Edited by Timo Jokela & Glen Coutts

# Relate North

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# Contents

# Preface

"How do people imagine the landscapes they find themselves in?
How does the land shape the imaginations of the people who dwell in it?"

Barry Lopez, *Arctic Dreams*

Our theme in this book, number eight in the *Relate North* series, is 'distance' or more precisely, distances. It is a small word, 'distance', but it contains multiple layers of possible meaning; according to the *Oxford English Dictionary* it means, in a physical sense, remote or far apart, the condition of being far off; remoteness. A space, or interval between two things (*a distance of one hundred miles*). The word also has meaning in a psychological sense; the avoidance familiarity, aloofness or reserve (*there was a certain distance between them*). A remoter field of vision (*I saw him in the distance*) or an interval of time (*can't remember at this distance*). All of these shades of meaning for the word distant and the concept of distance will be familiar to those who live and work in the Circumpolar North and the Arctic; as will Barry Lopez's musings on how vast distances in the Arctic environment might shape the imagination in this case the beautiful, fragile and often unforgiving landscape(s) of the Arctic.

Given the theme of the book, our call for contributions invited authors to engage broadly with the idea(s) of distance and locate their writing firmly in the multifaceted concept(s) of distance and distances. From the most obvious level; 'what is the distance between Moscow and Yakuts?' to everyday turns of phrase such as 'up close or distant' or 'she kept her distance from other people' and 'from a distance, the scene looked unfamiliar'. During the time that this book has been in production, the world has endured a pandemic; COVID-19 has forced us to consider many of the challenges posed by distances and how to we might manage them. Travel during this period has been problematic, even more difficult than usual in the Arctic and one effect of this has been so called 'remote working' for many. Designers, artists and researchers have been forced to find alternative ways to stay

connected and work together over long distances. How might we reimagine the notion of distance to mean something different and less negative than physical distance?

The contributors to this book critically reflect on Northern and Arctic perspectives on distances and interconnections to art, design and visual culture education. The concept of distance has always been one of the most characteristic issues of the North and the Arctic. While typically referring to physical space and remoteness, which has been and still is, despite the pandemic, distance remains one of the key challenges in the North and the Arctic. However, distance is about more than a measure between locations, rather it can refer to multifaced northern eco-cultures and communities including, for example, distances between Indigenous and non-indigenous groups of the North and the Arctic.

The idea of distance can also allude to other sorts of barriers that may complicate matters in, for instance, access to art, culture and education. That is why we are also interested in the project-based and context-sensitive research methods in collaborative art or design as they relate to distance and provision of access to art, design and education. The debate around the broad notion of distances in arts, culture and education that take into account the perspectives, needs, rights and responsibilities of northern and Arctic communities, including Indigenous peoples is ongoing. In addition to the notion of remoteness, distances can also mean mental, social and cultural isolation or fractures between different groups of people or even between generations. Very often, this can be perceived as distances between traditions, local cultures of the past and innovations of modern times.

Distances are not always negative or risky, they can also present opportunities. The COVID-19 pandemic has shown that distances can lead to new, positive dimensions, for example we been forced to rethink working, collaborating and creating. This book is dedicated to a broad understanding of the creativity and know-how that the Arctic region can offer and export to the rest of the world, particularly in respect of a more sustainable use of resources and in securing the cultural diversity of the North. The nine chapters that make up this book offer a unique insight into the notion(s) of distance from the perspective or the research, praxis and, in many cases, socially engaged contemporary art and design being developed across the circumpolar north.

In the opening chapter de la Barre and Bauberger report on the way that distance might be conceptualised through artwork as place-based performance. Bauberger, a Whitehorse based artist created work using brush, normally overlooked she gathered along the Dalton Trail in Yukon, the smallest, least populated and most western of Can-

ada's three territories. The authors reflect on distance and *place* and the implications for artists in a time of a global pandemic (COVID 19) when galleries are closed and minds tend to focus even more than usual in what distance really means posing such questions as 'When our usual galleries close, what new possibilities open up for artists and their audiences, and how can they support novel adventures in to common and public spaces?'

Art-based explorations or more precisely artographic inquiries are the focus for Sinner et al. in the second chapter by art educators, also from Canada. The notion of artographic exploration (normally known as a/r/t/ography) is proposed as a 'flexible and responsive' approach to art-based research investigation - in this case the missing '/' in the word artography is intended to highlight the inextricable link between the practices of art, research and teaching. During the COVID 19 pandemic the authors 'explore our archival impulse, documenting how distance as a gradient of change imposed by the pandemic draws our attention to the value of artography as a flexible and responsive approach to inquiry'.

Staying in Canada for the third offering in this anthology, Beer and Saur focus on climate change and its impact on the Canadian Arctic. Activism through contemporary art practices is explored as means to promote more social and environmental justice and help bridge distances in terms of cultural differences, inequities and strengthen relationships. The contemporary art practices featured are land-based, site-determined and socially engaged which seek to expose the social and environmental impacts of 'colonial perspectives and extractive industrialisation'.

Across the Atlantic in Finnish Lapland, Häkkilä, Suoheimo and Heikkilä focus on how design thinking and design processes can offer solutions in a time of a global pandemic and enforced 'social distancing'. In the spring of 2020, COVID-19 changed everyday life for people in almost every country in the world. The advent of so called social distancing presented new challenges from wearing face masks to avoiding crowded places, the authors report on three projects that addressed such challenges, proposing 'smart social distancing' solutions.

Also in Finland, the Sámi authors Idivuoma and Magga report, in the fifth chapter, on an initiative to establish the *Duodjeakademiija* – Academy of Duodji (DA) in Finnish Lapland. An enterprise that sought to celebrate the Sámi culture and language, the aim was to create a centre that focused on and promoted Sámi arts and crafts (the word *duodji* denotes Sámi handicraft and design) in the municipality of Eanodat. The Finnish Sámi Parliament's cultural policy for 2020-23 indicates support in its cultural policy to the Duodji Academy initiative.

Chapter six focuses on distance through the lens of educational practices in higher education (University of Applied Sciences) and so called 'blended learning' – a mix of face to face and online teaching and learning. Arkko-Saukkonen and Rasi report on design research using *Creative Steps 2.0* to overcome some of the challenges posed by distance. Teaching and learning in design practice is characterised by creative approaches to product development and testing in multidisciplinary teams – what potential is there for a blended model?

The seventh chapter, by Semenova, Khokholova and Hiltunen is about art and explores the idea that art and art method, may have the potential to overcome some of the complexities inherent the word 'distance'. Semenova and Khokholova, from Sakha (Yakutia) and Hiltunen from Finnish Lapland, report of two projects that aimed to transcend physical distance and at the same time address the more subtle and complex notions of distance; cultural, social or economic.

In the penultimate chapter, Gårdvik, Stoll and Sørmo from Norway present a collaborative study between two universities quite distant from each other, one in northern Norway and the other in Alaska. The project in the area of Education for Sustainable Development (ESD) sought to investigate the potential of a combination of arts education with the natural sciences to raise awareness and prompt responsible action regarding environmental issues, in this case the international problem of marine litter.

The final chapter, by Jokela and Härkönen, based at the University of Lapland in Finland, also reports on a collaborative project in this case involving universities from Norway, Sweden, Russia and Finland. The *Living in the Landscape* (LiLa) project brought together students, researchers, artists and academics from different disciplines to use art and science based interventions to investigate 'challenges related to the environment, population and economic life in the region caused by climate change' and of course, distances.

We hope that this book will appeal to a wide audience, to students, artists, researchers and academics or policymakers concerned with northern and Arctic issues connected to art, design and education. Many of the contributors to this volume in the *Relate North* series[1] are involved in the Arctic Sustainable Arts and Design (ASAD) thematic network of the University of the Arctic[2]. With 26 member institutions across the circum-

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1   For more information about ASAD and to download previous books in the *Relate North* series, visit www.asadnetwork.org

2   For more information about the University of the Arctic *Thematic Networks*, visit https://www.uarctic.org/organization/thematic-networks/arctic-sustainable-arts-and-design -asad/

polar north, ASAD members collaborate to minimise the negative dimensions of the word 'distance' and seek to promote best practice in art, design and education.

Editing a book is a multidisciplinary and collaborative enterprise. As editors, we have been fortunate to have the support of a remarkable group of people, without whom this book you are now reading would never have reached publication. We therefore want to express our sincere thanks to the authors, artists, researchers and designers who helped make the book possible. Our thanks are also due to the many academic reviewers and Board of *InSEA publications*[3]. A special debt of gratitude is due to our designer Annika Hanhivaara, her patient professionalism in response to our frequent questions and suggestions is very much appreciated.

Timo Jokela and Glen Coutts
Rovaniemi, November 2021

## REFERENCE

Lopez, B. (2014) *Arctic Dreams.* Vintage Books.

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3   For further information about InSEA Publications visit: https://www.insea.org/insea -publications/

# Performing Distance (for Closeness) on the Dalton Trail (Yukon, Canada)

*Nicole Bauberger and Suzanne de la Barre[1]*

1) Vancouver Island University, Nanaimo, British Columbia

**F**or people who inhabit circumpolar places, distance has always held both opportunity and constraint: as friend or foe, incriminating both the wealth and expense of remoteness, distance is a grounded force for locational identity that shapes creative and community expression and interaction. Distance refers to the multiple real and imaginary dialogical spaces that stand in opposition to closeness, while also being a significant granting agent for its existence. In this way, remoteness initiates an invitation to intimacy. Whitehorse-based artist Nicole Bauberger has created work in response to the constraints imposed by COVID-19, using disregarded brush along the trail as gallery spaces just off her backyard, a contrast with her usual cross-Canada exhibiting practice. Using images from her *Dalton Trail Trail Gallery* and the *RavenMonsterDress* exhibit, the authors engage in a collaborative analysis that is borne of the artists' reflections on her own body of work and process, the scholar's enthusiasm for theoretical musings on *place*, and the collaborators' mutual enthusiasm for identity expressions and co-created community engaged arts-based conversations. They draw on seminal ruminations on space and possibility (e.g., Massey, 2005; Massey & Jess, 1995; Soja, 1996), in addition to conversations about community, art and performance. Conceptualizing distance as place-based performance offers an opportunity to differently reflect on site specific art space, engagement, and a revitalized discovery of shared or purposefully-different meanings. Along the way, their collaborative exploration enables questions such as: How does a COVID-19 imposed focus on distance used to keep each other safe invite new kinds of public intimacies? When our usual galleries close, what new possibilities open up for artists and their audiences, and how can they support novel adventures in to common and public spaces? In peripheral regions, what do those common and public spaces look like, and how are the experiences they offer different from those on offer in differently located common and public space (e.g., urban)? What perspectives on *The Commons* are conceivable when distance is applied as safety net – and is there evidence that a *fait-accompli* assumed tragedy can be challenged when *The Commons* is seen as a work

in progress? What new audiences does art reach when we place art in the locations the audience inhabits? What happens when intimate work is exhibited in spaces that belong to no one/everyone? Finally, we contemplate what risks are provoked, and can these lead to the (re)discovery of valuable insights or outcomes that make those risks worth taking?

## Trailhead

For people who inhabit circumpolar places, the idea and practice of distance has always held both opportunity and constraint: as friend or foe, incriminating both the wealth and expense of *remoteness,* distance is a grounded force for locational identity that shapes creative and community expression and interaction. *Distance* refers to the multiple real and imaginary dialogical spaces that stand in opposition to *closeness*, while also being a significant granting agent for its existence. In this way, *remoteness* initiates an invitation to intimacy. The global pandemic has opened up opportunities to revisit conceptualizations of what distance means. By extension, we are also invited to carefully consider how we 'get close'.

From March 2020 on, Whitehorse-based artist Nicole Bauberger created work in response to the constraints imposed by COVID-19. Using disregarded brush along the trail just off her backyard as a gallery space, she explored what an exhibit can be in ways that contrast her usual cross-Canada art-sharing practice. A Whitehorse resident hungry for cultural distraction and engagement during the COVID-19 spring of 2020, Suzanne de la Barre, placemaking scholar and art enthusiast, was an eager audience member attending to the opportunities available along the path at the back of Nicole's home. Using the *Dalton Trail Trail Gallery, Civil Twilight* performances, and Nakai Theatre's *Pivot Festival* opening event, *RavenMonsterDress*, the co-authors engage in a collaborative analysis of a COVID-19 art engagement experience. The analysis is a conversation between the artists' reflections on her own body of work and process, the scholar's enthusiasm for theoretical musings on *place*, and the collaborators' mutual enthusiasm for identity expressions and co-created community engaged arts-based conversations.

The Yukon Territory is located in Canada's northwestern-most corner, south of Alaska (US), and north of the province British Columbia. At 483,450 km$^2$ and with only 42,507 residents, its remoteness is characterized by its low population density (.08 people km$^2$), its considerable nature-based assets which support collectively sponsored if diverse wilderness values, and its Indigenous population; specifically 14 First Nations, of which 11 have signed Land Claims agreements and practice self-government (Govern-

**Figure 1.** City of White-horse, winter. Photo: Government of Yukon, © Government of Yukon.

ment of Yukon, 2021). About 75% of the total territorial population, or 33,285 residents, make their homes in the capital city Whitehorse, *The Wilderness City* (Government of Yukon, 2021). The distance to the nearest next urban centre also invokes the sense of Yukon remoteness; the northern capital is 2396 kms from Vancouver (British Columbia) and 1991 kms from Edmonton (Alberta).

The *Dalton Trail Trail Gallery* opened in Hillcrest, a neighbourhood on the outskirts of Whitehorse's downtown core, on March 17, 2020 – the day after art galleries and the city's other cultural spaces closed due to COVID-19. That same day, long term care facilities also stopped accepting visitors, and various constraints emerged on gathering. These

restrictions would intensify over that week and intermittently over the months to come. As a result of public health directives, the boundary between public and private space became more rigid: visitors could not enter our homes. Public places, and the presence of other human beings, were cloaked in a dimension of danger. So, similar to other communities around the globe, we fortified ourselves with ill-conceived shopping trips for absurd amounts of toilet paper, and settled in behind our walls to outwait the siege.

Our exploration engages a dialogic process between the co-authors: Nicole, the trail gallery creator and artist, and Suzanne, who provides an audience-informed perspective that is inspired by both her lived and scholarly-influenced experience of the *Dalton Trail Trail Gallery.* Together, we discover and contemplate the various meanings of the experience created by this gallery on the trail. Along the way, we draw on ruminations on space and place possibility (e.g., Massey, 2005; Massey & Jess, 1995; Soja, 1996), in addition to conversations about community, art and performance (Heddon, 2012; Smith, 2007). Conceptualizing distance as place-based performance offers an opportunity to differently reflect on site specific art space, artist and audience engagement, the experience of co-creation, and through that process, the discovery of shared or purposefully-different meanings.

## On and off the Trail

The following presentations use the metaphor of being on and off the trail to facilitate the dialogical exchange between the collaborating authors. We propose four theme areas: The first explores the nature of the *Dalton Trail Trail Gallery* as a *place* through the lens of Doreen Massey's progressive sense of place (Massey and Jess; 1995; Massey, 2005). The second theme discovers the trail gallery as an *ecotone-like* space between public and private lands. The third proposes the *Dalton Trail Trail Gallery* as a place *performing location.* Finally, the fourth theme explores the wealth and challenges of art and the (Tragedy of the) *Commons.*

## Outward-looking Places

Place geographers have encouraged us to imagine space differently, among them Soja (1996) and Massey (Massey and Jess; 1995; Massey, 2005). For Soja (1996), the spatial dimensions of our lives are proposed to comprise practical and political relevance, and direct us to a collectively created spatiality that has social consequences that are vital

to "making both theoretical and practical sense of our contemporary lifeworlds at all scales, from the most intimate to the most global" (p. 1). Massey's articulation of an outward looking 'progressive sense of place' recognizes the contingency and porosity of the boundaries of places, and the networks of social relations in which they exist. The moment the walls went up to prevent the spread of COVID-19, spatial opportunities invited Massey's (2005, p. 15) "urge towards 'outwardlookingness'". She explains that this view involves:

> … a positivity and aliveness to the world beyond one's own turf, whether that be one's self, one's city, or the particular parts of the planet in which one lives and works: a commitment to that radical contemporaneity which is the condition of, and condition for, spatiality.

The radical contemporaneity of COVID-19 gave the collective *us* a new 'thing' in common. At the same time as it isolated us from one another, it connected us to the common project of keeping each other safe. Indeed, the closures that the pandemic precipitated opened up resources to invest in a more local 'outwardlookingness.' For Nicole:

> The gallery allowed my practice to live not only in my backyard but in the imaginations of passers-by; those out walking their dogs who were living through a similar time of adjustment. Before COVID, more of my attention was focused on expanding my audience nationally and internationally, as is valued through contemporary granting structures. As a result (prior to the pandemic), I spent less time looking out towards the people in my neighbourhood.

This state of affairs did not preclude trying to reach a wider, if still local, audience. Social media was mobilized. Because Nicole – like so many others – took to 'doomscrolling', reaching a wider audience was readily available: in fact, just a fingertip away! She involved social media to invite a wider audience into the imaginative commons created by her artistic responses to COVID's sanitary isolations. *Civil Twilight* performances – where Nicole read co-created video recorded poetry on the pond 200 m from the *Trail Gallery* – gathered voices from Japan and Paris. A *glocal* event by any definition!

The gesture of making Facebook pages for the gallery and the *Civil Twilight* performances looked outwards towards opening these events up to people in a wider world; a performance world that was not available in person during this time. The *Dalton Trail Trail Gallery's* Facebook opening post shared Nicole's process and intention, while at the same time reminding people of the new procedures for physical distancing:

I sculpted a series of small ceramic dresses this winter. They are tenderly and insistently asking me to exhibit them. But galleries are closing. And so, here begins the Dalton Trail Trail Gallery. You can see them in person if you walk the trail parallel to the Dalton Trail in Hillcrest, just near where it intersects with the fire road up to Granger. To be on the safe side, please stay 2 m away from fellow trail walkers. There's another trail intersection just there so there should be lots of space. I plan to install more things, or change the installation, every few days, or maybe more frequently. I'm not currently planning an opening. If people just come when they can, its likely best, so it's not a crowd. I'll post images of new installations here as they change. But they really do look better in person - they are physical objects that respond to the light and space around them. So walk your dog behind my house if you can, whether or not you have a dog.

Many passers-by informed Nicole about how important the *Trail Gallery* was for them in the COVID-19 inspired moment. The trail became a destination for them when there were few destinations to be had. It was a destination enjoyed by a mother pushing a stroller with two toddlers, and a father with his four year old daughter, among many others, known and unknown. And for Suzanne:

I went to the trail because I wanted to engage with person-created beauty – and beauty that I felt was created for us in this weird time. Beauty that I/we, could indulge in, bathe in as it were, and soothe my/our soul(s) with – easily walking in a place that was open for all of us, all the time. I went to the trail because of the possibility that other people might also be there, safely gathering, at a distance, outside. I guess I was looking to find a place where I could be as close as I could be to others and indulge in an art experience with them, while at the same time following the 'physical distancing' protocols provided to us by our public health officials.

The trail gallery provided relief from the pandemic, access to art and an opportunity for people to be close while remaining physically distant. The trail also did not rely on whether others were actually there or not; people *could* be there – and that's what mattered! With a nod to Massey's (2005) place porosity, the trail also presented a liminal space, and perhaps more precisely, an ecotone-like haven.

**Figure 2.** Dresses in trees. Photo: Nicole Bauberger, 2020.

## Ecotone-like Space

Wikipedia (https://en.wikipedia.org/wiki/Ecotone) defines an *ecotone* as a transition area between two biological communities, where two communities meet and integrate. It may be narrow or wide, and it may be local (the zone between a field and forest) or regional (the transition between forest and grassland ecosystems). Ecotone can also refer to the edges and overlaps between different ecosystems that are often extraordinarily fructiferous zones teeming with evolutionary potential (Coles & Scarnati, 2015, p. 116). Hence, the *Dalton Trail Trail Gallery* takes advantage of the an ecotone-like space just off Nicole's private back yard at the intersection of public and private land – or habitats – that support imaginative opportunities. As Forsa et al. (2018) explain, it is a boundary that can "create richness in meetings rather than constraint" (p. 46). The richness aligns also with what Coles and Scarnati (2015) describe as a space where the intersection offers both fertility and a sonorous tone – that is a vibrant and deep tone (p. 116).

As Whitehorse's tag name implies, *The Wilderness City* – presents also another kind of liminal space. The urban character of Whitehorse is significantly defined and experienced in relation to the way it sits on the border with wild, uncontrollable nature. Unlike



**Figure 3.** View of the trail. Photo: Nicole Bauberger, 2020.

many typical urban areas, the public spaces around Whitehorse are often defined as wilderness – (seemingly) owned and controlled by "no one."

The movement of people and political power play important roles in the Yukon's land histories. During the initial colonization process, much of the city's land was designated as 'Crown' lands (belonging to the Queen of England; Canada is a Commonwealth country). Today, the land is either privately owned or has been returned through land claims agreements to the Indigenous peoples who have inhabited the land on which Whitehorse sits for thousands of years. With this history in mind, there is the imperative to acknowledge the described ecotone area as an encounter space for Indigenous people and settlers.

It is with these references to how the ecotone space that the *Dalton Trail Trail Gallery* occupies was poised to host its ephemeral audience. It is an ecotone immersed in the fertile intersection of nature, and the myths and perceptions associated with wilderness. It is a border space that also resonates with encounters characterized by unresolved colonial pasts, and all the possibilities of decolonized futures. The scrubby trees lead you down a small slope from Nicole's backyard and furnish a space that is public only from one side. The trail is not on Nicole's property, but rather is positioned to be easily sustained by its proximity to her home. This proximity provides safety, resources, and territoriality. It also delivers an intermittent but steady stream of 'just walking-by' public.

## Performing Distance, for Closeness

Investigations into creativity in relation to remoteness and proximity have issued diverse insights in terms of the influence location has on the nature of creativity and the effects it has on communities (cultural, social and economic. Examples exist for Sweden (Brouder, 2012), Australia (Gibson, 2012), and Canada (de la Barre, 2021). Still, the *Dalton Trail Trail Gallery* in the time of a global pandemic prompts a different locational motivation: what does it mean to perform distance with the purpose of creating the experience of closeness between people? In essence, the gesture of making a gallery here deploys distance as conduit to comfort and care.

Even before the pandemic, the idea of 'the gallery' culturally contained a formalized actualization of social and physical distance. In typical gallery environments one does not touch the artworks unless explicitly instructed to do so. In an early attempt to benefit from these types of conventions, and to recreate them in this unusual context, Nicole considered posting notes alongside artworks on the trail to say she had sneezed on them – thereby making them 'untouchables' during a viral-transmission time. It may have been

a way to protect the pieces; but she chose not to. Instead, she reflected upon the collective sense of careful distance we were learning together. Those new behaviours alongside seasonal supports – for instance, the snow on the ground that made it harder to walk off the beaten trail – sufficed as already present ways to help keep the artworks safe.

COVID-19 provided diverse and novel ways to create and perform distance, and innovative perspectives on what it means to experience closeness. In their reinterpretations of distance in a time of coexistence with COVID-19, the Japan Foundation held an online exhibition from March 30 to May 5, 2021. Their *11 Stories on Distanced Relationships: Contemporary Art from Japan* featured works by Japanese and Japan-based contemporary artists "centered on the theme of translating distance" (https://11stories.jpf.go.jp/en/). The exhibition aimed to "promote new artistic exchanges in this time of COVID-19, which has brought restrictions to our lives that are forcing us to be conscious of togetherness and separation". Similarly inspired, conceptualizing distance as place-based performance, the *Dalton Trail Trail Gallery* offered an opportunity to differently reflect on site specific art space, engagement, and a revitalized discovery of shared or purposefully-different meanings.

That moment has extended as Whitehorse residents adapted to their own evolving COVID-19 situation. Activities in the gallery grew over the course of spring and then summer 2021. Artworks were installed and then taken down. Pieces have been stolen, broken, gifted and sold. The gallery also hosted performances. For example, in January 2021 larger scale programming occurred with Nakai Theatre's *RavenMonsterDress*. That festival opening event took place on the frozen pond at the end of the *Dalton Trail Trail Gallery*. Musical performances occurred across the little islands that spatter across the pond. Huddled together, 'bubbles' were physically distanced from one another, and audience members enjoyed the exhibit and performances. And they did so while dressed for the -35 degrees Celsius weather in the post winter solstice dark days – literally and figuratively – of a COVID-19 Yukon winter.

Later in February, and with some funding from the Yukon Government, Nicole used the gallery as a laboratory for COVID-resilient arts programming. The programs involved installations, performance, and the invitation for audience members to play with sound-making objects. As spring approached and snow melted, *Trailforks* mountain biking website named one of its riding trails after the gallery (https://www.trailforks.com/trails/dalton-trail-trail-gallery/). An elementary school teacher who happened upon the installation with her class said "it was like finding crocuses in the spring" (Jill Potter, personal communication, February, 15 2021).

**Figure 4.** Keep safe distance trail guide. Photo: Nicole Bauberger, 2020.

**Figure 5.** 2 metre sign on the trail. Photo: Nicole Bauberger, 2020.

**Figure 6.** An audience happens upon. Photo: Nicole Bauberger, 2020.

*The Dalton Trail Trail Gallery* emerges from a performative impulse. The gesture of its creation as a place for art to encounter the public despite the closure of galleries as a response to a global pandemic embodies a defiant resilience; it embraces a willingness to set the need to share above the need to keep the artworks safe. This impulse, set in the conceptual foreground of an *outward looking place*, and humming also with the notion that location can be performed, offers a challenge to an inevitable *Tragedy of the Commons*.

## The Possibility of the Commons

The *Dalton Trail Trail Gallery* is aligned with *Live Art* and *Guerilla Art*. Heddon (2012) explains that live art sits on the boundary of art and life (p. 180), and is premised on three

values-laden declarations – live art: 1) supports forging politics attached to encounters that are located in between forms – not art or theatre as we know it, triggering new ways of doing and seeing, of packaging, selling and consuming; 2) is ephemeral and fleeting, thereby resisting commodification, and by virtue of being an artist-led 'venue', bypasses the art market; and 3) is an aesthetics of the present moment, enabling an immediate encounter between artist and spectator. It disrupts typical relations of production and consumption, activity and passivity. The *Dalton Trail Trail Gallery* experience yields the here and now to the spectator, who independently determines when and how to engage with the gallery. In fact, the spectator may encounter the gallery inadvertently; falling onto it during a walk down the trail oblivious to the trail's 'gallery' dimensions (intentions?).

In *The Guerilla Art Kit* (2007), Keri Smith defines *Guerilla Art* as "anonymous work, installed performed, or attached in public spaces, with the distinct purpose of affecting the world in a creative or thought-provoking way" (p. 11). The *Dalton Trail Trail Gallery* has not necessarily displayed works of art anonymously; having said that, it has also not always been made clear who is making and presenting the art. There have also been others – self-identified artists or simple passers-by – who have spontaneously added their own art to the trail. As well, it could be proposed that the trail performs closeness (intimacy) remotely (physical distancing) with the ad hoc purpose of having an affect on the world in a creative and thought-provoking way – a way that Suzanne and others found soothing during a time of intense social confusion and anxiety.

As part of the trail exhibits, Nicole uses the motif of a sleeveless dress, in clay, glass and found plastic, in many of the works she installs in the *Dalton Trail Trail Gallery*. The dress is a motif she has worked with for over 25 years. The contrast of encountering a festive and impractical garment in a semi-wilderness location can evoke curiosity; and the gathering of dresses can impart a quality of celebration. The exhibit plays off presence, absence and touch as layers of possible meaning that are reinforced by the experience of the pandemic. Each dress seems to come alive and suggest a body through its shape and form. At the same time, no body is visible. It is the empty space itself that evokes the presence of those who are physically absent – and those whom we miss in the pandemic enforced isolation from one another – near and far. In addition, the hand-sized ceramic dresses harken back to a time of pre-pandemic closeness as they are literally made through touch and bear the marks of Nicole's fingers and other tools at close range.

It is worth considering that *Live Art* and *Guerrilla Art* are most typically associated with urban environments; therefore, the compelling features of an exhibit in an outlying

area, contained within the wilderness margins of a wilderness city, present a different set of considerations, especially in regard to liminal-like and porous places.

It is with these reflections in mind that the above discussion occupies the *Tragedy of the Commons*: What perspectives on *The Commons* are conceivable when distance is applied as safety net – and is there evidence that a *fait-accompli* assumed tragedy can be challenged when *The Commons* is conceived of as a work in progress? What risks remain, and what benefits make these risks worth taking? What risks are provoked, and can these lead to the (re)discovery of valuable insights or outcomes that make those risks worth taking? As Smith (2007) suggests "a part of what makes public art so interesting is how it interacts with its immediate environment … to relegate art to a gallery makes it available only to certain people, usually those with money. Guerilla art is for everyone. It engages viewers who might never step foot in a gallery: It is free and accessible" (p. 12). The displayed art is also free for the taking; storing intimately made personal treasures in the commons, and prompts the question: How does 'trust' engage with *The Commons*?

The *Dalton Trail Trail Gallery* is open all the time, to everyone. Including late night interlopers coming across little works of art displayed in trees … In an email to a friend, Nicole writes:

> … these pieces are utterly reliant on the respect and kindness of the person who encounters them. That person can choose to find beauty in them, or break them. It didn't feel so nice, when some of the ceramic ones were broken at the end of June 2020. But I soon realized that I knew all along that that was a possibility, and when it came down to it, the value for me in the (even unknown) gift of people's imaginative attention, and the value to them when this was a place they could go when all the other galleries had closed, was worth it.

Similar to the impact COVID-19 has had on the social contract we have with one another regarding how we care for each other (e.g., physical distancing, mask-wearing, etc.), the *Dalton Trail Trail Gallery* presented an opportunity to imagine new kinds of trusts: The stories we need, the t(r)a(i)l(e)s we get … The *Dalton Trail Trail Gallery* showcases the commons as a not so much pre-determined fait-accompli tragedy, but rather as a work in progress: one that may well demand generosity from all of us in order for it to function.

## Trailblazing

When the pandemic first struck, Nicole found herself saying to her fellow artists that '[this] is what we've been training for. We eat weird constraints for breakfast.' An actor

creates the feeling of connection across the orchestra pit. A tune on a penny whistle floats through the forest and touches the ears of someone who was not even listening. If a painting cannot touch someone with their hands in their pockets in an art gallery, then what good is it? If it is true that part of the artist's work is to create intimacy across distance (for some artists, some of the time, at least), then COVID-19 gave Nicole a reason to try to shape intimacy in novel ways. The pandemic gave her a reason to share what she had right away with the people in her own neighbourhood. It allowed her also to investigate *outwordlookingness* with near and far physically distant audiences.

Engaging with the *Dalton Trail Trail Gallery* enabled audience members to maintain a sense of continuity when our relationship to the future become suddenly fraught. Nicole rationalized that, even if we were to go into total lockdown as they did in Paris, her neighbour dog walkers could still encounter art, and each other, safely. This sense of possibility gave Nicole strength, and sharing it with people in her community, like Suzanne, served to reinforce that resilience. The gifts of distance granted the possibility for closeness and intimacy in these COVID-shaped times. They made the *Dalton Trail Trail Gallery* possible, timely and evocative.

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# Gradients-in-Relation: Distance as Continuous Variations in Artographic Practice

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**W**ith a lens of living inquiry, and in response to a growing 'covidpedium' across disciplines (Denis, 2020), we offer our artographic explorations with distance and distancing as lively openings that initiate conversations about the conceptual and applied dispositions of gradients to articulate our diffractive practices in action. In our inquiries, gradients implicate distance both geographically as an incline or slope informed by more-than-human experiences, and artfully as a gradual transition on a scale from light to dark. With slopes and scales in tandem, we traverse gradients-in-relation to attend to the complexities of distance as "continuous variations" as we 'go the distance' during the COVID-19 pandemic with variants now reframing everyday experiences (Deleuze & Guattari, 1987/2005, p. 483).

As art educators, we explore our archival impulse, documenting how distance as a gradient of change imposed by the pandemic draws our attention to the value of artography as a flexible approach to inquiry. This approach is not constant nor necessarily sequential, but dynamic, responsive and often morphing with the present moment. Such fluidity is embedded in efforts to query the identity construct of a/r/t during this time of suspension, and to embrace the fullness of pedagogic multiplicities inspired by our localised, situated moments that extend to 'bodies without borders.' The absence of the '/' in this project is deliberate, and intended to highlight the rupturing of everyday practices, where we now reside with and actively embrace middle-ness, while at the same time parsing and respecting domains of artist, researcher and teacher as spaces encompassing new potentials because of the pandemic.

In this chapter, we deliberate on the elasticity of expanding and contracting notions of gradients-in-relation as a process of compressing and elongating space and time virtually and physically. This suggests knowing belongs in the present, within context-sensitive methods contingent on embracing the uncertainty of movement that keeps us lingering in the liminality of not knowing and requires we 'keep our distance' during the time of this pandemic.

Gradients inform our projects-in-progress and present an invitation for possibility spaces within artful collaboration (Triggs et al., 2014). We share our experimental strategies, and apply accessible and vernacular inquiry tools of walking, photography, video and collage. We prioritize doing-making-thinking in ways that lend to gradients as moments of improvisation that emerge in the between spaces, and help us advance a theory-practice nexus shaped by response-ability (Haraway, 2016). This approach is distinct from invocations of gradients in teacher education, described as strictly linear learning models in which knowledge is both quantifiable and qualitatively differentiated between teacher and learner (see for example, Malik, 2017). Instead, we too are "musing" in this conversation, and "finding one another" during the pandemic through "personal geographies, digital spaces and new intimacies" (Gallagher et al., 2020, p. 638). Our proximity moves from pandemic isolation to artful geographies *out there*. In particular, we consider distance as an expression of encounters that playfully motivate our imaginaries during the pandemic. Given the vast physical geographies spanning our locations in North America – from the west coast (Anita, Rita, Elmira), to the central east (Elly, Mariia), and across the international Canada-USA border (Yasaman) – distance is a vibrant notion, and the distinctions and differences of gradients-in-relation are central to our current artographic journeys. In this way, we are compelled by concepts of distance, distances and distancing with compositions grounded in socio-materiality that connects matter with contemporary arts research and mattering with theoretical prospects guiding our way.

Adding a pandemic layer of virtual-place perplexity, the modalities of the project and the pedagogic potential activates a sensorial resonance as part of our learning and teaching at a distance. In effect, the "coming age of pandemics" as Peters (2020) suggests, foregrounds our archival impulse in this case with a tendency for Deleuzian tensionality that is sustained and sustaining in the doubling of folds that unfold gradients as continuous variations. We are adapting to keep within a measurable distance between theory-practice, virtual-actual, body-environment, and by doing so, curating distances where we are striving to enact "conditions of instability, contingency and change," in an endeavour to reterritorialize our artographic sensibilities (Hawkins, 2014, p. 54). Our inquiry serves as pedagogic pivots, that is, a deliberate "evocation of artistry" in an effort to foster more "responsive engagements with the world" as we come to know our distancing by degree (Hawkins, 2014, p. 34).

## Living Inquiry: Going the Distance

A parallel between artography and phenomenology can be traced in the notion of living inquiry, inspired by curriculum theorist Aoki (2004), with life writing as part of practice.

We continue to build upon this connection in ways that the pandemic has advanced, specifically in attending to diffractive movements that emerge in our ever-changing gradients-in-relation. In doing so we enter in the artographic middle, infusing a host of positions and reverberating outward, much as Gugutzer (2019), who sets a proposition for an emergent neophenomenological approach "based on the felt body and on situations" (p. 187). We align with Gugutzer in our 'thinking in constellations' and "the subjective states of affairs (facts)" as affective involvements, which for art educators lends further to the vitality of a creative impulse as "embodied happenings," that is, diffraction-in-action, with, in and through our distances (pp. 188, 189). As Gugutzer (2019) suggests, we become 'trans-individual' when we are "affected by something or somebody outside of [ourselves] in a way that enforces a reaction," and the "felt-bodily dynamic of contraction and expansion" bridges dialogue between singularity and collaboration as artful engagements during the restrictive conditions of the present (p. 190). We embrace neo- to explore new and revived forms of living inquiry and artographic renderings, informed by the 'betweenness and beyondness' of inquiry to-date (to borrow inspiration from Rossetto, 2015). In turn, we distance *and* associate ourselves in keeping our distance in moments of immediacy, and we strive to embrace diffractive practice to accentuate the precariousness of artist-researcher-teacher encounters during the pandemic. In the process, we are opening questions that 'deborder' and propel continuous variations of artography onward.

A neophenomenology lens offers a methodological kinship that resonates in particular with "divergent theoretical paradigms" and attends to aspects that occur at the 'macro-, meso- and micro-level of interconnectedness,' and between entities that are integral to meaningful practice in the everyday (Gugutzer, 2019, p. 194). For instance, the tensionality of distances inverts normalising practices, shifting our orientations of public-private to new entanglements that spread across geographies and within degrees of intensity: isolated publics are now virtually in our intimate homes, and public isolation shapes our bodied intimacies of the physical world. In common with Gugutzer (2019), we share in these "joint situations," where the "atmospheric grip" of the pandemic is something we will affectively recall long into the future (p. 195). We infuse neophenomenological perspectives with artographic inquiry to bring forth the rigor of sustained uncertainty, and to enhance thinking in companionship, without flattening unexpected situations that are 'the present.'

Before the pandemic, the idea of distance was deliberated in philosophical anthropology, aligning distance as "the ideal coping strategy" with the "ultimate goal of life

preservation" – perhaps a primordial "existential hue" that resonates unexpectedly today (Ross, 2017, pp. 380, 378). We propose too that sensorial motifs of distances in art education are becoming part of the socio-material story of body adaptation now underway (be that story speculative, mythical, realist or otherwise). The emerging aesthetic relation, or the "art of living" (p. 379) in the era of pandemics, arguably offers a pedagogic pivot of artographic concern. On that premise, we undertook our experiments with gradients, initiated in micro-daily encounters, extending to meso-networks of relations, and immanent macro-becomings that came to "exert different kinds of force across the range of senses, in different spatial arrangements, and at different temporal speeds" in which we gesture to situations of doing-making-thinking as "reparative practices" at the "threshold" of all our pandemic relations (Ioanes, 2017, pp. 58, 65).

According to Handel (2018), distance is central to geographic discourses and warrants reconceptualization in terms of mediating mobilities with a "critical, relational and political concept of distance" that goes beyond measurable references to "encapsulate human significance, histories and power relations" (p. 474). Handel proposes we think with mediation as a condition of distance and explore how distance is "a co-constitutive act between language, practice and space in a way that creates different territorialities" (p. 474). This approach brings us again to neophenomenological considerations that attend to affect and experience, and the socio-materiality that the pandemic has prioritised and produced in terms of technology. We share our proximal encounters with distance as gradients-in-relation, rendered as differences we have in movement and in our mediations of the felt-body.

## Diffractive Renderings: Gradients as Sensorial Resonance

Unfolding our artographic processes, we strive to articulate gradients as an anticipatory mode of living inquiry. Aligning with Handel (2018), our inquiry demonstrates that distances "are not necessarily contiguous" given our zonal locations and we continually "perform leaps" that may result in "islands of near and far" (p. 481). As our works-in-progress demonstrate, there is a "will-to-presentness" as a mode of communicating (Griffero, 2018, p. 68). Given the preliminary nature of our acts and actions, and the introductory ideas at the forefront of our questioning of distances, we offer what may be best conveyed as diffractive renderings in-the-making, or simple, preludes to artwork scholarship as "present tense moments" (Berry, 2016, p. 59).

## Mariia: A Prelude to Intensities

Accentuating the felt-body as in tension and with intention, my 'in-tensities' enact randomness as a form of movement that pushes beyond a sense of control and regulation over inquiry. My experiments were constructed with the ephemeral medium of snow in this case, defined by a creative impulse that is multilayered, doubling and re-doubling in digital collages, where I explore artful motifs of traditional vernacular arts drawn from my Ukrainian culture to investigate how gradients and gradations are in relation and call out for other signifiers / motifs / meanings to join in.

Adapting motifs of "bigunets" (runner) with the smallest unit of "zernyatko" (a seed) – both distinctive elements of "Petrykivka" painting – I embed stylistic qualities in my situated geographies to contemplate the contours of my cultural stories of becoming. This process of reterritorializing causes me to map surface tensions of landscapes in search of what motivates me as an artist, researcher and teacher. Connected yet linear, the repetition of style suggests stability, continuity, consistency and at the same time momentum (see Figure 1). Zernyatko varies in size and gradually forms the animated curve of bigunets. Zernyatko becomes an artful metaphor of each step and operates concurrently as a unit of gradient that functions as a present participle of the Latin verb "gradi," or 'to walk' (Merriam-Webster, n.d.). With bigunets as a marker of scale, zernyatko becomes a marker signifying a change, with the inherent possibility to transform notions of distances as continuous variations between the repetitions of my doing-making-thinking.

In practice, my personal subjectivities are much like the bigunets layered with the snow, and for me, this is intended to convey fluidity across places and events, actualizing childhood and adulthood as situated moments reverberating between and beyond. I remain dis/connected with family who have always lived in Ukraine, and because of my immigration to Canada, distancing has long been both a virtual and place-based reality. This lived experience is akin to the immediacy of the pandemic and the ongoing distancing underway. My felt-body is formed in these markers, where my encounters linger in suspension, continually disrupting a sense of belonging. This is the purpose of bigunets as a gradient vector. It points to the liminal. It is for me, the marker of the highest intensity.

The value of this gradient-in-relation also resides in the affect, with qualities of sensorial, transformative and pedagogical intent coming to the fore, all variations that form within these socio-material relationships. Collaborating with vernacular arts as I do, I

bigunets

zernyatko

**Figure 1** (opposite). Bigunets and zernyatko: Difference and repetition in action as gradients of unknown distance emerging in the process. Image: Mariia Kovalevska (full visual essay as well as video-recording of the walk are available at the Mapping A/r/tography website. https://bit.ly/39GfrrZ).

**Figure 2.** Releasing excess: Signifying doing-making-thinking with distance(s) as a provocation of artographic becoming. Image: Mariia Kovalevska.

apply traditional styles to photography and video, using digital imagery editing software. Each click on the 'record' button of the camera documents even more change and difference in gradi, suggesting that every image or video can be a new marker of my presence in a place that is both far and near (see Figure 2).

To expand more fully on my process, each step is the embodiment of going an unknown distance, of mapping visually and textually this life journey, and of embracing the potential to experiment with software tools as culturally informed living inquiry (such as layer, zoom, crop, displace, change value and color scheme, brush, stamp, etcetera). For instance, layers as a function of software can be traced in the materiality of snow to demonstrate the entanglements of belonging that will dissolve in time and begin again in the landscape.

Such sensorial motifs serve as micro, meso and macro expressions of distances and help me navigate and mediate the conditions of distancing, especially in the unpredictable moments of the pandemic. My living inquiry amplifies how physical steps operate as transitions of intensity across geographies that are both imagined and actual, much like inclines of past-present, yet metaphorically, these same steps dissipate in time when the snow melts and become one with the earth. It is with this artographic lens that I negotiate distance and distancing as a strategy of diffractive practice predicated on movements that expand and contract time and space.

In this way, I attend to the *radically* enacted personal and pandemic distances as intensities, where now devoid public spaces hold relationships between the social and the individual, and in the process, I continue to question notions of trust and care for the self and other, as well as in-tensities of going / keeping / knowing distance and distancing.

## Elmira and Yasaman: A Prelude to Ambiguities

The purpose of our inquiry is to foster sensory dimensions of understanding and unfolding notions of distance (physically and psychologically). Although we are both originally from Iran and we are members of the same cohort in our PhD program, due to the pandemic, we have never met in person. However, we continue to cultivate a close relationship through our scholarship and share our collaborative project about gradients we have in relation. We set a proposition to 'walk together,' even though we are 3540 kilometers apart, in Vancouver and in Chicago.

In the process, we undo our spatial and physical distances and examine our mobilities as continuous variations through the act of writing and art-making. Walking con-

stitutes mobility of the felt body (the subject) and the mobility of the seen (the objects), and simultaneously disrupts ordinary assumptions that define different scales. By exchanging visual and textual artworks, we explore gradients as expressions of movement between us to rupture this forced physical distance and open a fertile *third space* for negotiation, as well as greater connection and communication (Bhabha, 1994/2004). By "seeing possibilities *and* recognizing limitations" (Irwin, 2003, p .65), we utilize our joint experience as a process: We translate our active thoughts, emotions, and senses into an image; the image is then translated into poetic writing and shared virtually; followed by site-specific walking to evoke another response in turn (see Figures 3 and 4).

Residing in the third spaces of our encounters, we recognise continuous variations with uncertainty and what we describe as an ongoing ambiguity regarding the next step, as we consider ways we can unfold our artmaking in response to each other's creative sites. As Springgay and Truman (2019) state, this "complicates, stirs, and unsettles thought" (p. 134). As an ongoing process of discovery, we strive to cultivate acts of translation-in-motion by moving across distances, and yet collapsing distances at the same time as part of our diffractive practice in action. Along the way, we open new ways of interpretation, reforming and renewing meanings, and like Burgin (2011) in conversation with Bhabha, we find "there is always that moment of surprise, that moment of interrupting something. But from that moment of interruption emerges something new, something different: a displacement" (p. 97).

When we walk, we are vigorously extending our bodies to the spaces of encounter. Yet each walk is unique and different, despite our repetition of the act. It is as if we draw a line with our bodies to trace the gaps between us and between real and imagined destinations beyond. Extending this movement as mediation of distances to writing as a way of connecting further has blurred our sense of separation. Distance is often defined in relation. We recognize multiple relationalities in-between spaces where image meets image, where text meets image, where text meets text, and where we each meet these materials. The distance is not measurable anymore; it is non-ordinal and non-measurable. Distance is the mediator of 'something new happening' and it complicates the course of translation by slowing down the process and disrupting the original (Bhabha, 2016). In turn, the definition of "across" also guides this collaboration, from one side to the other, for instance, across a distance, a gap, a space in-between (Merriam-Webster, 2021). Moving from one destination to another, we find new modes to further translate our living inquiry.

As Springgay and Truman (2019) describe, "walking-writing [making] is a practice of the invention, where the movement of thought is *more-than* a moment of walking,

An ambiguate elongated piece of a body
A residue of some sort
Blanketing the signage of the day
A sign of lingering
A sign for suspension
A sign of anticipation...
A piece of hidden hope
There was a blue
In the heart of that dim gray
Mirroring the clouds in motion
Transporting I into a vanishing point

*Elmira, Feb 28,2021*

She faintly said something,
Traffic carried her voice away
I nod
"interesting!"
The secret was
I never heard what she'd said
A reflection
A gesture for respect
A piece of shame...
I turned away
Against myself



The space turns,
　　　　　also, the world
It turns into a whole circle
　　　the sky and earth merge.

light travels through the sky
and circles around the sun
the navy-blue sky travels down to the earth
And softly embrace the expanded water on the
sidewalk

the earth turns upside down
　and gently, lays down and stretches on the
ground.
It rests by snows along the road.

a man
　　　　step on the sky,
pass through the reflected, scattered
white clouds,
　　　and, distorted the image of the
sky
without even notice where he is,

his silhouette cast shadow follows him
and  travel through
　　　　sky,
　　　　　light,
　　　　　　earth
and vanishes into the distance.
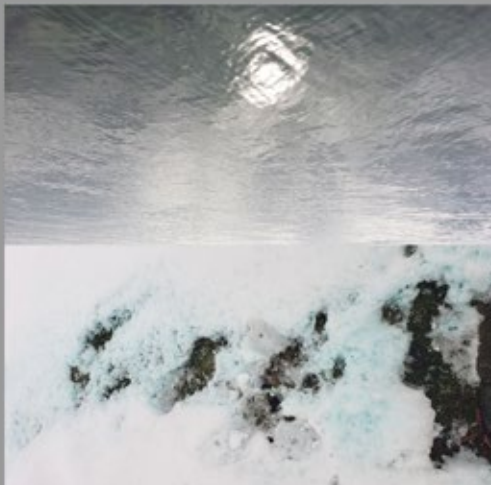
*Yasaman  Moussavi-March 2021*

thinking, or inscribing" (p. 131). Moreover, poetic writing is like having a journey with words and sentences, emphasizing again how gradients-in-relation operate artographically (see Leggo & Irwin, 2018). Similar to art-making and walking, it involves the movement of thoughts, so we employ poetic writing because it "transmutes the personal into the paradigmatic, the idiosyncratic into the universal, the familiar into the figurative, the example into the evocative" (Leggo & Irwin, 2018, p. 63). During our walks, our sensitivities to the world around us, to the rhythm of our breath and bodily movement, is reminiscent of the material and immaterial traces emerging from shared conversations that has shaped meaning and understanding (Anderson, 2004). The sound of nature, the texture of the ground, the angle of light: All provoke and evoke us and takes us on another journey. When we poetically express our living inquiry in correspondence to our walking experience, we linger, flow and move with words and translate our walking visually, into phrases and sentences. Writing and exploring the images that we capture in our walks and sharing them allows us to revisit our own embodied experience of walking through our world in this moment and invites walking in-between the lines of our poetic writing. Here the act of reading coincides with the act of walking.

Although we are yet to arrive at the same physical destination together, our corresponding projects open the potentialities residing within the liminal space of walking-writing-doing and provide an opportunity for a collaborative negotiation of unfolding, opening, evolving, expanding, manifesting, laying, and understanding as a perceptual sensibility. We embrace an aesthetic awareness to wonder, while trusting uncertainty as we wander (Irwin, 2003). We are enfolding and unfolding notions of time and space in ways that produce diffractive patterns of evermore possibility spaces through artographic practice. In this process we blur the line between virtual and actual distances and distances in the making of art. Walking offers an opportunity for feeling the body, leading to another form of attunement with the world, yet always as an ambiguous third space.

## Elly: A Prelude to Paradoxes

My experience during the pandemic, in which emphasis on distancing has intensified, contrasts with my enactment of immobility and stability. Throughout this time, to maintain distance I prefer to disrupt movement, rather than distancing myself from others and my surroundings. I attempt to achieve 'going the distance' by staying still and in proximity, in an effort to interrupt mobility as a key element of mediating distance differently.

The co-existence of static-dynamic movement creates a paradoxical condition, and in response, I employ an object to support my motionless body during the pandemic: A chair. For me, the chair serves as a psycho-social interruption when I enter the streets of downtown Montreal. In crowded places, such as crossroads, shopping malls and metro stations, I deliberately locate my chair in the flow of pedestrians, and then simply sit, creating a situation in which my body becomes a gradient-in-relation in the act and action of disrupting circulations already underway (see Figure 5). The surprise and at times confused gaze of passers-by embodies their response of distancing themselves from me, either consciously or subconsciously, as part of our exchange in the moment, and our collective mediation of the conditions of distance.

Conducting similar 'pauses' in indoor public spaces, I purposely place my chair between existing pedestrian lines, while safely keeping my distance. As a momentary event, I attend to continuous variations by seeking to bring disorder to the structured form of distancing now regulating public movement (Figure 6). This delineation of distance has prompted curious questions from strangers: Are you sick? Do you need help? Why are you doing this (security guard)? Through such performative acts, I seek to craft, mediate and communicate a different form of distancing as 'moveless' while there is movement at the same time.

**Figure 5.** A chair at a crossroad in downtown Montreal: Diffracting the flow of pedestrians in an effort to question movement. Photos: 2021, Siavash Farkhak.

**Figure 6.** A chair at a shopping mall and metro station: Diffracting the flow of movements to question distancing among pedestrians. Photos: 2021, Siavash Farkhak.

To analyze this paradox of diffraction-in-action, I map flows from the photos and videos of my practice to-date (Figure 7). I am (red dot) fixed and all other bodies (black dots) are moving around me, with their distances continually changing due to their responses. Within their linear movement, different distances highlight gradients caused by the immediacy of the encounter. This suggests that the paradox of moving and not moving enabled me to understand how variations operate and, in the process, how we come to a new meaning of going, keeping and knowing our distance through an arbitrary, improvisational and responsive performance.

A key dimension that emerges from the diagram is the dominance of response-ability in the experimental process, which brings together the proposition of ideas guiding this inquiry with performative possibilities. This continuous movement is a necessary condition of living inquiry, making the concept of paradox central to the realization of new meanings. In other words, paradoxical conditions have created the *need* for me to access new practices (Irwin, 2013). The creation of a *necessity* to invent new possibilities is more important than the intervention itself or the quality of such intervention, because without new possibilities, there can be no aesthetic appreciation and no change can be achieved. In my artographical inquiries, the idea of a paradox moves beyond standard definitions of contradiction, confrontation, or duality of concepts. Rather it refers to
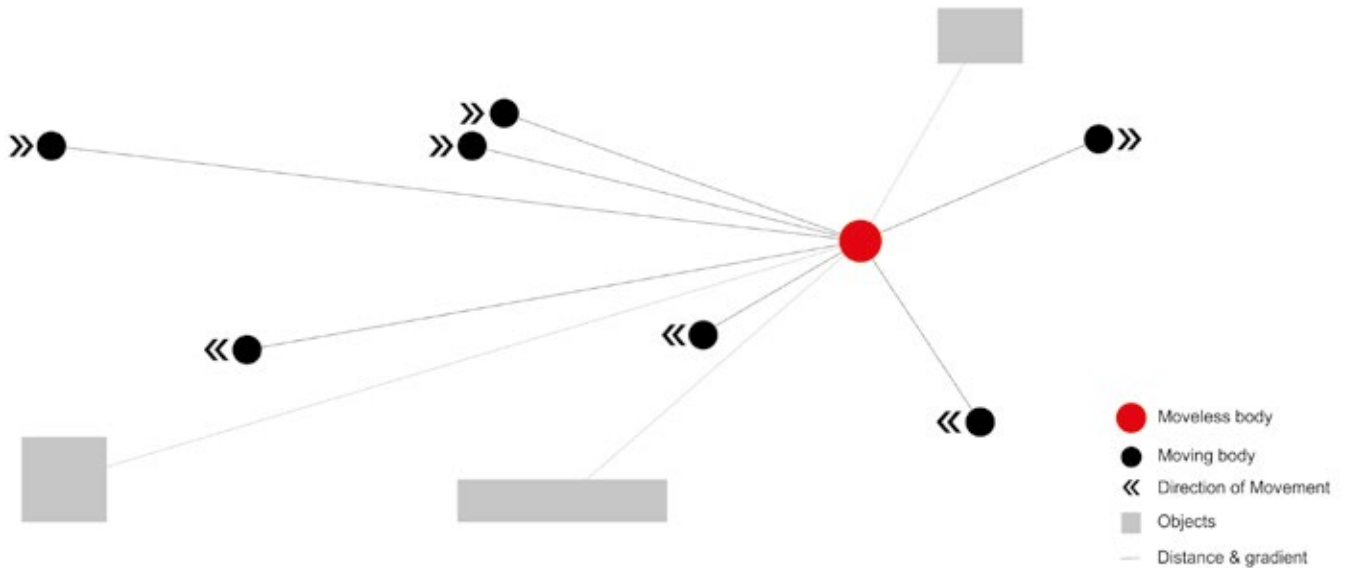
**Figure 7.** Diagram of sitting at a shopping mall: Mapping gradients-in-relation to make sense of proximity.

the co-existence of opposing concepts in the presence of tension between them. In this way, paradox underpins the diffractive flow as gradients-in-relation. For the concepts to be sustained in this tension, between spaces must be created and new meanings must emerge. This movement is possible because of the elasticity and responsiveness of artography. As Rowner (2015) explained concerning Deleuze's philosophy, such a paradoxical condition may maintain "a certain tension with logic: it engages in ironic play, makes puns, contests the conditions of meaning, and reverses the distinctive values of truth and false, good and bad" (p. 132). The co-existence of movement and immobility is a "paradoxical 'exhaustive' model" in both doing and making (Deleuze & Guattari, 1987/2005, p. 361). This allows the concepts of distance and gradient to be disturbed across, deviated from, and articulated through movement in new ways.

I am living my inquiries because inquiry cannot be separated from my lived experiences.

## Concluding with Continuous Variations: Diffracting Gradients-in-Relation

It may be said that artographers are promiscuous in adapting theoretical perspectives, provoking methodological dispositions, and embracing diverse forms of creative practic-

es with transdisciplinary response-ability that opens possibility spaces characterised as assemblages of becoming. Such movement however is critical to inclusive, democratizing and activist-oriented art education. As our preludes demonstrate, relationality is central in scope and in design, and key to a rigorous and resilient architecture emphasizing process and practice, along with assemblage production. Such distinguishing qualities align with shifts in a number of fields, including geography (Spies & Alff, 2020), occupational sciences (Barlott & Turpin, 2021), and theatre (Gallagher et al., 2020), which advocate for more integrative research approaches. Artography has been at the forefront of such creative scholarship for nearly two decades, and now alongside neophenomenology, we advocate for a synthesis of ideas and renderings that attend to relationality as a condition of doing research, bringing to art education another configuration of inquiry that recognises curating distance is part of our co-creating and co-presence in the moment.

In our exploration of gradients-in-relation, we encounter a doubling affect, a diffracting of distance that continues to compress space virtually, and at the same time distance is elongated by restriction of movement, aligning with what Handel (2018) refers to as 'forced waiting,' a betweenness that is shaped by a relationship of desire (longing to a return to everyday life) and degree (proximity of togetherness), rather than strict measurement. Our understood practices as artists, researchers and teachers remain in effective suspension and the return to everyday life is akin to a destination that is ever more elusive, to paraphrase Handel (2018), suggesting an emerging 'dialectic' of distance(s) may be upon us. This distinction is manifest in the visual articulations of our situations, or simply, our distances are mediated by diverse micro locations, meso emotions and socio-cultural orientations, and too, our macro atmospheric intensities as life-worlds that bind us together.

Mariia (Montreal, Canada) offers "visual mementos" that stress the tensions of passing-present, where memories are projections upon ephemeral moments, and a snowy evening becomes an artful event that is the essence of diffraction-in-action (O'Neill, 2018, p. 249). She employs metaphors of gradients to attend to markers of differences and betweenness when layering motifs, bringing the vitality of technology to bear on the notion of artographic relationality with integrity to protocols of art and research and culture.

Elmira (Vancouver, Canada) and Yasaman (Chicago, USA) share an inquiry process that harkens to and expands on artographic forms of the *Exquisite Corpse* (see Holbrook & Pourchier, 2012), with each sending an anticipatory photographic image and reflective poetic writing to inspire the other, drawing out qualities of response-ability by collaborating with immediacy to the prompts generated in the moment. Their mapping is argu-

ably post-representational, aligning in ways to Rossetto's (2015) discussion of emerging theorization of maps-as-events, a practice that is contingent, relational, different and laden with diffractive ambiguities. The body is felt as a gradient in the implicated senses of sound, touch and smell, bringing visual unity to their image-word-image triptychs. This suggests virtual-place tensionality is held, sustained and embraced as distance, while mediating the potential of the ambiguities of distancing.

Elly (Montreal, Canada) presents a compelling case for the felt-body, and how we feel towards one another at the time of the encounter is a defining factor in the activation of distances. Her performative works demonstrate, much as Mehta (2020) notes, distancing during COVID-19 involves a "repurposing" of public spaces, generating "a new sociable space" of "different sensory perception between people" (p. 669). Like Mehta, Elly explores how behaviours mix during this time of "changing urban etiquette" where "linear topology" is adapting to new forms of comfortable distancing as proximal and contingent (p. 670).

We offer our preludes of intensities, ambiguities and paradoxes as expressions of our diffractive renderings, with attentiveness and even playfulness, but we do not intend to idealise distances or suggest access to public space is equitable during the pandemic. As artographers, we evoke and provoke the desires implicated in distancing as a pedagogic pivot. Our preliminary efforts shared in this chapter are generating more questions and moving our inquiries towards a process and practice that is not unlike the position Hunter (2019) proposes for "vernacular mapping," where in our case, pandemic vernaculars of going, keeping and knowing one's distance open our gradients-in-relation as "individual routes, trajectories and vectors" (p. 127). Immersed in body-object-environment, our situated practices in the present bring our felt-bodies together with a "sense of connectivity and proximity despite being miles apart" (Hunter, 2019, p. 131). Our artwork scholarship produces work that may be described as incomplete and as the point of departure (Foster, 2004). Yet the archival impulse underway in our experiments mediates socio-material arrangements, and much as Eggert (2019) suggests, it 'comes between' as a condition of artographic inquiry. In our efforts, we embrace situations that host this artographic work and anticipate the impulse of our emergent renderings will invite further conversations beyond. In the course of this project, we attend to how and why continuous variations emerge within (micro) processes, (meso) practices and (macro) productions of living inquiry to amplify our current situations of distance and distancing. With mediation as a condition of distance, we propose gradients-in-relation are always becoming in the present, as diffraction-in-action. And so, we continue in our quest to keep our distances, to know our distances and to go our distances, together.

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# Re-mapping Distances

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**W**hile all Northern regions experience the increasing threat of climate change impacts, the Canadian Arctic has an additional disadvantage: the vastness of the region segregates the North from the more-populated urban centres in the South which perpetuates the strong sense of isolation and disconnectedness. This chapter looks at contemporary artistic practices that promote activism and change toward more social and environmental justice, while bridging distances between Canadian regions, valuing cultural differences, addressing inequities, and building stronger relationships. Ruth Beer's *Linking to the Arctic Ocean* (2021), Jeneen Frei Njootli's *Being Skidoo* (2017), and Maureen Gruben's *Stitching My Landscape* (2017) are land-based, site-determined, and socially-engaged, with the intent to reveal the environmental and social impacts especially aggravated by colonial perspectives and extractive industrialization. To oppose the exploitative history of mapping – especially in the Arctic regions, the artists employ counter-mapping strategies by either directly engaging with the landscape, or by providing alternative views of the landscape using satellite imagery, disorienting long focal lenses, or by manipulating images of the landscape using artificial intelligence. The works discussed in this chapter reimagine equitable futures by synchronously gazing at multiple coordinated perspectives of Canada's North.

The Canadian Arctic covers 40% of Canada's territory and is home to 200,000 inhabitants, of which more than half are Indigenous. Canadian policy states that the Arctic is central to Canada's national identity, prosperity, security, values, and interests. However, the geographic complexity of Northern regions increasingly affected by the unfolding climate crisis in the vastness of Canada's North, as well as challenges such as the lack of adequate health care resources exacerbated by huge distances that are difficult to access, bring into focus the direct consequences of territorial fractures between Canada's remote Arctic regions and more populated, urban centers of southern provinces. While sharing similar economic and social distress due to the harshness of the climate, Ca-

nadian and Scandinavian Arctic regions experience inequalities that put them directly at the forefront of climatic changes impacted by globalization. Yet, the economic and social sustainability of these Nordic regions is not subjected to the same vastness; with huge physical expanse in the Canadian Arctic, the geographic distances accentuate the remoteness from Canadian urban centres. Working to establish sustainable investment in Northern Canada, *Arctic 360* C.E.O and President Jessica Shadian states that along with her concern for equitable social conditions, the economic potential of Arctic regions is extensively overlooked by the Federal Government. She advocates for the need to emphasize the economic opportunities of the North and how that fits into Canada's role in the world (Shadian, 2018, p. 5). These economic and social disparities provoke us to look at these conditions and distances with a different gaze. Through contemporary artistic practices that include a "pedagogical turn" (Podesva, 2007) promoting activism and change toward more social and environmental justice, how can artists contribute to the need to bridge distances between Canadian regions, value cultural differences, form interconnections that address inequities, and build stronger relationships?

This chapter brings together the work of three artists whose artworks present ways of seeing distance from various literal and figurative points of view. They critically reflect on the problematic effects of climate change and the positive social, political, and cultural dimensions of future imaginaries drawing attention to the adaptation and resilience of Northern landscapes and communities. In rethinking distance, they create artworks that are land-based, site-determined, and socially engaged in order to reveal critical environmental and social impacts inherently aggravated by colonial perspectives, extractive industries inducing climate change and scarring of the land, issues of sovereignty, respect for cultural heritage, and dispossession from the land on the well-being of communities.

The artworks consider Northern landscapes from numerous perspectives including the spatial measure of distance by satellite imagery, in addition to the intimate physical interaction with, and moving through, the landscape. While Ruth Beer's recent work *Linking to the Arctic Ocean* (2021) proposes to look from above using new technology, Jeneen Frei Njootli's video performance, *Being Skidoo* (2017), presents their driving a blanket-covered skidoo across frozen landscapes, linking distance and time, cultural heritage, and intergenerational knowledge. Singularly, Maureen Gruben's colossal sculpture installation near Tuktoyaktuk, *Stitching My Landscape* (2017), literally punctures the ice landscape with bright red fabric, metaphorically weaving it together, thereby reconciliating distances through memory and healing of the land.

These artists encourage us to look from numerous directions: from above, from side to side, from beneath, from behind, and from within, in order to re-evaluate and philosophically or metaphorically measure distance in a context of advocating for environmental and social change. They examine distances as "composites of social values" (Kurgan, 2013, pp. 50–52) and gaze at a world of multiple perspectives embodied by a desire to acknowledge, expose, and celebrate commonalities and differences (Fur, 2017, pp. 33–57). Through the creation of new aesthetic expressions and practices that draw upon the land, lived experience, and urgency of addressing anthropomorphic climate change in more inclusive terms, these artists encourage glancing beyond the immediacy of the present to imagine transition to more equitable futures. At this pivotal moment in history, vast distances in the Canadian Arctic landscape, both physical and metaphorical, can be transcended through synchronously gazing at multiple coordinated perspectives that are an integral component of the artworks discussed this chapter.

Contemporary envisioning of space and landscape, mapping, counter-mapping or counter-cartography (Plagen, 2007) can reach beyond quantitative measures to encompass human social dimensions. An example includes the work of architect Ian McHarg whose manually-layered topographical maps with multiple sources of information result in layouts for highways that were more ecologically effective than conventional means. According to Kurgan: "Slope, surface, drainage, scenic value, residential value, forests, institutions, erosion and so on were layered together into what McHarg calls a 'Composite: All Social Values' or 'Composites: Physiographic Obstructions'" (2013, p. 52). As one of the most influential architects of the 1960s' environmental movement, Ian McHarg has transformed the field of ecological planning methods, proposing to rethink city planning and public policy in landscape architecture (Japan Prize Foundation, 2021). His concept of "composite of all social values" remains to this day part of the foundation of major urban and rural space conception throughout the world. Yet it constitutes a proper point of entry when examining notions of distances in Northern Canadian regions, as well as contemporary art practices, considering distances as agents that unveil environmental and social disparities.

## Ruth Beer, *Linking to the Arctic Ocean*, 2021

Representations of the Canadian Arctic landscape popularized through photographic images have presented romanticized views of pristine, untouched, or "bare" space, often devoid of inhabitants. The circulation of these "aestheticized" images is significantly

consequential as they form expectations and understandings, demonstrate power and privilege, and underscore both spatial and conceptual separation from any significant engagement based on respect and reciprocity. The annual World Press Photo Exhibition has largely participated in the production and proliferation of both romantic and graphic images of Arctic regions, made for the contemplative, and in some cases, voyeuristic pleasure of its audience. Since 1955, world renowned photographers and videographers have been awarded prizes honouring their ability to capture and by extension capitalize the "great white north" (Baldwin, 2012) or other remote areas of the world, while disparities have only grown stronger. In *Regarding the Pain of Others* (2003), Susan Sontag declares that "wherever people feel safe [...] they will be indifferent" (p. 73). While Sontag is writing about images that capture the atrocities of war in her book, this notion of indifference and its lack of affectiveness, can be applied to typical images of the North. It is not hard to imagine therefore that these soothing photojournalistic images instill indifference to the ecological crisis or realistic conditions in unfamiliar places – a situation that can be attributed to the ineffective visual strategies of a culture of images that refuses to meaningfully engage with violence inflicted onto the land.

In *Between Manufacturing and Landscapes, Edward Burtynsky, and the Photography of Ecology* (2013), American literature scholar Joshua Schuster addresses a critical portrait of one of Canada's most acclaimed landscape photographers. Schuster questions the ability of Burtynsky's alluring photographs to bring the viewer outside of a passive state, a state which is maintained through sublime depictions of land destruction. According to Schuster, Burtynsky's art practice cultivates an approach of human superiority over the natural world, arguing that the sumptuous aerial views and overall composition of the photographs are only justified by a desire to embellish the traumas embedded in the land, in such way that a point of no return has been reached, and humans were slowly becoming spectators of their own disaster (2013, pp. 209–212). While the images captured by the Canadian photographer seem to fetishize our modes of production instead of opening a political dialogue — as Schuster claims — one could argue that refusing to photograph or otherwise document the scars enforced onto the land would be ignoring the alarming state of distressed territories. Yet there must be other ways to examine these land traumas through a visual language suggesting perspectives that could broaden and educate on these issues. Ruth Beer's latest investigations with Artificial Intelligence where composites of political values are revealed and presented in a multi-layered, aggregated, and intersecting way, proposes to glance from a distance at the endangered Arctic regions of the Canadian Northern territories. By presenting

**Figure 1.** Ruth Beer, *Tuktoyaktuk, oil + water*, 2021, photograph re-processed by A.I., inkjet print, 40 x 30 inches.

viewers with the consideration of place through its relation to distance, Ruth Beer's work poses questions concerned with the impact of photographic representation convention-ally associated with depictions of the Arctic landscape.

*Tuktoyaktuk, oil + water* (fig.1) is a photographically reprocessed image powered by Artificial Intelligence (A.I.). Commenting on the potential of digital imaging technologies for reinterpreting cultural and social frameworks, it calls for a broad re-imagining of the forces, forms, and structures that create an impasse toward more equitable futures. In

employing artistic strategies of representation and abstraction, the artwork re-orientates norms of viewing by integrating satellite mapping imagery of the vulnerable Arctic coast with a woven pattern of an intersected photographic matrix of oil and water. These images are brought together to interrogate the complexity of present conditions in Canada's North, in order to unsettle expectations and challenge the viewer to engage differently.

While the DeepDream algorithm was initially designed for pattern or facial recognition and classification within images, it has been repurposed and trained via neural networks to merge visual content by prompting the algorithm to adapt an original input to a database (Hayes, 2015). The open-source code is now used to enable users to transform their own photographs and synthesize visual textures. In the case of Beer's work, two and sometimes three images were merged together with the intention of interconnecting similarities as well as dissimilarities.

As a site-determined artwork, *Tuktoyaktuk, oil + water* proposes to look at the Northern Canadian landscape at a close distance, where earthly physical materials such as oil and water encounter the God's eye perspective — or "god trick" in multi-species theorist Donna Haraway's term (1988) — of satellite imagery. The artwork is intended to build a system of understanding that goes beyond the study of clustered and destructive phenomenon like coastal erosion and oil dumping. Instead, *Tuktoyaktuk, oil + water* questions normative forms of photography and urges us to look at the environmental crisis affecting Northern communities and Arctic territories through the generative and reformulated mechanisms of A.I.

Driven by artistic research, this new work generates abstract images that reveal the unpredictability and uncertainty of the impact of environmental changes through *databending*[1] and manipulation of the underlying pixels of photographic imagery. Computer-generated images here call for our attention to the ambiguity of a potential future in territories subjected to serious changes. *Tuktoyaktuk, oil + water* thus witnesses both the deconstruction of the image and the destruction of the land; the violent manipulation and underlying movement of the pixels rearranged by A.I. reminds us of the erosion of the land, with coastlines unpredictably redefined and blended in an ocean of noise.

While representing a shift from computer-mediated forms of figuration and dissemination of data, algorithmic art (Pieters & Winiger, 2016) acts as an operator for revealing artifices in the form of alteration, compression, and glitches. The surface of the image

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1   Databending is process of manipulating a file using a software originally designed to edit another file format.

then becomes a prompt to expose the underlying truths inherently attached to data-bending. Generative art (Pieters & Winiger, 2016) is in a way the trigger and simultaneously the occurrence of such pixelated manifestations; trigger, because it operates as an executor of digital phenomenon; and occurrence, because it embodies its own visual instances. Therefore, generative art can somewhat be compared to a series of apparatuses that would act as both generator and viewfinder for digital experiences; see and be seen while revealing the unseen. As art critic and artist Rosa Menkman elegantly puts it in her *Glitch Studies Manifesto*: "I do not feel locked into one medium or between contradictions like real vs. virtual or digital vs. analog. I surf the waves of technology, the art of artifacts" (2009–2010, p. 3). According to Menkman, there are three different instances upon which to exploit what she calls noise artifact: the glitch, the encoding/decoding (usually referred to as compression), and the feedback artifacts. Considering that "noise" is usually seen as undesirable and unwelcomed in an image, it can also hold within itself positive outcomes by becoming its own opposite. For example, noise can, in some instances, become a desirable surprise curiously capable of revealing what's hidden within a digital image. Subsequently, noise through glitches, compression, or alteration is converted into what Menkman qualifies as a "wonderful experience" (2009–2010, p. 5). In the case of Beer's work, noise — through the manipulation of pixels by A.I. — suggests the destruction of the land and the constant remodeling of its boundaries. Noise then becomes an uncovering experience that discloses the constant distress of an endangered land, but also the violence of an algorithmically reprocessed photograph.

By proposing to look simultaneously from above by means of satellite imagery and inward through images algorithmically generated, Ruth Beer's work looks at distances from a unique standpoint that provokes us to consider accountability and action, and to reconsider the violence of the climate crisis through narratives of coastal destruction as well as within a medium of re-manipulated truth.

## Maureen Gruben, *Stitching My Landscape*, 2017

The artist Maureen Gruben, who was born and raised in Tuktoyaktuk, in the Inuvik region of the Northwest Territories, examines and performs with the Northern Arctic landscape. She considers distances as a means to honour ancestral tradition and to bring into the present both private and collective memories related to Inuvialuit hunting and embroidering practices. While her material practice concentrates on dissecting and re-combining organic matter such as polar bear fur, beluga intestines, and sealskins with

industrial materials like bubble wrap, vinyl, or metallic tape, her work is rooted in the intersection of Western Arctic, global environmental, and cultural issues. Grounded in activist work seeking change in the Arctic region, Gruben's concerns with melting ice and persistent organic pollutants (also known as "Pops") propose to reveal climate issues in Arctic regions. On the one hand, Gruben's work examines geographical and cultural traumas, and on the other, it celebrates the relationship between the land and indigenous communities of the Inuvik region.

In her video performance documentary *Stitching My Landscape* (fig.2+3), Maureen Gruben manifests the visibility of seal hunting traditions through the stitching of the frozen territory while using a kilometer length of red broadcloth. Embedded into the frozen landscape near the settlement of Tuktoyaktuk, the zigzagging patterns call upon her own childhood memories of the seal harvest and also the delta trim designs embroidered on local parkas. Documented using video camera and drone footage, the artwork consists of a performance by the artist with the land. It also materializes in the contrasting red fabric drawing a bold line, and in the traces left by the broadcloth on the ice. The artist has described the piece as recalling from her own memory the aesthetic experience of seeing seal blood and gut on the ice as a child (Willard, 2020, p. 15). The performative aspect of the art work frames the overall experience in a ritualistic process that encompasses a material practice embodied by her actions and the vibrantly coloured fabric.

Using drone technology, Gruben's video piece primarily presents the land from a bird's eye view, characterized by the wide-angle panorama that renders the frozen beauty of the Arctic regions during the winter months. The democratization of drone technology is, as in this case, predominantly adopted for perspectival work requiring altitude in order to more fully present the experience, quality, and large scale of land-art installations. While aerial photography has changed the ways in which we look at the world, drones are participating in establishing new perspectives that render our earthly experiences almost obsolete (Waxman, 2018). However, by incorporating several perspectives on, and also of the land, in her video piece, Gruben not only challenges the duality of land reality in contrast with aerial views but also preserves human emotional scales through a language of reconciliation embodied by her own physical performance of the land. By redefining and repairing the land through the use of red broadcloth, Gruben connects and converges with it through the gesture of her body on the ice's surface. The different perspectives emphasize the effect of vastness, reminding us of the immensity of the space, showing us the distant horizon while at the same time being in immediate contact with the land.

While the process of mapping has often operated as a means of appropriating the land, in Western cultures counter-mapping is increasingly considered as a generative method for engaging communities with their own histories. For example, the annual Indigenous Mapping Workshop assists participants in mapping landscapes using new technologies and guides them through understanding the significance of Indigenous history, knowledge, and culture (Coleman, 2020). The workshops acknowledge that Indigenous maps and Indigenous use of space are reflected in a myriad of ways, including through stories, practices of hunting and fishing and other ways of knowing the land. Through the act of performing the land, Gruben rejects conventional mapping practices and removes herself from those colonial processes, and instead reconnects with both her personal story and the hunting traditions of her community, experiencing and reuniting with the land.

In *Introduction, The Science of Social Space* (2013), curator and writer Jeanne Haffner traces the origin of the term "social space" which emerged in post-World War II France. The concept is defined as a science which integrates the participation of the residents in urban planning activities that will reshape the boundaries of the community's growth and geography. Haffner highlights the fact that a social space is most predominantly inspired by aerial perspective but is ultimately anchored in a view from below that affirms the respect for human scale and social needs (Haffner, 2013). While Gruben's work does

not take place in an urban environment but rather in remote territories, her installations, through motions of reclaiming the land, operate as a social space for the artist's entire community. By celebrating seal hunting traditions, Gruben reappropriates a territory for the people of her community as an act of resistance. In light of Gruben's work, the concept of "social space" can be seen as a way to refuse the traditions of colonial cartography, as well as a process for re-evaluating today's maps and land redistributions. Artistic practices such as Gruben's then contribute to a re-imagining of mapping as a flexible, inclusive, and community-engaged process through site-specific installations, performances, and events. For instance, similar to the acclaimed Inuk artist Shuvinai Ashoona whose 2020 *Mapping Worlds* exhibition reconciles memory and tradition through a drawing-based mapping practice (Verna, 2021), Gruben physically redesigns the land and manifests memory through the act of stitching of the land with cloth.

While Gruben's work is critical of mapping practices that are based on ownership titles and territorial acquisition, it also represents notions of geographical distances and remoteness within rural environments influenced by traditional ways of life such as hunting, fishing and embroidery. Through the act of stitching the landscape she reclaims and repairs the land simultaneously, connecting with past and present. In his 2003 essay "The Cartographic Gaze, Global Visions and Modalities of Visual Culture," geography scholar John Pickles critiques the European colonialist project of world domination through mapping. According to Pickles, Western images of the world have formalized the ways in

**Figure 3.** Maureen Gruben, *Stitching My Landscape* (still), 2017, video (6:10mins). Commissioned by Partners in Art for Landmarks/Reperes2017. Curated by Tania Willard.

which the land is recognized and renamed, resulting in inequitable conditions and dispossessions of local indigenous communities, distancing them from their right to manifest their unique culture within their own territories (Pickles, 2004).

*Stitching My Landscape* then restores control over perspectives and reclaims a sensory system that separates, or distances itself from the colonial gaze through the use of drone aerial views. Similar to the ways in which Beer repurposes this gaze through the use of Artificial Intelligence and satellite imagery, Gruben reclaims the endangered Arctic coast using aerial perspectives and videography as agents that reveal colonial ambitions on Canadian remote regions. Underscoring the intentionality of her subject, while commenting on the capitalist-driven neocolonial politics of present-day Canada, the commissioning of Gruben's performance in *Stitching My Landscape* corresponds with the 150th anniversary of the Canadian Confederation (Willard, 2020). The installation also commemorates the termination of the ice highway from Inuvik to Tuktoyaktuk before it was replaced by today's part-gravel part-asphalt road. This new road opening to the Arctic coast symbolizes a desire for Canada to bridge distances to open its most remote regions to southern regions of the country. However, taking into account the potential exploitation of the region, the socio-economic and cultural consequences for local communities remain to be demonstrated.

In connecting the ecology of the site, through probing what is beneath and around the ice, Gruben's red broadcloth reveals "composites of social values" materialized by the fabric itself and in the artist's and her community's engagement with the land. Gruben's art practice adds another layer, or composite according to McHarg's own terms, which agglomerates on top of permafrost, roads, and ice, in order to unify natural life with its primal community; distances are then diminished in a process of reconciliation and rapprochement.

## Jeneen Frei Njootli, *Being Skidoo*, 2017

Jeneen Frei Njootli is a two-spirit interdisciplinary artist from the Vuntut Gwitchin nation in northern Yukon and is currently based on unceded territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh (Squamish), and Selíĺwitulh (Tsleil-Waututh) Nations in what is now referred to as Vancouver. Their work primarily takes the form of performance, sound, video, and installation. In their 2017 experimental video documentary *Being Skidoo* (fig.3), Frei Njootli navigates the landscape by skidoo covered with re-purposed and newly embellished dog blankets, boldly and triumphantly advancing in

the frozen landscape toward the camera, with the noise of the motor alerting everyone in the vicinity of the journey. The artwork addresses distances from various different points of reference. Firstly, it is made visible through the various routes traced in performance as the artist drives the skidoo across the frozen Yukon landscape. Similar to Gruben's work, *Being Skidoo* is anchored in the traditions of aerial perspective. Additionally, in the process of the production of the artwork, Frei Njootli collapses distance through intergenerational knowledge-sharing with elders and other knowledge-keepers within their community. As part of Frei Njootli's artistic practice, they are especially attentive to the ethics of sharing cultural knowledge in the public presentation of their artwork. For example, Frei Njootli provided images (figure 4 and figure 5) that appear in the video, describing them as intentionally blurry, refusing the extractive gaze.

In creating the multi-faceted artwork *Being Skidoo*, Frei Njootli collaborated with their own community of Old Crow, Northern Yukon, and with close family members who worked together on the design and production of the embroidery and assisted with filmmaking and performance. With the intention of honoring the interrelationship between dogs and members of the community, Frei Njootli and their contributors adapted and embellished ski dog blankets traditionally made by the Gwitchin community accustomed to making regalia or garments for their dogs (Frei Njootli, 2018). Along with community skill-sharing that is at the foundation of this socially-engaged participatory artwork, Frei Njootli interrogates issues related to colonization and land use through movement and gesture on ancestral territories. Frei Njootli's work responds to their concerns for how the North is conventionally depicted, consumed, and repeatedly used to perpetuate ideas of Canadian nationhood that are not reflective of their community.

Filmed in Vuntut Gwitchin territory, *Being Skidoo* is a testimony to the importance of contemporary skidoo culture for people living in the Canadian North. With fewer people using dog-sleds, skidoos are now an essential mode of transportation in many regions for practical purposes. The skidoo can be considered a social adhesive that minimizes distances connecting communities challenged by harsh terrain, remoteness, and lack of roads. Frei Njootli's re-adaptation of traditional dog blankets for covering the skidoo combine ancestral and modern modes of transportation connecting traditions and mobility both in space and time. In refusing the erasure of traditions carried by women elders and knowledge-keepers, Frei Njootli's actions and interventions on the land operate as political acts that advocate for the sovereignty of the Gwitchin people. Through the skilled labour of Gwitchin women — whose beading and sewing practices participate in perpetuating intergenerational connections — Frei Njootli creates a

**Figures 4 & 5.** Stills from *Being Skidoo* 2017, HD video, Commissioned by Partners in Art for *LandMarks2017/Repères2017*. Courtesy of the artist: Jeneen Njootli.

space of "love and skill" (Phillips, 2018, p. 14) that cultivates ancestral knowledge and binds families together. Movement here becomes one of hands traversing back and forth across the dog blanket fabric, creating colourful traces and forms of material. Jeneen Frei Njootli resists colonial and neo-liberal views of the world by creating artwork that builds on Vuntut Gwitchin traditions and values, adhering to ecological principles and celebrating intergenerational community relationships. Distances are therefore diminished and converted into consolidated social spaces that render colonial perspectives obsolete.

For Frei Njootli the work exists in two places (Frei Njootli, 2018) first, it resides up north in Old Crow, for the members of her family and community, where the ski dog blankets protect the front of the skidoo and prevent engine corrosion. Secondly, by creating experiences of movement as a journey across territories and communities, *Being Skidoo* manifests the territory whose influence generates activity and life in Northern landscapes (Willard, 2018). Refusing displacement, it looks at distances through the apparatus of mobility that encourages, mobilizes, and reconciles Northern communities with the land. In regard to *Being Skidoo*, curator Tania Willard states that Frei Njootli "presents an experience of being out on the land, an experience that speaks to Indigenous knowledge, tenacity, and a land-rights-based relationship to traditional territories" (2018, p. 21).

Frei Njootli's experimental documentary aligns with the notion of social space which centers the experience of their own community in an intergenerational participatory project of informal pedagogy, teaching, and learning of traditional knowledge. As in Gruben's *Stitching My Landscape*, Frei Njootli's performances of the land are conducted in remote regions and propose to recognize human scale in the vastness of the landscape, hereby attending to close relationships with the land, and to re-establish social values within the artist's community. Their approach to social space and temporality engages with participating collectively in transitional distances that erase the supremacy of authoritative colonial power over the land.

The French philosopher, Henri Lefebvre designated the perspective facilitated by aerial photography as a space of state control (2009), a space in which, under the gaze of the state, the land is surveyed and overseen. By driving the land, and creating routes, Frei Njootli and their community create movements that disrupt the gaze of overseeing Canadian government authority and calls for more equitable relationships of post-colonization. Similar to the ways in which Beer creates movement in her A.I.-generated images, Frei Njootli scrambles the state's fields of vision and creates a disjunction in power dynamics. Movement then becomes an agent of resistance that confronts and rebukes the empirical gaze while celebrating traditions.

Using drone footage and long focal lengths creating a cinematic experience in *Being Skidoo*, Frei Njootli tells the story of the land and reappropriates modes of representation, documenting their journey through accessibility and respect of the territory. This work, in parallel with the artworks of Gruben and Beer, revises the colonial gaze in repurposing aerial views. The so-called God's eye perspective here operates as a way to contest colonial forms of representation of the land, using similar angles that transport the audience to a territory that is not to be exploited, but rather to be engaged in with respect, appreciation, and care. Yet, in opposing colonial perspectives, Frei Njootli's process of mapping suggests that distances can be harmonized by viewing from above and studying from up close, from side to side, and from within the inequalities and existing disparities. Similar to the ways in which Gruben reappropriates the colonial gaze through the use of new technology, Frei Njootli utilizes drones and video cameras to reinforce the importance of the site-specificity of the work, while documenting her counter-cartography of the land in driving skidoos.

In her essay *Situated Knowledges*, Haraway (1988) questions the reality effect of high-resolution imagery, and analyzes vision as a sensory system that ought to overcome dominating gazes:

> Vision can be good for avoiding binary oppositions. I would like to insist on the embodied nature of all vision, and so reclaim the sensory system that has been used to signify a leap out of the marked body and into a conquering gaze from nowhere. […] This gaze signifies the unmarked positions of Man and white, one of the many nasty tones of the word objectivity to feminist ears in scientific and technological, late industrial, militarized, racist and male dominant societies […] would like a doctrine of embodied objectivity: [...] feminist objectivity means quite simply situated knowledges. (p. 581)

In this short abstract, Haraway underscores the relevance of an artwork that counters "the god trick," which disregards all other perspectives and ignores the voice and presence of non-white male gazes. In Frei Njootli's case, the colonial gaze denies the right to look at the land from any other standpoint than aerial perspective; this emerges and still flourishes today through federated imperialist world mapping. Relatedly, curator Kimberly Phillips states that "Working with fugitive materials and movement allows Frei Njootli to reconfigure that which is 'given to be seen.' Settler colonialism is intimately linked to patriarchy and capital and thus as always been – and continues to be- a systematically gendered process" (2018, p.13).

## Conclusion: Re-mapping the landscape

By being in direct conversation with the uniqueness and specificity of the land in Canadian Arctic regions, art practices can propose to reimagine social, political, and cultural dimensions of the future of Northern territories, while drawing attention to both the adaptation and resilience of the landscape and strengthening positive relationships across communities. As in the examples of artwork discussed in this chapter, by metaphorically reducing the considerable distances between the land and its inhabitants, such practices remarkably amplify and deepen our understanding of perspectives within territories that have been subjected to the colonialist gaze and its ambitions to own the land. Through the layering of "composites of social values" on the earth's surface, art practices reveal the traces and footprints left behind by ancestral communities and promote discovering new routes that solicit a common effort for the decolonization of the land and, by extension, the frameworks that enable inequities to persist. They focus on the relevance and potentials for art to activate sociocultural, political, and ecological transformational change.

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# Design Perspectives
# for Smart Social Distancing

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**T**he COVID-19 pandemic hit the world in spring 2020, suddenly affecting to the whole society with different restrictions related to social distancing in order to prevent the virus from spreading. With the practices applied for social distancing, people's life was changed by mobility restrictions, remote working, and remote schooling. The sudden change created different challenges for running everyday life, from wearing of face masks to reorganizing the family routines (Häkkilä et al., 2020). For its very nature, design is a discipline which offers means to address problems and find solutions to new challenges. This chapter presents design concepts and activities related to the COVID-19 era. The presented activities were carried out at the Faculty of Art and Design, University of Lapland, which has a successful history of integrating thematic approaches, such as sustainability and social design, into the education across different study disciplines (Jokela & Coutts, 2018).

Especially, the chapter describes three distinct design activities related to smart social distancing. For each, the process and the final design outcomes are presented. Firstly, we present concept designs for a mobile application that tracks a family's well-being related to COVID-19. The design exercise was carried out at a Master's level interaction design project course, and involved three student groups addressing the design challenge. Secondly, we present a mobile application concept and user interface (UI) design for a mobile application, which helps the user to plan their daily schedule and mobility in a way which minimizes exposure to crowds of people. Thirdly, we describe a face mask making workshop, which was organized for university staff and students as a community activity to help them to create sustainable and individual fabric face masks.

The common denominator for these activities was the Smart Social Distancing Co-Creation project, a joint research project between University of Lapland and University of Oulu, funded by Business Finland. This chapter illustrates, how the smart social distancing research project activities have been successfully integrated into the university level design education.

## The Design Context for Smart Social Distancing

### Facing the COVID-19 Pandemic

In spring 2020, the world faced a global pandemic, COVID-19. The actions taken for reining the virus were world-wide, international flights were stopped, shops and other facilities closed, lock-downs implemented, and people's mobility dramatically cut. In Finland, on March 16, 2020, a state of emergency over the COVID-19 outbreak was declared, followed by a close-down of education premises and a shift to remote education. For children's schooling, the remote teaching period lasted until mid-May 2020, but for universities, the teaching mostly continued in the remote mode for the academic year 2020–2021. Moving education to the remote mode enforced a rapid ramp-up of online teaching, which was not without challenges both for teachers and students (Wiberg, 2020). At the University of Lapland, the autumn semester 2020 started with face-to-face teaching for the first-year students, as well as for a set of art and design practicum courses. These lessons were organized with precautions of social distancing, such as the use of face masks and extra spacing between seats. In practice, this arrangement was active from September to mid-November 2020, after which stricter restrictions were enforced.

The consequences of the COVID-19 pandemic were omnipresent and overwhelming, and had an impact on the art and design education at many levels. Shifting the mode of teaching from physical classrooms and workshops to online interactions had a huge effect on how the art and design courses could be taught. It required modifications to the student assignments and exercises, which had to be completed to a large extent without workshop facilities and tools. In addition, the influence of COVID-19 could be seen in the content and topics of the design tasks. In this chapter, we focus on the latter aspect, and present examples of cases which used COVID-19 as the topic for an education activity.

## The Smart Social Distancing Research Project

The COVID-19 pandemic impacted society rapidly and throughout. The acute and over-burdening need for healthcare services, remote schooling, and remote work raised the need for investment in these areas. Additionally, other domains such as tourism, restaurant services, and performing arts, highlighted their needs for economical support. Among other economical governance actions, this led to a number of research funding calls focusing on the pandemic releated challenges faced by society. It was identified that there was a need to research the emerging practices, their impact, and the potential

of new services and applications related to pandemic context. As part of this scheme, Business Finland set out a Corona Co-creation funding call for research proposals investigating these challenges. The Smart Social Distancing project (2020–2021) was funded by Business Finland as part of this call.

In the core of the Smart Social Distancing project is a vision to support people to live as normal and safe life as possible during COVID-19, or other similar pandemics. This includes maintaining social interactions and mental well-being, with a minimal risk of catching the virus. The aim was also to come up with long term design solutions, which would still be valid and needed after COVID-19. For example, solutions developed for a pandemic could support people also at the times of seasonal flus.

The smart social distancing research relates tightly to the use of digital technologies. Interactive technologies including sensors and different data gathering mechanisms, with which the user interacts through a user interface (UI). Thus, the research included both the technical research as well as design research for new, user-friendly solutions to support social distancing. The project was implemented in cooperation between two research groups residing in two universities in northern Finland. The Lapland User Experience (LUX) research group, University of Lapland, concentrates on the user experiences design, human centered design, and human and computer interaction (HCI). The group has made extensive research on user experience with interactive wearables and ubiquitous computing systems. In the area of digital health and wellness, the group has conducted research through design research for instance on sports services for youth (Häkkilä et al., 2016) and encouraging a physically active lifestyle (Harjuniemi et al., 2018). The Center for Machine Vision and Signal Analysis, University of Oulu, conducts research on biosignal analysis. Biosignals represent the state of human body such as body temperature, respiratory function in the form of airflow from mouth, and cardiac function in the form of heart rate. The previous research of the group includes for instance respiratory analysis (Tiinanen et al., 2015) and ECG measurements (Vuorinen et al., 2019).

The physical distance between the research partners forced us to develop effective methods to work in a distributed environment using online tools for brainstorming and designing novel technologies and services for smart social distancing. For instance, we used the Miro board online application to help to identify key ideas and technologies that should be explored further in our teams. The Miro board was also very useful for creating and refining the ideas together with selected stakeholders, representing key actors in Finland. In addition, video meetings and shared document editing tools were extensively used between the research groups.

# Social Distancing as a Topic for Interaction Design

### The teaching perspective

Interaction design is a discipline, which focuses on designing user interfaces (UIs) that are easy and pleasurable to use. Typically, the focus is on graphical user interfaces, which appear for instance in web services, mobile applications, and different office software. In addition, interaction design covers unconventional UIs that are typical for ubiquitous computing environments (Schmidt et al., 2011). These are for example tangible user interfaces utilizing physical interaction, and multimodal user interfaces that can use, for example, auditory or olfactory elements as part of the user interface design. In the age of digital technology, the number of interactive products and applications have rapidly increased, and they are used for a myriad of purposes at work, home, and for social life. The omnipresence of interactive technologies in our everyday life is evident. Thus, learning interaction design is of growing importance for future designers, who are needed in growing numbers in industry.

At the University of Lapland, Faculty of Art and Design, interaction design is taught mostly at the master's level as part of the industrial design study program. The particular course presented in this chapter includes both local and international students, and it covers both theory, small design exercises, and group assignments with larger design tasks. The course introduces different interaction technologies and covers the main principles of interaction design. The theoretical learnings are applied in practice in different user interface design exercises. During the ten credit point (ECTS) course, the students submit three large assignments, where two focus on graphical UIs and one on some other approach, for instance tangible UIs.

In autumn 2020, due the COVID-19 restrictions, the interaction design course was organized remotely, using the Adobe Connect online tool that was provided as part of the university's general infrastructure for remote teaching. A pandemic related design exercise was decided to be integrated to the course, as it offered a topic that was highly relevant and offered an interesting design challenge. In the following, the UI assignment task, the design process, and the outcomes are presented.

# Mobile UI Design for a Family Health Monitoring Application

As in interaction design assignment, the students were given a task to create a mobile application concept and UI design for a health monitoring family application designed

for the COVID-19 pandemic era. The family health monitoring application should support both individual and family use, and inform the user about four different risk levels of getting sick: normal, low risk, high risk, and an alarm. As the input for the system, the application was defined to use the body temperature, coughing frequency, breathing difficulties, as well as exposure to other people. The UI design was required to present a holistic visualization of the health data for each family member, and provide a warning when s/he entered to a stage triggering an alarm of getting sick. The design should also pay attention to the user's privacy in terms of how the warnings were delivered to the user. Both single user and family UI views were to be visualized, and for the example use case, a family size of four was used.

The assignment was done in three groups, each including 4–5 students. The design of the family health mobile application concepts followed the conventional UI design process, which starts from the analysis of the prior art, ideation phase, and sketching different ideas. After that, the main features are decided and the interaction flow planned, and a wireframe design of the application UI is drafted. After this, the different interaction steps, screen views, and their elements are iterated and refined. Finally, polished UI graphics are applied. In the end of their design process, each group created an interactive UI simulation of the final design by using the Marvel tool. Examples of the final designs of the smart social distancing family health monitoring application are presented in Figure 1.

After the design brief, the student groups worked independently for two weeks by meeting online and using tools such as Miro to support the group work, see an example in Figure 2. During this period, the groups presented their work-in-progress twice at the lectures, and the concepts went through commenting rounds by the supervising teachers. Here, the status and the direction of the design was commented. Based on our earlier experiences in teaching interaction design, these review rounds in the middle of the design process are extremely important. Through these iterations, the students can sharpen the scope of their application concept and remove some evident usability flaws in the design. If the course was organized as face-to-face teaching, the final presentation would have included a live demo with the UI simulation. In the case of remote teaching, a video showing the interactive use of the simulation was created for each design concept.

If the design process was continued further, the next step would have then been user testing the application to evaluate the usability of the application and to collect feedback for the iterating the UI design further. The usability evaluation was partially replaced by

Miro tool supporting
design group work:
-UI views as screenshots
-Interaction flow between views
-Early design notes

General comments on the concept
Comments on the UI design

Zoomable view allows finding materials
created in different design stages (e.g.
brainstorming sketches, concepting
notes) and expanding the design

**Figure 1.** Final designs for the family health monitoring mobile application (Häkkilä et al., 2020).

**Figure 2.** Miro tool used in the group work when creating the UI design (Häkkilä et al., 2020).

the expert evaluation comments provided by the teacher and the external experts in the final presentation. In an industrial product development process, there would also be more restrictions set for the UI design from the perspectives of technical implementation and the UI style, for instance due to Look and Feel guidelines of the organisation's brand. These limitations were however not relevant for the content of the course, where the main target was to focus on creating a concise and usable mobile application concept and UI design from the scratch.

As a reflection of the topic, we found that positioning the design assignment around the COVID-19 theme was a success. The topic was timely, and everybody could relate to it. At times when meeting other people was heavily limited, it was not possible to organize a user research field study, which could have been used as background information to inform the design decisions. However, now the students already had personal insight about the needs and requirements for a usable application, which would support health monitoring during a pandemic.

## Concept and UI Design
## for a Smart Social Distancing Mobile App

The previous example presented a group assignment conducted with design students, in the topic of smart social distancing topic. In addition, the topic was found promising for larger design tasks, and as a second example, a master's thesis project was introduced (Heikkilä, 2021). As mobile technologies were in the key role in the research project, the task in the master's thesis was to design a Smart Social Distancing (SSD) mobile application. The aim was to design a mobile application, which could be used as an everyday tool to guide the user away from visiting crowded places while conducting everyday tasks and commuting. A map based UI design was selected as the key feature for the application. As fit for a design thesis, the focus was on the UI design and user experience (UX) design, excluding the technical implementation.

The thesis research began with benchmarking different applications and features related to social distancing guidance. Many stores and institutions have introduced COVID-19 safety guidance, and besides printed instructions, a large number of mobile applications for maintaining safety distances have been developed (Collado-Borrell et al., 2020). Also, Google search provides data charts of stores' popular visiting times, which are useful when trying to avoid rush hours. After benchmarking the

existing applications and discussions with the research groups, the main concept idea was developed. Following a standard UI design process, the application design proceeded from drafting the application's key views, the interaction flow, wireframing the UI views, and then polishing the UI graphics.

Figure 3 presents selected views of the final design, and illustrates the main features of the mobile UI design prototype. The red coloured hotspots on a map represent the crowded areas in the city. The user can change the map view to show yesterday's, or the next week's predicted hotspots. The icons at the bottom show the main functions of the application. The route feature supports user to search for the best route to avoid crowds, and the crowded hotspots can be viewed also as a 3D map. The user can also search specific places and their rush hours from the map. The application lets the user save his/her most commonly visited places, marked with a star icon, and provides route recommendations. Finally, on the right in Figure 3, the application allows the user to consider the level of crowdedness in specific places. With this function, it is possible to predict what time would be the best for visiting a grocery shop or other destination. In addition, the application supports the scheduling of the day in a manner that avoids the crowds in everyday mobility. Risk notifications were designed to give the user rush hours warnings related to the frequently visited places.

To evaluate the concept and the application UI design, two focus groups were organized (Heikkilä et al., 2021). Each focus group session was divided into three themes: general techniques for avoiding crowds, evaluating the application prototype, and techniques in predicting the amount of people in certain locations. When the application prototype was demonstrated, first, all the functions were presented. After this, the participants tried out the mobile prototype simulating the application, and evaluated each main function (Figure 3) in terms of its usefulness in maintaining the social distance. The participants deemed the hotspot map, crowdedness of specific places, scheduled day to avoid crowds, and the risk notifications to be the most useful functions. Based on participants' feedback, these features were found useful, easy, and fast to use. When inquired if the application was considered to be useful also outside the pandemic era, the participants reflected that avoiding crowded places and queues would be relevant also then. Thus, avoiding crowds would provide a feasible use case also in a long-term.

The master's thesis provided a large enough project to consider both the concept design and its evaluation. The task was well suited for a design thesis project for the size and duration of the design process. Although a vast amount of prior art on location
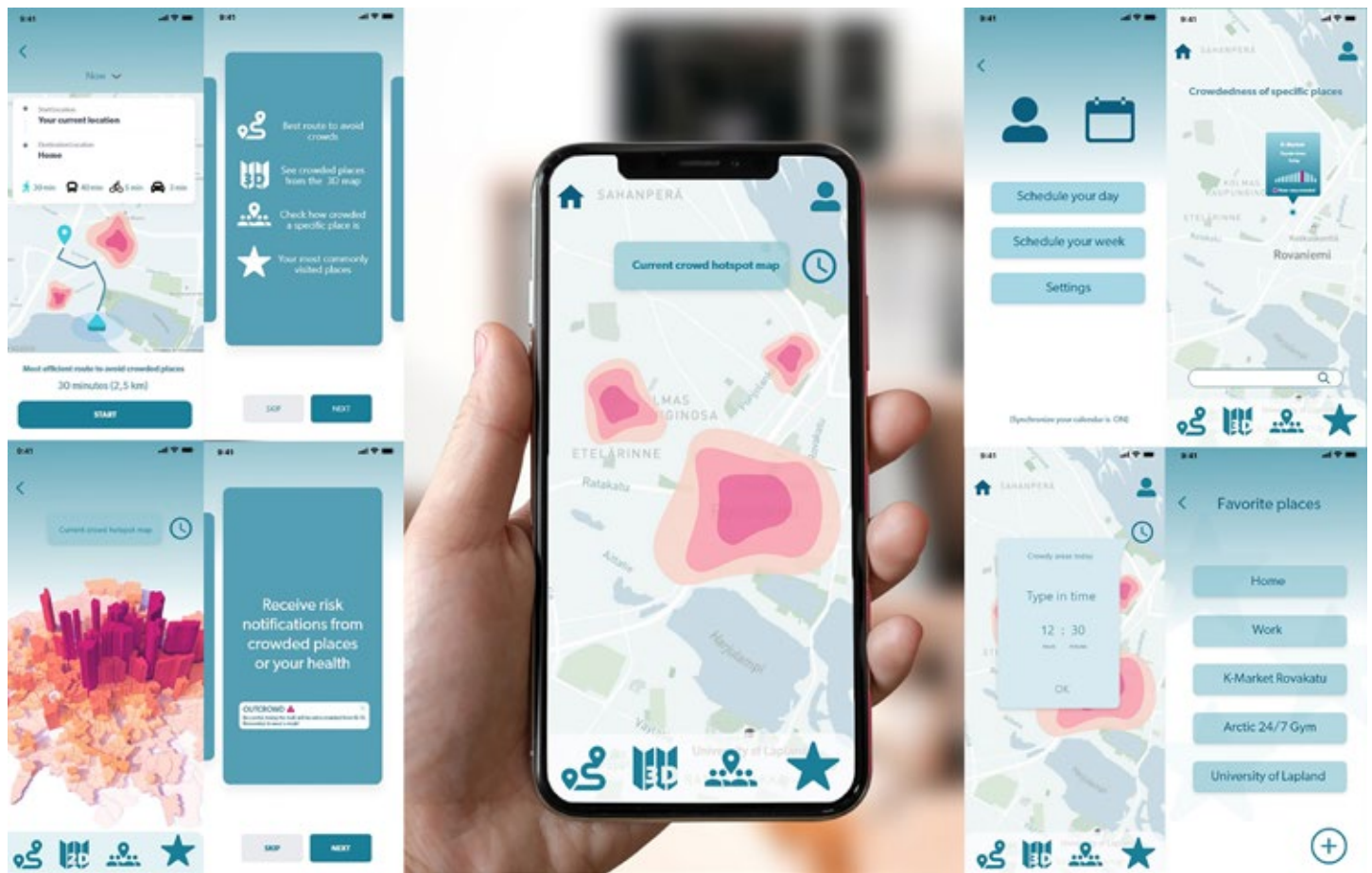
**Figure 3.** Screenshots of the SSD mobile application UI design (Heikkilä, 2021).

based mobile services exists (Huang, Gartner, Krisp, Raubal & Van de Weghe, 2018), the COVID-19 pandemic provides a new angle and urgency for the application domain. Again, the timeliness of the topic made relating to the use cases easy, which helped in organizing a user study to evaluate the concept.

## Face Mask Workshop to Support Social Distancing

As the third example showcasing how the social distancing theme was integrated in the university's design activities, we present a public face mask making workshop, which

was organized on the University of Lapland premises in October 2020. The participants had a chance not only to create their own fabric face masks, but also an opportunity to participate in two research studies regarding social distancing during the pandemic.

A variety of different pre-cut pieces were provided for the participants to select the fabric for the front and back parts of the mask, as shown in the Figure 4. A textile design student facilitated the workshop by helping to put the pieces together and sew the masks. The workshop created a long queue lasting until the end of the workshop, when all of the one hundred pre-prepared masks had been constructed.

At the time of the workshop, the use of face masks was still quite novel, as the Finnish government had only recently given their first public recommendations on mask use due to the second wave of COVID-19 in autumn 2020. Simultaneously, the mask workshop was advertised on the University of Lapland's website and social media. During the workshop, we witnessed how the participants made numerous social media postings presenting their self-made masks. We see that the workshop promoted and reminded people of the need for their use, and provided an affordable way to create a sustainable, reusable face mask for the students and staff.

After making a mask, or while waiting in the line, the participants could participate in a research questionnaire and interview regarding the experiences and expectations with COVID-19 social distancing practices. Here, the first study investigated the use of face masks and emotions related to that. The second study focused on the use of social media and how COVID-19 appeared in there. This way, organizing the face mask workshop also facilitated collecting data for the Smart Social Distancing research project.

**Figure 5.** Mobile application concept design for detecting COVID-19 risk from the user's coughing (Heikkilä, 2021).

The workshop also related to a larger theme of design research, where we have demonstrated interactive technologies integrated with face masks. These research concepts include a mask-integrated display for presenting a smile with interactive electrochromic graphics (Genc et al., 2020), and an interactive visor, which closes when detecting a coughing sound in the surroundings (Luukkonen et al., 2021). The two research groups have also been studying the possibility of integrating a microphone into a face mask that could detect respiratory infection. Related to this, Figure 5 presents a mobile application concept, that would detect the coughing and based on the results, instruct the user to take a COVID-19 test.

## Discussion

In design education, the COVID-19 pandemic changed not only the way we were teaching, but also gave us new design challenges to explore. In this chapter we have presented three examples where the pandemic context was used as a topic for a design exercise. In our observation, students were motivated to think of new ideas on how to tackle the COVID-19 and better support people with social distancing practices. These examples show how design can bring solutions to the sudden, current problems encountered in the society. In this case, safety is the key term linking together all of cases illustrated in

this chapter. With solutions that support social distancing, we can provide better safety for people to meet each other, commute, or go shopping. As all students had personal experience on the changes and mobility restrictions caused by the pandemic, they could easily relate to the design tasks.

It is interesting to notice that design solutions for smart social distancing can be traced back to designing context-aware applications, which has been a well-researched topic among human-computer interaction research for two decades (Abowd et al., 1999). Here, we are dealing with smart applications that can track and infer the user's context, and provide recommendations and notifications based on that. Design guidelines developed for context-aware mobile applications (Häkkilä & Mäntyjärvi, 2006) can be applied also to designing smart phone applications to support social distancing.

As COVID-19 enforced us to work remotely both in teaching and research projects, the use of online tools has been necessary, which strengthened our skills in online facilitation and teaching. This would not have happened in this extent or speed, if such extraordinary circumstances did not occur, and it is clear that COVID-19 has forced us to re-adapt our ways to work online. Online systems were utilized heavily among the researchers to clarify and discuss various ideas emerging in two very different disciplines of the participating universities: health data analysis technologies and design. Matching together the ideas from the research teams and integrating the technical functionality to the service concepts were not easy tasks when physical meetings bringing the researchers together were not an option. However, a successful concept and prototype development shows that this was indeed possible.

Our research on smart social distancing was tightly integrated with the design teaching activities, where the COVID-19 pandemic has brought many challenges. Many of the design courses were heavily practicum based, and the challenge of organizing such teaching remotely brought challenges that were on a completely different level when compared to lecture-based teaching. Interaction design courses could include electronics and physical design components, especially with tangible user interfaces and internet of things applications. One approach to overcome the difficulties has been to provide students hardware toolkits which they can work with at home (Boll et al., 2020). This year, with our interaction design course, we emphasized graphical UI design, which did not require physical parts or devices, but the design tasks could be handled with conventional software tools in home computers. The group work was also shifted online. In our experience, the students managed altogether quite well in organizing virtual meetings and online group work, employing tools such as Miro board for working together in concept design phase. However, although

the tasks were completed successfully, it was evident that the face-to-face meetings were missed both for a smoother design process and the social dynamics. For instance, simple post-it notes are widely used physical tools in design processes (Dove et al., 2018). Although online tools such as Miro support functions that mimic the physical post-it notes, the dexterity and spatial organisation in using the virtual notes does not reach the level of the physical interaction. In addition, the physical meetings were missed for the group dynamics and for getting to know the fellow group members better.

It has been reported that one benefit in online teaching has been in connecting the practitioners to the global community (Paudel, 2021). This was found to be true also in our case. Connecting the students with a larger research community was straight-forward, as external specialists were easy to invite to the online meetings. As the design task for family health monitoring application originated from the research collaboration between two universities, the students inherently got to see a wider connection to the research community. Including representatives from the research groups of both universities in the review meetings was easy to organize with online lectures. This way, the students received feedback from a wider research community, and heard the comments not only from their design school perspective, but also from a health technology angle. We believe this was a good experience for the students and widened their perspective for product design. The cooperation was also very instructive for the participating engineering students at Oulu university, as they do not have similar courses, and lack even the basic knowledge of the art and design methods. While being trained to design and implement highly specific algorithms for analyzing physiological signals, they also learned important lessons of how to design entire products and services from the user's point of view. Our experiences indicate that it is indeed possible to crossbreed teaching from so different disciplines if proper methods and tools are used. We conclude that joint-courses and joint-classes of students is a promising idea to extend and diversify curricula even in the form of distant education.

## Conclusion

In this chapter, we have presented three examples of how COVID-19 pandemic related topics have been integrated to both the teaching and community activities at the Faculty of Art and Design, University of Lapland. The requirements for social distancing due to the pandemic have influenced on the mode of teaching, bringing several challenges that yet have been overcome in the context of interaction design education. The presented examples also show how the topical theme of social distancing has been successfully applied in the design teaching, and how these activities have provided both utilitarian and social value.

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# Academy of Duodji – Indigenous Institution to Eanodat/Enontekiö

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In this article, we discuss the establishment of the *Duodjeakademiija* – Academy of Duodji (DA). DA constitutes the main business of the current term of the Finnish Sámi Parliament, as well as a core element of its cultural policy programme (Sámediggi, 2021a, p. 4) which aims to promote Sámi culture and Sámi duodji - arts and crafts in the municipality of Eanodat and to secure fixed allocations for DA activities (Sámediggi 2021a, p. 4). The word *duodji* denotes Sámi handicraft and design, while *duddjon* refers to the act of creating and producing the article itself (Guttorm 2010, pp. 14–15).

The aim is that DA will be a centre for the support and development of the Sámi duodji tradition as well as the Sámi culture and language. DA received funding for a preliminary project for the period 2019–2020 from the Tunturi-Lappi Leader EU fund. During this period, the aim was to create a basis for the DA Centre's work, which included, among other things, formulating the centre's vision and planning its activities. The Finnish Sámi Parliament notes in its own current cultural policy programme for the period 2020–2023, that it intends to promote the Duodji Academy initiative (Sámediggi, 2021a). The DA initial project ended in 2020 and no fixed allocation was made by the Finnish State for the year 2021.



**Figure 1.**
Logo of Duodji Academy.

The idea of a Duodji Academy saw the light of day in Eanodat in 2017, to meet the needs of the local community, as there isn't any kind of formal institution or authority in the Eanodat area that ensures the transmission of the duodji tradition from one generation to another. Despite this, however, the importance and position of duodji in Eanodat may be greater than in any of Finland's other Sámi areas: in the 1960s, the use and ownership of the Sámi *gákti* (traditional Sámi costume) was still more common in Eanodat than in other Sámi areas (Rinno, 1987, p. 101).

The local Sámi had need of a meeting-place, an arena where they could engage in communal activities and matters of common interest, such as the preservation and transmission of local people's traditional knowledge. The lack of such an arena could therefore have an adverse effect on Sámi communality and collective identity (Magga, M., 2001, p. 37), as well as the development of duodji culture and artisanal craftsmanship among the Sámi. DA will revive and increase communal activity both among the Sámi as well as the local inhabitants. The knowledge and competency of duddjon and the use of duodji has declined in the Eanodat area in line with a decline in the number of *duojárat,* experts of duodji (Sámediggi, 2020b).

According to Professor in duodji, Gunvor Guttorm (2020, p. 43), Smith (2003) uses the term, *proactive behaviour* in the sense that peoples themselves promote education based on their own needs. Smith (2003, p. 4) writes that indigenous peoples must consciously strive for actively controlled change, a process he calls *conscientization*. Thus, the local Sámi community's idea of promoting duodji activities in Eanodat, through the DA, could certainly be called, proactive behaviour. Reetta Tornensis (2019, p. 19) mentions a duodji tourist shop while examining the concept, innovation, as part of her master's thesis. The concept describes the people who introduce innovation, those who bring new elements into everyday life, combining the two, thus creating an example or a model for others to follow. The DA centre can be the local Sámi community's new innovation, that ensures the survival and dissemination of the duodji tradition.

Eanodat's geographical situation, at the heart of Northern *Sápmi* (Sámiland), provides great opportunities for cross-border co-operation with other Sámi communities, such as Guovdageaidnu (Kautokeino) on the Norwegian side of the border and Gárasavvon (Karesuando) on the Swedish side. An example of such cross-border common purpose is the co-operation in the Deatnu valley between Ohcejohka in Finland and Deatnu in Norway, with their joint promotion and development of a working model for education (OKM, 2021, p. 67).

Core to the work of the reindeer herders of Eanodat (Näkkäläjärvi, 2013, p. 3) have, throughout the ages, always been, livelihood, way of life and cultural heritage, of which duodji forms an important part (Tornensis, 2019, p. 3). Duodji and reindeer herding are interacting with each other. The raw materials for the duodji come from the reindeer according to requirements as, amount of materials, as Guttorm (2010, p. 19) terms it. The preparation, treatment and processing of these raw materials are based on traditional knowledge that has been transmitted orally and through work-practices from one generation to the next in homes and within families (Porsanger & Guttorm, 2011). Even today, reindeer herding communities are divided into smaller units according to relatives and families along the Eanodat area.

This interdependent state of duodji and reindeer herding existing and developing side by side is reflected in the following observation made by the folklorist/folklore researcher, Soile Rinno, while living among the Eanodat Sámi in the late 1960s:

> As long as there are reindeer in the mountains, then we will always get skins from them. And as long as there are skins, there will always be someone to treat them and sew them into reindeer skin shoes and coats. And as long as there are reindeer in the mountains, then someone will always have to watch over them, and will always need shoes and coats.[1] *(Rinno, 1987, p. 104.)*

## Learning Duodji

Seija Risten Somby (2003) has, in her master's thesis, examined the methods of transference of the duodji tradition from a generational perspective. According to her, structural changes in society have had a negative effect on duodji's development, nor was duodji valued in the formal education system in the 1970s (Somby, 2003, p. 96). Maarit Magga (2001) has, in her master's thesis, studied Sámi female identity and the place of duodji in the eastern part of Eanodat. For women born in the 1940s–50s, learning duodji at home was a natural part of their childhood: "Even as a little girl, I was sewing together with my mother. At the age of eight I was already weaving, and I was always learning about sewing and weaving and all those things from my mother" tells one woman (Magga, M., 2001, p. 62).

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1   Thoughts spoken by Piera Tornensis ja Nils-Piera Labba (Rinno, 1987, 104).

According to Somby, the story in the Gáregasnjárga area has been a similar one. The grandmother's and mother's generations have learnt to duddjot at home from older family members (Somby, 2003, 96). According to Sigga Marja Magga's Doctoral dissertation (2018, 26), the learning of duodji previously happened within the immediate and extended family, but today it is far more usual for people to learn these same skills on duodji courses.

Reindeer herding in the east of Eanodat appeared to support duodji competency and knowledge, as the women were expected, due to the requirements of the work, to sew clothing for the herders in order to keep them warm (Magga, M., 2001, p. 77). Folklorist researcher, Soile Rinno (1987) has analysed duodji culture in the western part of Eanodat. According to him, sewing has always been women's work. In 1969, women who were then of middle-age were very knowledgeable and skilled in duodji, but the members of the younger generation were far less proficient, which was a concern for duojárat (Rinno 1987, pp. 98–99). Similar concerns were expressed by middle-aged women in east Eanodat in 2001 "—But as you know, in Eanodat there aren't very many who sew" (Magga, M., 2001, p. 102).

The importance placed on duodji by a given individual can be a good indicator of that individual's interest in learning duodji. In these middle-aged women's youth in the 1960s and 70s, the gákti became a symbol of Sáminess, and the wearing of the gákti was a natural thing, through which the wearer was able to show their outer and inner identity as well as honour the duodji tradition. Duodji and its craftsmanship reinforce identity and are the outward hallmarks of Sáminess. Studies have shown an improvement in the current status of duodji, which has encouraged young people to teach themselves to duddjot. (Magga M., 2001, pp. 78, 98.)

## Formal Education

A formal duodji institution began to take shape in the 1970s based on a combination of duodji associations and education authorities and which also included Sámi museums, archives as well as other institutions having common cause with exponents of duodji (Magga, S.M., 2018, pp. 49). Eanodat lacked an authority founded on Sámi cultural self-determination, and which promoted duodji culture from an indigenous perspective, taking account of the needs of the local community and respecting its knowledge. In her study Somby (2003, p. 86) cited Sarmela (1984, pp. 149–150) "folk culture is impossible, when in scientifically technological societies, culture is part of organizations— where culture can only be produced by an officially trained specialist". Are we then to interpret this as meaning that, for example, traditional experts cannot produce cultural knowledge, and that it is difficult to adapt indigenous knowledge to today's formal education?

In 1975 in Anár, on the Finnish side, the duodji association, *Sápmelaš Duoddjarat* was founded, whose name was later changed to *Sámi Duodji* in 1997. To be eligible for membership, a person had to be a duojár enrolled on the electoral register of the Sámi parlameanta (present day Sámediggi – Sámi Parliament) (Sámi Duodji, 2021a). The association was at first restricted to qualified, professional craftsmen, but membership was later extended to include the whole of the duodji fraternity. A principal theme during this period of institutionalization of duodji, became the raising of the level of what was considered tradition, and the definition of what should be considered genuine duodji, and what were the quality criteria requirements. (Magga, S.M., 2018, p. 51; Tornensis, 2019, p. 48; Lehtola, 2006, pp. 21–22, 42, 47.)

According to duodji association historical documents, the association would have communication with national official authorities as well as with organizations at a Nordic level, to ensure the survival of Sámi culture and the promotion and continuity of

duodji. The association is mainly concerned with advising, teaching and sales. (Sámi Duodji, 2021b.) The current project contains provisions for a duodji bus, which would operate in the eastern part of Anár, Ohcejohka and Vuohču. The duodji bus would operate under the official title of, "Mobile Duodji Advisory Service", whose objective is, to bring duodji teaching and workshops direct to remote rural locations (Sámi Duodji, 2021b). The Sámi Duodji Association also has a duodji store in the Sámi cultural centre, Sajos, in Anár (Magga, S.M., 2018, p. 51). The association has also previously maintained a local branch in Eanodat's municipal centre of Heahttá, but this has now been discontinued.

The municipality of Anár is also the site of another formal institution, namely, Sámi oahpahusguovddáš - the Sámi Education Centre (SOG), which provides education in duodji in the form of basic technical courses. Its aim is to raise the level of technical knowledge and competency among the area's Sámi, and to provide vocational qualifications, in addition to the overriding aim of the survival and promotion of Sámi culture. At school, duodji can be studied as a specialist subject. SOG holds duodji courses throughout the whole of the Sámi region in Finland, and from time to time also outside the Sámi homeland. (Magga, S.M. 2018, p. 52; Laki Saamelaisalueen koulutuskeskuksesta, 2010.) In the same way as with the Sámi Duodji Association, SOG's aim is also to work in concert with education authorities and higher-level academic institutions. SOG is also able to arrange teaching(courses) outside the school centre, thus taking account of Sámi learning- and information needs (Laki Saamelaisalueen koulutuskeskuksesta, 2010). At Eanodat's Heahttá branch, which has access to suitable workspace, it is possible to organize Sámi culture classes including practical duddjon workshops (Studentum, 2021).

According to a new Ministry of Education report (OKM, 2021, p. 50), linguistic and cultural groups, such as the Sámi, have the right to education in Sámi culture in addition to the language. The challenge for institutions of formal education is that it is up to the teacher what he/she teaches from the culture. (OKM 2021, 50). On the Finnish side of the border, duodji is not taught as a subject in its own right at primary and secondary schools, however, a separate curriculum was drawn up in 2016 for Sámi language education in schools in Eanodat (Peda.net -kouluverkko, 2021). In it, duodji is mentioned as a subject in its own right and defined as follows:

> Duodji is at the heart of Sámi material culture. - - Duodji is one of the subjects through which the student becomes familiar with Sámi history and culture, and with which he/she can reinforce his/her own cultural background –and identity. Teaching is founded on a Sámi value system, a Sámi world view, traditional

knowledge and its continued transmission, appreciation of duodji and duddjon ecological values as well as protection of the environment. The duddjon process is a social activity, which brings with it a sense of belonging. The transmission and teaching of traditional knowledge naturally requires close co-operation between schools, homes, and families as well as between the duojárat and the active duodji participants themselves. (Peda.net -kouluverkko, 2021, p. 3.)

At the primary-secondary school level, formal education in duodji is, on its own, not enough to secure duodji's survival, and though the curricula are in place, there are a lack of duodji teachers throughout the whole of the Sámi region of Finland (Sámediggi, 2020b).

## Theoretical Basis

### Thesis statements, research questions and perspective

We would like with this article illuminate how important the position of duodjis is in Sámi culture. The key issues we would like to clarify are

- How to pass on duodji traditions to future generations and make them aware of the value of handicraft/duodji at the local level and reinforce it?

The second key issue is

- How does DA's perception of duodji differ from other duodji operations and what could be DA's operating basis?

As the Sámi are indigenous people, it gives a possibility to examine the issue in an indigenous context and take into account the perspective and knowledge of the Sámi people. DA has been built on Sámi and indigenous values and perspective. According to Kuokkanen, the use of indigenous peoples' perspectives in research and teaching revitalizes and strengthens indigenous peoples' knowledge order, methods, philosophies, and values. That is the basis for the Sámi peoples' values, views, worldview, and starting point. The starting point is who we are, and our cultural background. (Kuokkanen, 2009, p. 42.)

## Purposes and Methods

The purpose of a method is to get information. Our main method was communication with local people to clarify the needs of the local society in relation to duodji/handicraft. We have benefited from Duodji academy activity report (Sámediggi, 2020b), and com-

bined knowledge and perception with questions regarding duodji in accordance with DA's operations. The state of duodji tradition differs from place to place and therefore they know in certain places what development needs and solutions are required. These thoughts shape the vision of DA's operations. Kuokkanen (2009) states that indigenous peoples often emphasise the importance of experience in gaining information. Indigenous peoples' closeness to nature has meant that information comes directly from the environment, where people lived and was their basis of existence. Indigenous peoples' pedagogy is also a part of this, where children learn by following the adults and imitating their activities. The use of Indigenous peoples' views, values, and philosophies as the starting point of research and teaching strengthens and renews indigenous peoples' communities, identities, and cultures. (Kuokkanen, 2009, p. 44–46.)

Together with the community, we share experiences and perceptions, when we represent the insider perspective of this research: we are a part of this Sámi area's and duodji community, and we have indigenous knowledge, which emphasises the research's benefit to the indigenous people (Porsanger, 2007, p. 33; Rigney, 2000, p. 6).[2] Indigenous knowledge refers to indigenous peoples' management knowledge. Indigenous knowledge refers to a versatile order of information on several levels, based on indigenous peoples' traditional way of life, which contains systematic information about nature (ecology) and space (cosmology), its various origins, animals and their way of life, and behaviour and plants. (Kuokkanen, 2009, p. 49.)

In addition to our indigenous knowledge, our background from duodji and our formal education, will help the community to overcome the challenges while establishing DA. During the time debating the DA, we will use following terms as a basis for solving our research question: *traditional knowledge* (árbediehtu), locality (báikkálašvuohta*)*, *life management* (birgen)*, v*alues (árvvut).

## Key Concepts and Perceptions

### Duodji and duddjon

Gunvor Guttorm (2010, p. 13–23) defines the term duodji today as Sámi handicrafts first. As indigenous people, the Sámi have lived of natural resources throughout the ages, and the production of utilities and clothes have been important necessity liv-

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2    cf. Utsi Bongo 2019, 5: Information gained through experiences.

**Figure 3.** *Gákti,* traditional Sámi costume in Eanodat. Photo: Maarit Magga, 2011.

ing in the nature. Crafts and crafting are handy chores, which fills the daily needs of someone, like clothing, tools and other stuff to the house. Duodji or crafts have been crafted because of need in the beginning, and that way of thinking is still present in the Sámi culture. In today's crafting the function is basically the same as before, but the contents of the concepts have changed as the way of life has changed for the Sámi people. Nowadays a duodji term could contain a modern act of crafting, which each duodji practitioner their own meaning to the craft. Duddjot is a verb and means to make, to do crafts, create. Duojár is a person who creates and crafts. Usually, the starting point of a duojár is local and cultural, and the knowledge of duodji is linked to a certain local perception. A duojár deserves the name duojár. If a duojár is exceptionally skilled, the duojár could be an expert in duodji and expert in footwear, if they master a certain duodji discipline (Guttorm, 2010, p. 13–23). According to Sigga-Marja Magga, duodji is bound to the areas and relatives, and without considering how someone has learned the craft, it is still the social community and communica-

tion, which regulates the norms of duodji (2018, p. 26). That is, what is acceptable duodji and how it is supposed to be.

## Knowledge and Traditional Knowledge

Information (diehtu) and knowledge (máhttu) have different definitions. The traditional knowledge of the Sámi and the value of local knowledge and highlighting it (Valkonen & Valkonen, 2019, p. 12–13) is the main purpose of building the DA.

According to Guttorm "personal experience is required when one is to be able to do something, but not to know something. The difference between information and knowledge, one could say that one can know a lot, but doesn't need to know how to do everything" (Guttorm, 2010, p. 46). One knows and has information about the gákti related to places or families but is not required to know how to sew it.

Sara talks about traditional knowledge, which is a part of the Sámi culture and knowledges, which shapes the affiliation and identity of a person. (Sara, 2003, p. 128.) Traditional knowledge is something that has helped people to manage, to invent common knowledge and work with the knowledge in the daily life, as to "obtain different kinds of local resources and other kinds of materials, goods, things and tools" (Sara, 2003, p. 124). Porsanger and Guttorm use the term *árbediehtu* (traditional knowledge), which has been the wisdom and knowledge of the Sámi through generations so that they will manage. This wisdom has been passed down orally and through work and connects history, present and the future (Porsanger & Guttorm, 2011, p. 17).

Traditional knowledge is usually related to the place, the area and the understanding of duodji (Guttorm, 2010, p. 15). Guttorm talks about the term *árbečeahppi* (knowledge bearer), which: "is a person who thoroughly masters traditional information and knowledge, and on who the local community regard as an expert in their discipline" (Porsanger & Guttorm, 2011, p. 22). The goal of DA is to honour the area's knowledge bearers and to attempt acquire their knowledge to serve the needs and interest of the DA.

Sámi University of Applied Sciences conducted the *Árbediehtu-project* in 2008–2011, where the knowledge bearers in traditional knowledge were the informants. The idea of the project was that the experts give advice and inspect the documentation methods and approve if they are viewed as adequate in the eyes of the local community, that they meet the terms and needs, and that they ensure the management of local traditional knowledge. (Porsanger & Guttorm, 2011, p. 23). The DA project follows the

Árbediehtu-projects ideology to elevate local communities to the forefront. Knowledge bearers in traditional knowledge, individuals, and communities, will experience that there is a need for their knowledge in today's society. They are going to participate in designing methods, by which their traditional information and knowledge they can strengthen and reinforce Sámi communities, so that they exist as an indigenous society and develop on their own terms. (Porsanger & Guttorm, 2011, p. 23.)

## Locality and Life Management

The operation of DA is supposed to bring forth local Sámi culture and to preserve duodji so it can still "show a person's affiliation to a certain family, a certain village, and even a certain generation" in the future (Lehtola et al., 2006, p. 38).

**Local** (báikkálaš) communities own and manage their own local traditional information and knowledge. The traditional word refers to the fact that one has inherited, for example, some knowledge from the previous generation and the knowledge has been passed on from one generation to another (Guttorm, 2010, p. 47) in a small community, at a local level. The knowledge in duodji context could be information about how the gákti is decorated in certain areas and how it should be sewn. Utsi Bongo (2019, p. 1) writes about established, local patterns in her master's thesis, which refers to local knowledge. The duodji of a certain area, looks of a certain area, the typical materials of duodji also depict material quantity of a place (Guttorm, 2010, p. 19). The information and customs change from place to place. For example, the information and knowledge about sewing a provision bag (niesteseahkka) might be different between a duojár from Vuohču (Vuotso) and a duojár from Eanodat (Enontekiö) is different even though it might be common information and knowledge how to prepare the material. Variation of the areas and the diversity of information is threatened if the self-esteem of knowledge of duodji and local duodji are inhibited from developing and expanding.

**Life management** (Birgen) is a term, which one can imagine Sámi understanding of life and surviving it. Life management is linked to sustainable development, values, the use of resources, and to relationships or social networks. Life management is linked to the equilibrium and lifestyle between human and nature. It changes through time and situation. Life management presupposes ability and promptness and adaptation both in use of, development of (Porsanger & Guttorm, 2011, p. 20–21) and honouring of local traditional information and traditional knowledge.

## Cultural Research Communicates a Person's Position

Indigenous perspective is supported and complemented by anthropologic research information in the Eanodat area and officially by duodji. An individual receives information and knowledge through *enculturation* or socialisation in their community and the surrounding culture. The research of Jávrrešduottar (East side of Eanodat) reindeer husbandry community can use culture as basis for enculturation according to Klemetti Näkkäläjärvi's doctoral dissertation, when an individual learns the surrounding community's norms. Enculturation happens both through conscious (duodji)training, but also unconsciously through oral narratives and through work. (Näkkäläjärvi, 2013, p. 34.) Through enculturation a person learns traditions. According to Somby "enculturation is a person's first case of cultural reception and is usually experienced during adolescence" (Somby, 2003, p. 54; Kilpeläinen, 1975).

In cultural research enculturation is differentiated from *socialization*, which emphasises society. One learns the community's rules of conduct, exterior and interior norms as a child, it is also possible to learn them as a new member of the community. In the transition of cultural characteristics there is a requirement of membership before one is privy to the culture's terms, values and, symbols and transition the core to the later generations (Somby, 2003, p. 54).

The terms and theoretical knowledge of cultural research are able to assist in building up DA's operations, so it is possible to shape and adapt the operations for specific affected groups. Affiliation and identity are shaped on the basis of a person's connections and communication. Duodji is a part of building a Sámi person's identity. The Sámi look at duodji their cultural property and as a form of expression, which they take with them. A lot of people who do crafts like to do this because through duodji, among other things, they can maintain their self-esteem as Sámi. (Guttorm, 2010, p. 21.) Duodji is a distinctive part of the Sámi material culture and gákti serves as the hallmark of Sámi (Tornensis, 2019, p. 50). With outer clothing the Sámi shows affiliation with their close group, their family, their relatives, their friends, or their ethnic group. With clothing and with duodji a person tells about their home area and cultural identity. Clothing can strengthen the affiliation and sense of citizenship of people. (Somby, 2003, p. 60–61.)

According to Aikio (2010, p. 43) a person, whose identity is solid, knows and feels affiliation to their home area and family. Identity can be defined that an individual is in the centre, but that it is also built collectively (Somby, 2014, p. 104–105; Magga, M., 2001, p. 37). An example to collective identity is *ethnic identity,* which can be defined as affiliation to a certain ethnic group (Banks, 1996, p. 9). Ethnic chores and tasks are important

when an individual is supposed to strengthen their ties to their ethnic group (Kvernmo & Heyerdahl, 1996, p. 453–454). DA will support the Sámi who need to become familiar with and learn duodji traditions. In the last ten years, it has become known in the Sámi media of NRK that more and more Sámi are leaving Sámi core areas and moving to the cities (NRK Sápmi, 2020).

## The Duodji Academy:
## The construction of an Indigenous Centre's Activities

Duodji Academy, as a public development initiative of duodji, represents a formal institution that is at its base an official organization (Magga, S.M., 2018, p. 26), such as the Sámi Parliament the Sámi have a right to cultural self-determination (OKM, 2021, p. 50) and the development and preservation of their cultural heritage, therefore, they also have the right to establish an operation based on their own terms. The aim of DA is to adapt the business model to modern conditions of society and to meet needs when the transition of duodji knowledge is no longer natural and possible for everyone. Formal institutions have not managed to preserve the transition of traditional knowledge by the Sámi's own terms in an indigenous perspective, where the entire community learn and share knowledge together. (Sámediggi, 2020b).

According to Finland's constitution 17 § 3, the Sámi have a right to develop their culture and pass it on to future generations (Sámediggi, 2021c, p. 2). The UN Declaration on the Rights of Indigenous Peoples emphasizes the right to determine traditions in self-determination. (Guttorm, 2010, p. 53). Duodji represents traditional culture and traditional industry (Sámediggi, 2021c, pp. 7–9) which are the basis of traditional knowledge, which in turn is indigenous knowledge (Guttorm, 2010, p. 53; Somby, 2003, p. 33). DA's vision is that laws and declarations guarantees' establishments of a modern indigenous and Sámi business environment.

## Reputation Building

According to the DA's activity plan, the work was to profile itself with reputation and at the same time adapt the administration of DA, which is based on a corporate culture. These activities we have called here communication and dissemination (gulahallan ja gaskkusteapmi). A part of it was to make connections with the people in the Eanodat area and to create networks with other duodji associations, companies and enthusiasts.

The creation, *communication* of DA with the communities and other Sámi happened at gatherings, sewing gatherings and communication with duodji associations, local businesses, institutions, and through social media. In social media DA had their own Facebook page, where giving and receiving information happened.

The DA project's first job was to establish a physical centre to Gárasavvon (Karesuvanto), but the scope of it was supposed to be the whole of Eanodat. Extra important was *locality* and *belonging* to a certain area, what people thought was important and precious to them and thus important and precious to the whole community. Certain areas have their own needs and duodji materials that are typical of the area (Guttorm, 2010, p. 18). Local needs became apparent during duodji nights, which DA arranged once a week in Gárasavvon school on the Finnish side, where duodji enthusiasts could gather to sew. In these happenings the theme was the transfer of *tradition*, and the exchange of information and knowledge. At the same time, it was a place to socialise, and it gathered Sámis from both Swedish and Finnish side of Gárasavvon and from surrounding areas, which in turn strengthened communication, dissemination, locality, the sense of *life management*, and the sense of common tradition.

Leading artist Áillohaš, Nils Aslak Valkeapää, engaged in developing a centre to the village of Gárasavvon he called *Davvi latnja*3. He concidered that Sámi issues would be convenient in collaborations between Northern countries (Gaski, 2020, p. 68). Gárasavvon is an ideal place for operations like DA, when historically it has been one village but the borders of countries have split it into two sides of borders. As an operation crossing borders enriched the operation and strengthened the social and cultural cohesion. During the sewing gatherings or workshops, it became apparent that the Sámi who lived in the Gárasavvon area, from either side of the border, Sweden, or Finland, have the same cultural background and they have a shared language and dialect. (Sámediggi, 2020b).

One of the most important arenas for communication, in addition to the duodji gatherings, were popular gatherings which DA arranged in three places in Eanodat municipality. A concrete result of the popular gatherings was a wish, which the youth promoted, and the DA managed to adhere to. The youth wished to learn how to sew a hat (gahpir). The use of man's hat (šávka) by boys and men is starting to dwindle, and the duodji knowledge of making a woman's cloth hat seemed to have faded as well. At that point it might be a question of revitalising duodji. Idivuoma (2017, p. 15) has researched

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3    English: Space in North (own translation).

the revitalisation of gákti, and she writes that revitalisation of gákti is used in today's Sámi language with the intent of making wearing a gákti a living tradition – to breathe life into wearing a gákti to those areas where it has vanished or has started to vanish and to teach sewing a gákti and its customs accordingly. It could be that revitalisation might be a time relevant field of activity for DA?

That is why DA, in partnership with the Youth Council of the Sámi Parliament (Sámedikki Nuoraidráđđi) and Finnish Sámi Youth Association (Suoma Sámi Nuoraidsearvi), applied and received monetary suppord from the Wihuri-Fund to hold hat-sewing course (Sámediggi, 2021d) within the year 2021. The Covid-19 state of emergency has helped to see the value of local community, the knowledge and inheritage that is in the communities. The plan of the cap-sewing course is to adapt the teaching and exchange of information to the virtual world and the tuition is planned with physical gatherings, as well as net-based tuition between the teaching days.

It was important to show commitment to the whole area and build trust between the people and the DA's activities. The purpose of the gatherings was to hold conversations about the needs of the duodji community and the future of duodji traditions and how to strengthen and develop them. At the gatherings, several wishes and proposals arose. Key issues that emerged were that the people of the place wanted to join various duodji courses and that there was a meeting place where one could learn and share information. People also missed the duodji workshop, where there are duodji devices and tools, especially larger and more expensive facilities, that people lack at home (Sámediggi, 2020b).

The situation with Covid-19 affected DA's third popular gathering. This gathering had to be arranged virtually. Conversations in the virtual world are not as effective as physical gatherings would have been. The part that was positive by holding a virtual gathering as that people who would not have an opportunity to participate physically, got the chance to participate virtually. So, the virtual gathering gathered more people. (Sámediggi, 2020b).

In accordance with Heahtá's duodji event, DA organized both a popular gathering and, in collaboration with the Sámi Parliament's Mánnu – children's culture centre, a duodji workshop for children, where most of the kids in Heahtá and surrounding area participated and where the supervisor was a young duojár. There seems to be a need for children's workshops such as this, where there was appropriate duodji teaching and strengthening for the tradition at the same time as it was a social gathering (Balto, 1997, p. 38).

## Experiences and Visions in the Duodji Academy

Since the business structure has changed and not all children or adolescent have the opportunity to learn duodji from the family or relatives, DA is bound to adapt their teaching. The method of teaching could be like in the Maori communities, where the women and children get together to sew (Smith, 2017, p. 13). This method strengthens the woman's position as culture carriers and administrator of information. In their gatherings the Maori women have shared experiences, told stories, listened, and questioned, and by that tied themselves to the community, earth, and history (Smith 2017, pp. 13, 22). According to Liisa-Ravna Finbog's dissertation duodji workshops can create safe spaces to develop the practice of duodji: "In part, this sense of security is likely to do with the way that coming together in a social setting to practice duodji as a way of creating a safe space for difficult conversations to be had has deep roots in our communities" (Finbog, 2020, p. 82).

Undoubtedly the same method of working and teaching would fit the Sámi community, so we can carry our duodji knowledge forward orally while sewing.

One method, which is already in use in Norwegian and Swedish Sápmi, is a duodji apprenticeship program. In Norway's apprenticeship program (Fagopplæring i reindrift og duodji, 2021) the apprentice gets the opportunity to join an experienced duojár for a year or two. Both apprentice and supervisor are paid. At the end of the apprenticeship program, the apprentice must complete examinations and based on those examinations, obtain a certificate (vocational education confirmation) in duodji if the apprentice passes. The apprenticeship program contains the various branches of duodji, such as needlework with soft materials and crafted. On the Swedish side of Sápmi there is a similar program, where the apprentice teaches for two years. At the end of the program, the apprentice must do exam work and if the apprentice passes, they will receive a so-called journeyman's certificate (craftsman's confirmation). (Stiftelsen hantverk och utbildning, 2021).

Seija Risten Somby uses the term community network, when people used to gather together to sew. It was based on family network and kinship. The company sewing was based on traditional duodji community, where they had gotten used to work together and where children also were a part of it. (Somby, 2003, p. 92.) The duodji gatherings, that DA has started, could be called extended community network, where everyone sews together, regardless of if one is a child, an adolescent or an elder from a previous generation.

**Figure 4.** Duodji Event in Enontekiö Hetta. Older people are guiding younger people to the world of duodji. Photo: Maarit Magga, 2012.

**Figure 5.** Daughter learning how to make material. Photo: Maarit Magga, 2010.

Sámi childrearing methods are perfect for building DA's operations, that is, which methods are used teaching children and adolescents. Asta Balto (1997, p. 75) mentions specific experiences, the environment, and family's learning as the core issues Sámi child rearing. Balto emphasises, that traditional sámi child rearing is based on the importance of the Sámi home and parents, where way of life, the participation of adults, indirect upbringing, steady social practices, and where kinship is significant. Child rearing happens by telling stories, nature, chores on their own, and by trial. (Balto 1997, p. 7.)

Sámi class teacher Bigga-Helena Magga, who has worked a long time in teaching, writes the same. According to her "the Sámi have had an indirect way of teaching" (2012, p. 67) and the children have learned by following the adults when they work. One of DA's main methods of preserving the duodji tradition is the Sámi teaching method, the transfer of kin and family tradition and information from one generation to another in Sámi language.

DA could adopt the teaching methods and philosophies of Maori in Aotearoa. Indigenous peoples across the world have the same challenges in developing their own culture. Maori researcher Lise Hirekura Smith talks about the development collective responsibility and political awareness (Smith, 2018, p. 10) when parents choose to put the child into a specific language teaching. The same method could strengthen identity of a child in a Sámi language class, where practices are grounded on Sámi cultural values, like duodji itself is. (Magga B.H., 2012, p. 66–68.)

Asta Balto (2008) has used action research as an approach to decolonise schooling in Sápmi, and she sees that this approach is both a necessary and an appropriate tool to promote Sámi perspectives into the school world. Decolonising means to shatter the colonial states' influences on thoughts and values and start using their own ways of thinking and order of knowledge (Kuokkanen, 2009, p. 34).

The purpose of DA is also to document familiar business systems and to collect information, that pertain to duodji tradition. DA regards the conservation of information for the next generation very important. Porsanger and Guttorm (2011) write that the Sámi, as other indigenous peoples, are struggling with conserving, gathering, and managing their traditional knowledge within their own terms. In 2010 there came approved ethical guidelines in protection and conservation of accordance with the UN Convention on Biological Diversity. In the background clarifications of the guidelines, it is emphasised that indigenous people should still be able to use their traditional areas, natural resources, and their traditional information and knowledge. This is the condition for the preservation of traditional knowledge and the protection of biological diversity. (Porsanger & Guttorm, 2011, pp. 35–37.)

## Concern About the Duodji-Business Appeared in the Popular Meetings.

The duodji tradition is threatened because it is difficult to manage with duodji as a business. When there are no jobs for people, they must move. Since the business structure has changed, crafting is not possible for a family. Families must earn extra income outside of reindeer husbandry and this means that the other parent, usually the one who manages the duodji, the woman, must leave the reindeer husbandry and the duodji. It is also common that the woman is not Sámi and duodji traditions might not have a strong position in such families. The purpose of DA is to cover the needs of such families and encourage them to participate in the development of the duodji tradition.

In addition to duodji workshops, DA started to work with the Sámi class of Gárasavvon school. The collaboration began, when the school's teachers wanted support from DA. DA offered duodji classes once a week. The pupils got to experience the plucking of hairs in making the reindeer skin into hide and sewing a needle housing with a reindeer's marrow. The philosophy of these duodji classes was firstly make the pupils acquainted with the Sámi duodji tradition, to which belongs the function of duodji, but also the use of materials in each season, the immaterial parts of the duodji tradition and its history. In this way the pupil could experience duodji in practice and the duodji specific silent information and knowledge that comes with working with hands and body, and by observation (Triumf, 2004, p. 19). The lasting use of natural materials is also in the transfer of traditional knowledge (Markkula & Helander-Renvall, 2014, p. 4) and the utilization of the reindeer's amount of materials in the area where reindeer husbandry is still important and part of several children's lives. All the human experiences and contacts, the results of the gatherings, the conversations, and the debates are basic data when designing the Duodji Academy, indigenous centre, to Eanodat.

## Conclusion

The value of traditional knowledge and local knowledge (cf. Valkonen & Valkonen, 2019, 12–13) is DA's design of operations core purpose. Information and understanding of local communities' importance and suitability designs DA's operations. The materials, the use and shaping in duodji change from where the Sámi live, which are affected by the environment and social situations (Tornensis, 2019, p. 6; Magga, S.M., 2018, p. 23). Then the transfer of knowledge happens from the inside to the inside (eg. Kuokkanen, 2007,

p. 82). One of DA's main methods in preserving the duodji traditions with the Sámi way of teaching, the transfer of tradition and traditional knowledge from one generation to another in Sámi language. The younger generation should have an opportunity to learn from their families' elders, and their parents. In this way, the characteristics of the family and relatives are preserved for younger generations, and the diversity of the duodji tradition remains.

DA should be built on Sámi and indigenous values and perspective to preserve duodji. These perspectives are based on our own values, views, worldviews, and our approaches.

The Sámi in Eanodat are in a situation where the possibility to live as a Sámi and to preserve their culture is threatened. In this article, we have designed a theoretical business model, which follows the way of life of indigenous peoples and looks at the world's affiliation and locality, traditions, communication and dissemination, in relation to values and life management.

Throughout the years, almost every Sámi institution in Eanodat, by which the area's Sámi could have felt that they are taken care of, and that their best interest is in mind, have gone. There is a strong gathering policy going through the Finnish Sámi areas. Traditional learning and teaching methods and borderless Sámi area is a strange method for Finnish functioning duodji instances, even though it is so natural for the Sámi. Securing the support and financing of formal institutions is a condition for all kinds of businesses nowadays. Only after permanent funding can we strengthen and develop the duodji tradition.

In Eanodat, reindeer husbandry has always been a very important industry and way of life. They live on interaction with duodji. The Sami language has become weaker as a professional language in the context of duodji. Perhaps this is the last generation, who the language is still strong and natural to?

The situation due to covid-19, has helped to notice the importance of the local environment, the importance of the knowledge and values that communities have. The people in Eanodat still have knowledge and interest in duodji and to carry it on. They need to be separated from other Sámi groups and communities in Finland and they need to be proud of their culture and existence. Eanodat has its own history, territory, and identity, which appears just like it does.

Before the end of the first financed period, we got extra funding from the Wihuri-fund to arrange a course in sewing an Eanodat-style hat in accordance with the wishes of youth. The need for an operation like DA is relevant nowadays. If a family does not have

duodji information or knowledge, nor resources, then the consequence is the change and disappearance of external cultural elements when they no longer are found in the community nor family.

Could one ask if the vision of the Duodji Academy is just a dream, and are we already delayed?

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# Towards a Creative and Authentic Learning Environment Through Creative Steps 2.0

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**I**n universities in the Northern and Arctic regions, overcoming physical distance is one of the key challenges to developing and providing a high-quality education. The coronavirus 2019 pandemic created an urgent need to develop online and blended learning environments to support higher education (HE) at the present time and during possible future pandemics. Over the past two decades, the need for models and principles for creative and authentic online learning environments has been acknowledged (e.g., Reeves et al., 2004). This chapter reports on design research in which *Creative Steps 2.0* (*CS2.0*) was developed to overcome the challenge of distance by modelling creative and authentic learning in blended environments in HE. CS2.0 is a response to the need to develop models and practices that meet the challenges of modern globalized working life and business, which require a creative and innovation mindset and the ability to work across distances (Arkko-Saukkonen et al, 2020; Arkko-Saukkonen & Krastina, 2016).

The promotion of student creativity has long been a pedagogical priority. For example, Ausubel et al. (1978) described "teaching for creativity" as a "flourishing trend" in education (p. 584). Approximately 40 years later, the need for the promotion of creativity in education policy (e.g., Tarjanne, 2020) and research, especially to support future working life (Shaheen, 2010), has been highlighted. Universities of applied sciences have identified innovation competence as a basic working life skill. Creative work, which includes brainstorming and product development in multidisciplinary teams, is considered crucial for promoting innovation competence and entrepreneurial thinking (Hero & Lindfors, 2019; Keinänen & Kairisto-Mertanen, 2019; Poutanen & Ståhle, 2014; Zhou & Luo, 2012).

University–business collaboration has been identified as a strategy to enhance innovation (Hero & Lindfors, 2019) and innovation competence (Hero, 2019; Keinänen & Butter, 2018; Keinänen & Oksanen 2017). Collaboration often culminates in the integration of teaching and research, development and innovation. Various factors such as "the right people, the right supporting, motivational and task contexts, and effective

social and cognitive processes" in team collaboration can increase innovation (Paulus et al., 2012, pp. 348). Collaboration, especially in innovation and development activities, is a key competency for a working life (Arkko-Saukkonen et al 2020). Online tools and environments enable international collaboration across geographical borders. They play a key role in the Arctic (Lipatov, 2014).

This chapter discusses the second iteration of CS2.0, a model for creative and authentic learning in blended environments in HE. CS2.0 was designed, implemented, and refined as part of a larger research project (see Arkko-Saukkonen, 2017; Arkko-Saukkonen et al., 2020). The focus of this chapter is the *student experience* and the implications for the refinement of the model. At the core of CS2.0 is the pursuit of creative and authentic learning activities in online university–business collaborations.

## Previous Research

Previous research on *university–business collaboration* has focused on settings in which "working and learning are integrated as students work on assignments from clients or other stakeholders in the community" (Cremers et al., 2016, p. 310). Cremers et al. (2016, p. 310) designed, implemented, and evaluated a "hybrid learning configuration" for senior secondary vocational institutions and universities of applied sciences in collaboration with companies. On the basis of the students' learning experiences, seven principles were developed to guide the design and development of such learning settings: (1) foster authenticity, (2) create a learning community, (3) use diversity, (4) interlink working and learning, (5) facilitate reflexivity, (6) enable organisation, and (7) enable ecology. Hero and Lindfors (2019) studied the learning experience in a multidisciplinary innovation project at a Finnish university of applied sciences. With the help of faculty, the students were expected to create novel solutions, products, services or processes to resolve challenges submitted by companies. This provided opportunities for personal development and participation in multidisciplinary collaborations to solve problems. The students' negative experiences were related primarily to unevenly distributed workloads, task-related uncertainty, and inadequate input from the companies.

Recent studies in Finland have focused on *innovative learning* and *creative development* at universities of applied sciences (Hero, 2019; Kairisto-Mertanen et al., 2012; Keinänen, 2019). Keinänen et al. (2018) developed a self-assessment tool for measuring university students' innovation competence in an authentic learning environment (see also Keinänen, 2019; Keinänen & Kairisto-Mertanen, 2019). The tool measured the

following competencies: creative problem solving, systemic thinking, goal orientation, teamwork and networking.

Keinänen and Butter (2018) tested a novel tool to assess the role of authentic learning environments in the development of innovation competence through university–business cooperation. Students identified university–business cooperation as contributing to the development of innovation competence and working life skills. The application of a self-assessment tool in business collaborations taught students to reflect on and evaluate what they had learned, to practice collaboration skills, and to discover the role of learning in creative and innovative work through trial and error. In a systematic literature review, Hero et al. (2017) studied individual innovation competence. The results suggest that innovation and collaboration require flexibility, an achievement orientation, adequate content knowledge, motivation and engagement, self-esteem and self-management, and a future orientation, as well as creative thinking, social interaction, and project management skills.

Hero (2019) developed an innovative pedagogical approach that was applied to the study of students' development of innovation competence in a multidisciplinary innovation project. She suggested the following steps, each involving assessment, for promoting the development of innovation competence: orientation and theory, the development of creative ideas, future orientation, concepting, prototyping and testing, implementation, and entrepreneurship planning. In a study of students' development of innovation competence, Keinänen and Oksanen (2017) concluded that attention should be paid to creating a psychologically safe and encouraging atmosphere (see also Paulus & Dzindolet, 2008).

*Authentic learning* in online environments has received a great deal of attention. Teräs and Herrington (2014) applied the elements of authentic e-learning identified by Herrington et al. (2010) to educational design research focused on an online professional development program. They concluded that the elements of authentic e-learning are very useful for both design and evaluation. Especially at the beginning of the learning process, students may experience difficulties with some of the elements. Therefore, guidelines were developed to enhance scaffolding during the learning process. Leppisaari et al. (2013) applied the elements of authentic learning identified by Herrington and Oliver (2000) to the evaluation of online courses. They found that the "multiple roles and perspectives" and "scaffolding" elements were achieved; however, the "collaborative construction of knowledge" and "authentic assessment" elements posed challenges (Herrington & Oliver 2000, pp. 16–17, 19–20).

LaBeouf et al. (2016) found that international online collaboration in HE can be problematic because of time zone differences. Thus, planning, scheduling, and the establishment of clear guidelines for collaboration can support group activities (see also Arkko-Saukkonen, 2017). Studies on international university–business collaboration have highlighted the importance of face-to-face communication in addition to online collaboration (Arkko-Saukkonen, 2017). Paulus et al. (2012) argued that some creative development can occur online; however, decision-making is more effective when done face-to-face.

## Design Framework

### Creative and authentic learning environments

In the conceptualization of a *creative and authentic learning environment*, the present study relied on (1) the design principles, elements, and factors in creative learning (Philip, 2015; Poutanen & Ståhle, 2014) and (2) the nine elements of authentic learning and learning environments (Herrington & Herrington, 2006; Herrington et al., 2003, 2010). In the present study, a learning environment refers to curriculum design and the organization of material, geographical, social, and virtual resources for teaching and learning (Cleveland & Fisher, 2014; Vuojärvi, 2013). The role of the teacher is to coach, support and encourage students during the creative work process (see Arkko-Saukkonen, 2017; Herrington et al., 2010).

Poutanen and Ståhle's (2014) focused on creativity in short-term, self-directed student groups tasked with real-life societal challenges. They identified the following seven factors as important for achieving creativity in teamwork: (1) information and knowledge about the case, (2) frequent feedback, (3) organization of work, (4) communication skills, (5) group mentality, (6) use of internal and external assistance, and (7) deadlines and time limits. The focus is similar to that of the present study, in which a 10-day workshop was conducted. These factors can also be applied to authentic learning to support creative activity because the foundation is collaboration.

Philip (2015, pp. 257–259) identified the following approaches to fostering creativity:

1. framing the vocabulary around concepts such as "explore", "experiment" or "play";

2. realizing that instead of "teaching creativity", the aim is to "set up the conditions for creativity";

3. fostering habits of creativity, e.g. developing domain specific knowledge, tools and techniques, and appreciating the creative process;

4. finding generative spaces for play, which can be virtual, physical, affective or cognitive, individual or team-based;

5. creating pathways for creativity, e.g. through using constraints such as time, place and task to frame creativity and setting "parameters within which students have broad freedoms, but are not overwhelmed by choice";

6. using holistic assessment strategies of creativity;

7. empowering students to develop "a sense of agency about their capacity to be creative thinkers, learners, makers and researchers";

8. using a whole person approach, e.g. through developing students' and tutors' awareness of the emotional dimensions and phases of the creative process;

9. providing leadership and guidelines for creative groups;

10. teaching and leading by example, and by adopting a facilitative teaching style;

11. using analogue and digital technologies that best meet creative needs; and

12. strengthening creative leadership and supporting a climate of creativity.

Table 1 presents the conceptualisation of the creative and authentic learning environment to design and evaluate CS2.0. The conceptualization is based on the following nine elements of authentic learning suggested by Herrington et al. (2010): (1) authentic context, (2) authentic tasks, (3) access to expert performances and the modelling of process, (4) multiple roles and perspectives, (5) collaborative construction of knowledge, (6) reflection, (7) articulation, (8) coaching and scaffolding, and (9) authentic assessment. Additional elements of creative learning environments have been integrated into the conceptualisation.

CS2.0 provides a model for creative and authentic online and blended learning environments in HE. The model is informed by the previously discussed theories of creative and authentic learning. CS2.0 describes the coaching, learning, and co-creation processes and resources needed for a creative and authentic learning environment that fosters the development of innovation competence in online and blended environments in HE (Figure 1). The model was iteratively designed, implemented, and refined in previous studies by Arkko-Saukkonen (2017) and Arkko-Saukkonen et al. (2020).

**1) Authentic context:** The authentic context is built on real-life tasks or assignments from work environments to enable students to practice working life skills. Professional practices guide the curriculum, and the learning environment preserves the complexity of the real-life setting (Herrington & Herrington, 2006).

**2) Authentic and creative activities:** Complex, ill-defined activities provide opportunities for professional growth, as well as engagement in complex communication and the acquisition of higher-level skills (Herrington & Herrington, 2006; Keinänen & Butter 2018; Kivunja 2014; Lombard, 2007). Fostering creative habits involves developing students' domain-specific knowledge, tools and techniques, as well as appreciating the creative process and finding generative spaces for play (Philip, 2015).

**3) Access to expert performances and the modelling of processes:** The learning environment should make real-life situations accessible by providing students a "model of how a real practitioner behaves in a real situation" (Herrington & Herrington, 2006, p. 5). In addition, students should have the opportunity to see experts' strategies for solving similar problems and to compare them to their own.

**4) Multiple roles and perspectives:** Working with more than one person creates opportunities to work on a task from different perspectives and starting points. In addition, the exchange of ideas generates common thinking and solutions to current challenges (Herrington et al. 2010). It is important to enable students to examine problems from the stakeholders' perspectives (Herrington & Herrington, 2006). The variety of roles in group work has been acknowledged as having a positive effect on innovation activities (Hero & Lindfors, 2019). Diversity refers to not only multiple professional roles and perspectives but also multiculturalism and a shared learning culture and understanding of the needs of others from different cultural backgrounds (Leppisaari et al., 2013; Teräs et al., 2014).

**5) Collaborative and creative knowledge construction:** Collaborative knowledge construction can be encouraged through appropriate incentives, tasks, and information and communication technologies (Herrington & Herrington, 2006; Herrington et al., 2010). For online collaboration, the digital tools that most effectively support creativity need to be selected (Philip, 2015). Thus, the sharing of ideas and knowledge through collaboration is crucial (Amabile, 1998). Collaborative knowledge construction is supported by a creative climate and psychological safety for creative activities (Paulus & Dzindolet, 2008; Paulus et al., 2012; Philip, 2015; Poutanen & Ståle, 2014). Risk is inherent in creativity, and mistakes have been found to activate creativity and development (Paulus & al., 2012).

**6) Reflection:** The processes and outcomes of learning through authentic tasks and activities are reflected in relation to the work of the individuals, group members, and experts (Herrington & Herrington, 2006). Decision-making is an aspect of reflection, the evaluation of the materials used, and the selection of important content and practices (Herrington et al., 2010).

**7) Articulation:** Learning is facilitated by opportunities to share and present knowledge; to reflect, defend, and justify ideas; to create conflict; and to build a common understanding (Herrington & Herrington, 2006; Herrington et al., 2010). Innovation activities enable students to brainstorm, to communicate with one another, and to present content to experts, instructors, and/or the wider public (Hero & Lindfors, 2019; Keinänen & Kairisto-Mertanen, 2019). In creative collaboration, the group is provided opportunities to discuss the content to develop a common understanding (Poutanen & Ståle, 2014).

**8) Coaching and scaffolding:** In an authentic learning environment, coaching and scaffolding are provided by more able partners, such as teachers or student peers, at critical times (Herrington & Herrington, 2006). The teacher's task is to "empower students to develop self-efficacy" and, at the same time, to "strengthen creative leadership and support a climate of creativity" (Philip, 2015, pp. 257–259). Therefore, pedagogical solutions are designed to support creative activity (Cochrane & Antonczak, 2015). The key is to "provide leadership and guidance to creative groups" to foster self-direction and trust in the availability of support (Philip, 2015, p. 257–259). Deadlines and time limits are important for achieving creativity in teamwork (Poutanen & Ståle, 2014). From the perspective of creative leadership, the effects of digital technology and social media on creative activity must be carefully considered (Philip, 2015).

**9) Authentic assessment:** Authentic learning can be assessed on several criteria, such as knowledge acquisition and polished performances or products, as well as the time and effort invested in the collaboration (Herrington & Herrington, 2006; Herrington at al., 2010).

**Table 1.** Elements of creative and authentic learning environments.

**Figure 1.** Creative Steps 2.0 (Arkko-Saukkonen et al., 2020).

The centre of the "mountain," the visual representation of the model, depicts the progressive approach, the 10 + 1 steps, to developing innovation competence in online and blended environments in HE. The steps are as follows (Figure 2): (0) developing a framework for the business case, (1) identifying and creating the business case, (2) enabling the use of online tools, (3) understanding the business case, (4) formulating a potential business idea, (5) creating a checkpoint for evaluating the idea, (6) enhancing business expertise, (7) sparring with experts in the creative clinic, (8) prototyping the business idea, (9) proving market demand, and (10) pitching.

**CREATIVE STEPS 2.0**

X PITCHING

IX PROVING MARKET DEMAND

VIII BUSINESS IDEA PROTOTYPING

VII CREATIVE CLINIC

VI ENHANCING BUSINESS EXPERTISE

V IDEA EVALUATION CHECKPOINT

IV FORMULATING A POTENTIAL BUSINESS IDEA

III UNDERSTANDING THE BUSINESS CASE

II ENABLING ONLINE TOOLS

I IDENTIFYING THE BUSINESS CASE

0. THE FRAMEWORK OF A BUSINESS CASE - LAUNCHING CS 2.0 WORKSHOP

The central elements of the model are depicted on each side of the mountain (see Figure 1). First, international companies are paired to facilitate the development of a common new product or service. This complex task challenges each creative student team to consider the companies' needs and perspectives. Second, ideation tools and innovative methods are used creatively (see Arkko-Saukkonen & Krastina, 2018). Third, the participants, including the companies and multidisciplinary student groups and external experts, were involved in the CS2.0 process. The students act as aids to the business partners. The shared goal is to collaboratively learn creative ideation and development methods, to engage in innovation activities, and to develop entrepreneurial thinking.

**Figure 2.** The step-by-step approach of the Creative Steps 2.0 (Arkko-Saukkonen et al., 2020).

The right side of the "mountain" contains three additional key elements. First, the model is based on the step-by-step approach that structures and guides the creative activities. Each step includes tasks and creative methods to advance authentic and creative learning. They include energizers to keep the mind and body active during the creative process (Arkko-Saukkonen & Krastina, 2018; Arkko-Saukkonen et al., 2020). Second, external experts provide teams with feedback and assistance in the Creative Clinic. Third, the creative innovative project is completed when the student teams develop a prototype and present a finalized product or service concept to an international team of experts in the Creative Cave Pool. The external experts' evaluation includes feedback on the marketability of and opportunities for the final product or service concept. In addition, the companies evaluate its usability and value from their perspectives.

## Course Design and Implementation

### Design research

The principles of the present study are in accordance with those of design research. They are typically used in the design of the product, operating model, curriculum, pedagogical model, or learning environment (Brown, 1992; Collins et al., 2004; Edelson, 2002; McKenney & Reeves, 2019; Nieveen, 2010; Plomp, 2010; Ruhalahti et al., 2017). In design research, theory and practice are tested through iterative rounds in real-life educational situations instead of controlled test environments (Collins et al., 2004). Successes and challenges are identified, and the results of each iteration are used to develop a deeper understanding of the objects of learning (The Design-Based Research Collective, 2003).

### Creative Steps 2.0 workshop and participants

In the present study, CS2.0 was applied in the design and implementation of a 10-day workshop at the Lapland University of Applied Sciences in Finland in Spring 2016. The participants were visual arts, international business and business information technology students ($n$ = 15) and creative sector entrepreneurs ($n$ = 8) from Finnish Lapland, western Ireland, Northern Ireland, and mid-Sweden. The students represented six nationalities. Visual arts and business faculty members ($n$ = 2) facilitated co-creation and learning. In addition, external experts ($n$ = 4) brought their idea sparring expertise to

the Creative Clinic, and an international jury ($n = 5$) provided feedback on the finished products and services. The workshop was organised as a Creative Momentum[1] project activity.

The aim of the co-creation and learning activity was to develop students' creative, innovative, and entrepreneurial skills through an authentic industry-based task. During the workshop, the students were expected to co-create novel product and service ideas with and for the entrepreneurs. Four creative teams, each comprising three or four students and two company representatives, were formed. The entrepreneurs participated online, and the students worked in a hybrid environment. Some shared the same physical space, and others worked online only. The students were involved in the selection of the online tools for communication (Skype, iLinc), collaboration and presentations (Padlet), ideation (mind maps, Scamper), and content sharing (Facebook, Eliademy). The creative teams were allowed to choose the online tools for their internal communication. Support and coaching for online collaboration were provided throughout the process.

The creative teams started the process by getting to know the companies' operating principles, products, services, and challenges. They then created frameworks that included key information about the businesses: operations, products or services, challenges, expectations, and potential development and innovation opportunities (Arkko-Saukkonen & Krastina, 2018). Finally, as is typically the case in authentic learning, a complex real-life task was developed.

The teachers coached by supporting, encouraging, and guiding the students (see also Arkko-Saukkonen, 2017; Herrington et al., 2010). In the Creative Clinic, the creative teams engaged in sparring with experts from different creative fields. To develop and to present their product or service prototypes, the students obtained feedback from a target group of their choosing. The prototypes were presented to the international jury of career professionals, who provided feedback and assessed their marketability.

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1   Creative Momentum (2015–2018), a transnational project to support the creative industries in Europe's Northern Edge, was co-funded by the European Union's Northern Periphery & Arctic Programme (MyCreativeEdge, 2021). It supported networking opportunities, the acquisition of creative and business skills, and the development of new products and services. Internationalization was promoted through various creative spaces, events, mentoring, and gatherings.

## Research Questions, Data Collection and Analysis

The study sought to answer the following research questions pertaining to students' experiences of the workshop:

1. What were the successes and challenges regarding the learning process and outcomes?

2. What implications does the student experience have for the refinement of CS2.0?

### Data collection and analysis

At the end of the workshop, the students ($n$ = 13/15) responded to a 42-item online evaluation survey (Google Forms; see also Arkko-Saukkonen, 2017). The close-ended questions allowed for responses on a scale of 0 (*poor/not important at all*) to 5 (*excellent/extremely important*). The focus of the closed-ended ($n$ = 22) and open-ended ($n$ = 20) questions was the implementation of the workshop. Thus, the questions were related to the tasks and creative methods, online work, teamwork, and coaching. The students ($n$ = 11/15) also maintained reflection diaries about the creative teamwork experience. They were instructed to make daily entries. The diaries varied from 1,038 to 5,943 words. The total amount of data collected was 25,622 words.

First, qualitative content analysis was performed to identify the successes and challenges regarding the learning process and outcomes related to the elements of creative and authentic learning environments. The results were re-examined, and the problem areas were clustered into four main implications for the refinement of CS2.0.

## Results

### Successes and challenges

Table 2 shows the successes and challenges regarding the learning process and outcomes with respect to the theoretical framework, i.e., the elements of creative and authentic learning environments.

| Elements of creative and authentic LEs | Identified successes | Identified challenges | Examples from the data<br>s=student, rd=reflection diary and q=questionnaire |
|---|---|---|---|
| **Authentic context** | • Step-by-step approach<br>• Use of diverse creative methods | • The authentic context´s complexity | Working with real companies is my first experience and working with them online is even more new for me. From that collaboration I have learnt many new things about business, business relationships, management and teamwork- it is an invaluable experience. S5, RD<br><br>Generally, I found the workshop really good experience. It was nice to work in environment combined of students of many programs and countries, bringing more variety in thinking and innovative process. Online tools chosen for this workshop work well, so thinking about future I think these elements are good to keep as it is now. S2, RD |
| **Authentic and creative activities** | • Creating a business case<br>• Creative Clinic<br>• Prototyping<br>• Checkpoint (pitching business ideas)<br>• Use of Scamper for ideation | • The ill-defined task<br>• Time constraints | We were required to work with our 10Q [the questioning procedure used in the workshop] results combining companies' answers on one mind map. Such practice has trained us how to apply innovation way of thinking and to have a professional approach to the working process. In addition to this all, we also were trying to create an added value for an existing or future customer pain. In this case we were using only existing resources of two companies, these resources could be combined into producing one new innovative product. S6, RD<br><br>We needed to do marketing research in order to find out whether there is actually a demand for our product This information indeed turned out to be extremely valuable when trying to find out wheter our product is going the be succesful or not. S7, RD |
| **Access to expert performances and the modelling of process** | • Sparring by the experts during the Creative Clinic | • "Go around" method in the Creative Clinic<br>• Lack of prior knowledge about the experts attending the Creative Clinic<br>• Students' insecurities<br>• Time constraints | Working with real companies is my first experience and working with them online is even more new for me. From that collaboration I have learnt many new things about business, business relationships, management and teamwork- it is an invaluable experience S5, RD |
| **Multiple roles and perspectives** | • Students' diversity<br>• Collaborative development of the main task with the companies | • Students' experienced lack of expertise in the field of the company involved<br>• Homogeneity of the Creative Teams | All of the results of brainstorm were gained because of unique set of team members' background knowledge. S4, RD<br><br>We had a great teamleader who had a clear vision of things. We were actively asked about our opinion so our voices weren't muted and we worked a lot in the background. I could help with the practical things in artistic perspective, for example: our companies were strongly visual art based companies, so it was easy for me to bring up ideas from my own perspective. The other students understood more about economics and marketing I didn't know much about. S7, RD |

| Elements of authentic and creative LEs | Identified successes | Identified challenges | Examples from the data<br>s=student, rd=reflection diary and q=questionnaire |
|---|---|---|---|
| **Collaborative and creative knowledge construction** | • Use of online tools<br>• Collaboration with companies<br>• Support from the Creative Team | •Company members' delayed responses<br>•Lack of necessary ICT skills in students<br>•The atmosphere in the Creative Teams<br>•Scheduling the collaboration | It was nice to work in environment combined of students of many programs and countries, bringing more variety in thinking and innovative process. S2, RD<br>We also had a team meeting on Skype to catch up what happened and to what direction we should go. During our meeting this was the first time when I felt being discouraged from being creative. I still would like to have something really creative as end-result as well as fulfil the needs or expectations of the companies. S8, RD<br>People can disappear and be unreachable without saying a word. S8, RD |
| **Reflection** | • Multiple arenas for reflection with companies, coaches, experts and student peers | • Get companies participation in joint action and feedback | The aim of this day was to have short presentations from each creative team. By this way we all could see the progress on other team and also give comments to each other. S2, Q<br>This day was reserved for us students to have time to gather more ideas and dig deeper into our cases. As we were creating the mindmap we saw that there is lot of things we need to take into consideration but at the same time narrow down the things so that we would have one clear executable business case at our hands.  S7, RD |
| **Articulation** | • Discussing, justifying and presenting arguments for peers, companies, teachers, and external experts | | We had 4 entrepreneurs and experts, who could give us feedback and ask tricky questions in order to test out our ideas. We had 2 steps we need to make before the last one – Idea Prototyping and Market research. Taking into consideration our idea developed beforehand, we wanted to ask our companies' ideas regarding joint prototype, and based on that develop the essential prototype, matching our brainstorming results, and companies' needs S7, RD |
| **Coaching and scaffolding** | • Coaching, support and encouragement provided by teachers<br>• Availability of the teachers | • Students' inadequate ICT skills and knowledge about creative process and online collaboration | We were coached about basics of innovation to understand the importance of it and everything it includes: instrument, resource, value, commercialization etc. S2, RD<br>I am that kind of person who likes to plan in advance, for which it was a bit bothering that I did not always knew in advance what was next, but looking back it was perfect like that. We had many new information anyway and we did not have any disadvantage or rush because we did not no what exactly will be the next 2-3 steps. So it was just perfect really. It was also very important that everyone was available all the time pretty much, which even if we did not need the help, created a kind of safety-net feeling. I knew that I can contact someone any time if I need, which one was really important. S7, Q |
| **Authentic assessment** | • Assessment provided by several stakeholders: teachers, experts, an international jury, and companies | • Lack of interaction with companies during the process | Creative Clinic which let us to think critically. There were four coaches and they directed us to make our outcome better. We were impressed with their ideas and skill of narrowing down. With their feedbacks we could definetely understand where we are heading for. S3, RD |

**Table 2.** Successes and challenges.

## 1) Authentic context

In CS2.0, the authentic context was realised through the complex and ill-defined re-al-life task, which was based on working life. As their main task, the students, in collaboration with the companies, developed a product or service for the companies. For students, authentic contexts can be very demanding and even overwhelming. Therefore, the CS2.0 model is based on a step-by-step approach to provide a structure for co-creation and learning (see also Philip, 2015). In the questionnaires and reflection diaries, the students indicated that the subtasks provided an effective and easy-to-follow structure that supported the participation of first-timers. One student indicated that the clear structure and daily deadlines facilitated the completion of the development tasks and the achievement of the final goal (see also Philip, 2015). Some students reported that some of the subtasks were very challenging; however, peer collaboration and instructor support were helpful.

## 2) Authentic and creative activities

The online questionnaire asked the students how the step-by-step approach, which included tools and methods, enhanced learning. Most students (85–100%) rated all 10 + 1 steps in the CS2.0 model as either "extremely important" or "very important." The model begins with Step 0, the *development of a framework for the business case*, and Step 1, the *identification and creation of a business case.* This required creating a background for the authentic task in collaboration with the entrepreneurs and the students. In their diaries, the students wrote that Steps 0 and 1 were essential for producing the actual assignment and the main aim of the creative process collaboratively with the entrepreneurs.

Step 2, *enabling online collaboration and the use of online tools*, was important to ensure that guidance was provided for international cross-border collaboration. The creative teams chose the online platforms for accomplishing the tasks. They indicated that Facebook, Skype, and Padlet were very important for collaboration and task completion. Step 3, *understanding a business case*, required information acquisition. Thus, the students assigned themselves an information retrieval task. Some of the diary entries indicated that they gained a deeper understanding of the topics related to the business case and shared their knowledge of various topics with team members.

The creative teams brainstormed, and in Step 4, they *developed* and presented *a potential business idea.* This led to Step 5, the *idea evaluation checkpoint.* Most (85%) of the students perceived the feedback from the entrepreneurs and teachers and the cross-evaluations from the other groups as important. The creative process continued.

The Scamper method was used to develop out-of-the-box ideas and to find new solutions. Most students (85%) also rated this method as important. In Step 6, incubation time was added to the creative process to allow the students to *enhance of business expertise*. This allowed them to expand their knowledge of the business and to participate in a business event. Many students were inspired by the business event and wrote in their diaries that it improved their understanding of entrepreneurship and business thinking.

In Step 7, the creative teams engaged in *sparring and* received *feedback* in the Creative Clinic about their business ideas from the experts. In Step 8, they developed *a prototype*, a more specific concept of the product or service. In Step 9, they *identified and proved the market demand for the new business idea* by testing prototypes and obtaining feedback from potential customers. The diary entries revealed that this step was important to several students. One student registered surprise at discovering that their idea was not as innovative as had initially been thought. At the final step, 10, the polished prototype was *pitched* to the international evaluation panel, which assessed its market value.

The responses from two early-stage students revealed initial confusion about the reason for the step-by-step approach. The students reported that the biggest challenge was the lack of time to find information, to develop solutions, and to polish the idea.

### 3) Access to expert performances and the modelling of processes

The evaluation questionnaire revealed that the sparring during the Creative Clinic allowed the experts to model their roles and expertise for the students. Two students reported that they learned professionalism and entrepreneurship. The Creative Clinic was generally reported to be very important for co-creation and learning. It allowed the students to present their assignments to the experts to receive feedback and sparring assistance.

The "go-around method" was used. The students presented and discussed their task with four creative industry experts; however, some indicated that this was demanding and frustrating. The students said that having prior knowledge about the experts would have allowed them to determine the type of help that was most needed and, thus, to optimise the assistance. The students were at different stages of their studies. The questionnaires from those early in their studies revealed initial uncertainty and insecurities because of the perception that their peers were more advanced. The students reported having experienced time constraints during their interactions with the experts.

### 4) Multiple roles and perspectives

The students represented several nationalities and study areas. The companies were international. The questionnaires and reflection diaries indicated that the experiences related to competence, cultural perspectives, and international activities were mainly positive. Student diversity was considered important. For example, the visual arts students assumed the role of visual experts, and the business students focused on business and marketing. The students also indicated that the collaborative development of the main task to create common value for the companies required an understanding of both companies' perspectives.

The importance of getting to know peers when starting group work was also highlighted in the diaries. The students also reported that understanding cultural differences was important for working with peers from different countries and cultures. The challenges included some peers' lack of expertise in the companies' specific fields. This made them question their competence to create added value for the companies. A reflection diary revealed that one of the creative teams was homogenous in terms of the students' study areas. In addition, the students were familiar with one another. The diary entry noted that working life skills would be better practiced in a more diverse group of students who were not already familiar with one another (see also Paulus et al., 2012).

### 5) Collaborative and creative knowledge construction

The questionnaires and reflection diaries revealed that the online tools (Facebook, Skype, Padlet) facilitated collaboration. However, some students reported that the company members' occasionally delayed responses made it difficult to consider their perspectives during the design process. One student emphasized that collaboration required ICT and social media skills, the absence of which created challenges for the group. In their reflection diaries, several students reported that the collaboration with the companies enabled them to develop working life skills. Specifically, the discussions with the experts in the Creative Clinic were considered beneficial for learning. One student mentioned online collaboration as a mandatory skill for future working life. Overall, the students reported receiving encouragement from the relaxed atmosphere and team support.

Openness, curiosity, encouragement, and a psychologically safe climate of respect and acceptance facilitated creative multidisciplinary teamwork (Ness & Riese, 2015; Paulus & Dzindolet, 2008). However, one student mentioned that the atmosphere in their group was not good and that ideas were not valued. Several diaries and questionnaires highlighted communication as the biggest challenge. Difficulties in reaching the

companies and scheduling cross-border collaboration because of time zone challenges were mentioned. Several students indicated that the commitment and motivation to work online was an important matter that required group agreement. According to one student, communication problems can lead to confusion and misunderstanding in online collaboration.

### 6) Reflection

Decision-making requires reflection (Herrington et al., 2010). Some of the diaries described the collaborative selection of ideas as an opportunity for reflection (see also Herrington et al., 2010). The students explained their choices to the companies and teachers at the checkpoint and to the international judges at the final pitch. In the Creative Clinic, reflection was also an element of the expert sparring when the students had to justify their approaches. Several students mentioned in their diaries that important learning occurred as they enhanced their knowledge, attended business events, and met with experts in the Creative Clinic. These steps were followed by discussions with the teachers and creative groups. The students then spoke and wrote about the most important lessons that they had learned.

### 7) Articulation

The questionnaire responses and diary entries indicated that the students discussed, justified, and presented their ideas for their peers, the companies, the teachers, and the external experts throughout the workshop (see also Hero & Lindfors, 2019; Herrington & Herrington, 2006; Herrington et al., 2010; Keinänen & Kairisto-Mertanen, 2019). Several diaries indicated that the use of online tools for brainstorming and co-creation in the Creative Teams enabled the students to discuss, to communicate, to explain, and to justify their proposals. The discussions with the teachers in their roles as coaches allowed for the exchange of ideas when the students had to justify their approaches. The interactions occurred either online with the companies or in a hybrid environment, with some students online and others in the same physical space.

### 8) Coaching and scaffolding

The role of the workshop teacher was to coach, to support, and to encourage students during the creative process (see Herrington et al., 2010). In the evaluation questionnaire, 77% of the students characterised this guidance as excellent, and 23% deemed it good. The evaluation questionnaires and reflection diaries indicated that the students received

assistance from the teachers at different stages of the process. For example, the students indicated that the teachers facilitated ideation and co-creation by helping them to refine their perspectives and find solutions to challenging situations and providing encouragement, as well as useful materials and links to techniques and online tools. One student's diary entry indicated that knowing that the teachers were available, even if their help was not always needed, was helpful.

Several students indicated in the questionnaire that learning to use new online tools was important for successful online collaboration. Most (85%) indicated that they received either very much (39%) or quite much (46%) of information about working online from their teachers. Many diaries and questionnaires indicated that the guidance and support encouraged them to learn and to use new online information sources. The guidelines for working online were found to be important because they provided a common body of knowledge to facilitate group work. One student's diary entry discussed the challenge of determining the project stage and next steps. Inadequate ICT and social media skills, as well as knowledge about the creative process and online collaboration, were perceived as challenges by a student who asked the teachers to emphasize the importance of online collaboration at the start of the project.

**9) Authentic assessment**

In CS2.0, assessment includes the evaluation of the final outcome but also in relation to the collaborative process and the targets of the co-creation and the different stages of the CS2.0 process (Herrington & Herrington, 2006; Herrington at al., 2010). According to the diary data, some students found that the comments and evaluations facilitated learning, creativity, and co-creation. They appreciated the diversity of the assessments provided by the coaches, experts, international jury, and companies. However, the questionnaires indicated that some students experienced a lack of interaction with and desired more feedback from the companies. The students obtained feedback from a target customer of their choice for their prototypes and final presentations. Several diary entries indicated that this assessment was important.

## Implications of the Student Experience for the Refinement of Creative Steps 2.0

The students identified the challenges that they encountered. Suggestions for refining CS2.0 are presented in Table 3.

| SUGGESTIONS FOR REDESIGN CREATIVE STEPS 2.0 | HOW TO REDEFINE CREATIVE STEPS 2.0 |
| --- | --- |
| Creative but suitably challenging authentic context and activities and clear instructions for a step-by-step approach. | The level of complexity of the tasks must be proportionate to the level of competence of the students, but considered sufficiently challenging. The step-by-step approach must be clearly presented at the beginning of the work to all participants so that everyone can understand the meaning of the task and creative methods and participate in the activity. |
| Enrich co-creation and collaboration with multidisciplinary teams and encourage the use of everyone's expertise. | Creative work benefits from a multidisciplinary team and it is important to consider the team's diversity and different perspectives in terms of co-creation to enrich learning experiences.<br><br>The added value of the Creative Clinic consisted of the sparring provided by the experts, but the format of the working method needs to be re-evaluated to be more practical and beneficial to participants.<br><br>Students should be given more advance information to prepare beforehand for Creative Clinic. Students should be offered support to expand their knowledge of the business case and encouraged to utilize their own skills to work together, especially first-timers. |
| Enable, coach and scaffold online collaboration. | At the beginning of the work, encourage and support the Creative Team to get to know each other, create common team rules for online collaboration, set a timetable and commit to collaboration.<br><br>Guidance must be attached to the online work, the importance of basic skills in online collaboration must be emphasized and students who are less skilled in online work need to be given more guidance and support so that co-creation and the creative atmosphere are not jeopardized. |
| Coaching and supporting co-creation and generating a creative climate. | Coaches should enable the strengthening of a creative climate and a sense of psychological safety from the outset.<br><br>Collaboration with companies must be made smooth and interactive, therefore, the possibility of companies' participation needs to be assessed, the realities of real life need to be considered and alternative solutions may need to be sought. |

**Table 3.** Suggestions for refining Creative Steps 2.0.

To summarize, CS2.0 must have a creative, but challenging, authentic context and implementation. Clear guidelines must be provided for the step-by-step approach. The benefits of multidisciplinary teams should be recognized (see also Hero & Lindfors, 2019), and the teacher should encourage everyone to use their skills. Coaching and support for co-creation, a creative climate, and online collaboration must be ensured from the outset (see also Paulus & Dzindolet, 2008). Coaching and scaffolding must be available throughout the creative and authentic learning processes.

## Conclusion and Discussion

This design research aimed to refine the CS2.0 model. The students' experiences were evaluated, and their successes and challenges highlighted areas for refinement. The results indicate that the step-by-step approach of CS 2.0 is beneficial for creative and authentic learning to achieve innovative competence. In the creative process, the focus is the exploration and generation of new ideas; however, in innovation, ideas are implemented (Poutanen & Ståhle 2014). CS2.0 combines these elements.

In the present implementation of CS2.0, learning was realised through an authentic task that was accomplished through the cross-border collaboration of students and entrepreneurs. The creative methods and online tools promoted learning. The students gained professional knowledge and developed an understanding of entrepreneurship by strengthening their innovation and working life skills with the help of experts and teachers. The suggestions for further development were based on the challenges identified by the students.

A limitation is that CS2.0 was not a part of the curriculum. This might have had a positive effect on the students' motivation. The functionality of CS2.0 should be explored in more detail as part of the curriculum. A greater focus should be placed on online collaboration. Finally, evidence of learning outcomes, besides that gleaned from student self-reports, needs to be collected and analysed.

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# Art as a Means
# to Overcome Distances

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**M**aking space for understanding new ways of relating to one another and to multi-layered realities of the world, distances can provide a solid ground for art participation. This article focuses on two projects addressing the idea of art overcoming different perspectives of distances. Firstly, **the Art laboratory** project was dedicated to shorten the physical distance between artists from other localities and residents of Yakutsk. Secondly, **the Practices of co-existence** was aimed to shorten the mental distance between one another as human beings, each having a unique experience of life, as well as different ways of perceiving the world.

Distance is often one of the first words that come to mind when thinking of the North. At a first glance referring solely to geography and physical space, distances are sometimes also perceived in cultural, social, or economic context as a difference, reason for misunderstanding, or an obstacle that stands in the ways of access. Nevertheless, peoples of the remote territories with hard-to-reach, sparsely populated settlements are used to see distances as a part of everyday life. One of such places on the Earth, often imaginary, inhabited by the Other living in a harsh climate with extreme weather conditions – these are some connotations of those who think about the Republic of Sakha (Yakutia) for the first time. Being the largest subnational governing body by area in the world, the place has three time zones and a word in the Sakha language to describe a long distance – "yraakh". There, distances between three worlds have always been mentioned in the national epic of the Sakha people – the Olonkho, which includes ideas about the surrounding world, social relations, rituals, people and their beliefs (Oyunsky, 1927). For centuries its narrators, the bearers of ancestral knowledge, had traveled to other settlements in order to share heroic epic tales consisting of thousands verses about events central to the Sakha worldview. Such gatherings helped to unite around the idea of collective memory, overcoming distance between people in a metaphysical sense. For hunters and gatherers overcoming spatial distances was a part of life, bringing rituals that were performed before a long journey.

**Figure 1.** The Art laboratory participants in a mutual dialogue. Photo: Dzhuliiana Semenova, 2019.

**Figure 2.** Object from the fridge exhibition. Artwork and photo: Ekaterina Egorova, 2020.

In the present reality distances do not dictate either the frequency or the quantity of socio-cultural processes happening in the Republic. As put by Jacopo Sanna, although in the context of the local punk-scene: "Yakutsk, Russia, turns isolation into inspiration" (Sanna, 2019). Artefacts of spiritual and material culture of the peoples of Yakutia indicate the specific character of identity of the place and its peoples. Interestingly, this place has been a long-standing home for artists, which began with cave narrations of people from deep historical times and folk craftsmen, who made utilitarian objects with a shape that is dear to one's heart and mind, often with symbols inspired by the surrounding landscape. It continued with embroiderers, telling stories by patterns on winter boots, and with the Olonkhosuts, carriers of cultural heritage, creating space for imagination and improvisation. Then there were artists, who updated the world of graphic art by intertwining Western art-techniques with local imagery, and the booming cinema production, where the entire village participates in creative production with facilitation provided by a school teacher. Many more cultural evidences could be mentioned in this sense. Therefore, it is no wonder why there is a certain desire for creativity – it was always a part of indigenous cosmologies and worldviews, their long-standing ways of building knowledge, later in neoliberal conditions becoming a way of cultural survival. We believe making art has always shortened the distance between people, between one and the surrounding reality, helped to acknowledge many voices and perceptions of the world. Enriched with art-based participatory research (Barone & Eisner, 2012; Jokela & Huhmarniemi, 2018; Knowles & Cole, 2008; Leavy, 2008; McNiff, 2013; Whyte, 1991), distance also supports alternative ways of knowing and creates new forms of social practice on its own terms.

Both projects introduced in the article invited youth of Yakutsk aged 16 to 32, with diverse backgrounds and no requirements regarding art-related practice. Overall, 29 people participated, among them high school pupils (3), art college students (9), university staff (2), emerging artists (4), filmmakers (3), linguists (2), journalists (2), economists (1) and people with no occupation (3).

The projects are part of one of the authors Dzhuliiana Semenova's research practice on developing strategies for inclusive co-creation to address the problem of cultural identity during the processes of multi-faceted changes in people's day-to-day life in the Republic of Sakha (Yakutia). Semenova's doctoral study focuses on art-based participatory practices by using art-based action research strategy to critically reflect on surrounding realities by collectively constructing meanings. The aim of the study is to improve social interaction and situate discussion in indigenous and non-indigenous communities. In unison with these objectives, the Art lab was created. It is the art and

education initiative, run by two cultural workers and organized also as a consequence of a significant lack of institutional, educational, social and cultural infrastructures in the field of contemporary art in Yakutia, and, thus, to support the needs of Yakutsk city residents interested in contemporary art.

The aims of Art lab are as following:

- to support cultural agency and a sense of belonging;

- to involve indigenous and non-indigenous communities in a dialogue, collective thinking and meaning making through art-based approaches;

- to support different modes of thinking, historically oppressed ways of perceiving reality and indigenous forms of cultural knowledge;

- to provide access to the arts, arts education and discourse underrepresented by institutions in the Republic of Sakha (Yakutia);

- to promote empathy and sensitive ways of being through art as a form of more positive and non-hierarchical social relationship.

## Methods for art-based action research as a means of awakening subjectivity and bringing people together

Willing to engage with communities and address which methodologies would fit the ethical and responsible social engagement it is important to first situate oneself. Two authors of the article, who also acted as project facilitators, are art workers, who have been growing up in the Sakha lands surrounded by complicated politics of space, exploitation of nature,

**Figure 3.** Valerie and Anna during the practice of mapping space by James Batchelor. Photo: Dzhuliiana Semenova, 2019.

**Figure 4.** From the practice of wandering in nature by Tarja Koistinen. Photo: Dzhuliiana Semenova, 2019.

hybridity of cultures and identities. All this was a significant prerequisite in the selection of methodological grounds. Approaches applied in building and conducting projects derived from art-based research schemes intertwined with indigenous knowledge systems and the decolonial option (Mignolo, 2013). In this part of the article, we will unfold the importance of outlined approaches and their relevance regarding the main objectives of Art lab projects.

Art-based action research (ABAR) as a participatory, culturally sustainable approach within circumpolar and Arctic contexts is one of the epistemological cores of the University of Lapland (Jokela, 2019; Jokela, Hiltunen & Härkönen, 2015). As professor Timo Jokela (2019, p. 606) describes characteristics of the ABAR methodology, it "brings together people of diverse ages and generations and promotes the understanding, dissemination and renewal through art of the cultures of northern places and their communities." The difference between ABAR and artistic actions is that the former involves not only creation, but also analysis and further development of practice.

It is important to acknowledge that – independently from educational discourse – similar ways of action can be noticed in the collaborative initiatives of cultural revitalization that took place all around the globe. In the Republic of Sakha (Yakutia) most known practices and projects nurturing public discussion about identity, history, memory and culture begin from the 1920s: in emancipatory activism – *"Future of the Sakha" research society* (Argounova, Cruikshank, 2000), folklore – *"Elleyada" by Gavril Ksenofontov* (Ksenofontov, 1977), dance – *Sergei Zverev–Kyyl Uola* (Illarionov, 2011), graphic art – *"Old Masters" series by Valerian Vasiliev among others* (Neustroeva, 2020), music – *"Kyl Sakha" ensemble of national instruments* (Tomskaya, 2019), museum – *"Rarities of Yakutia" by the National Art Museum of the RS (Y)* (Neustroeva, 2014), theater – *"Yuko and Aneke"* (2020), *narrated by Nikolai Kurilov and directed by Kostas Marsaan,* cinema – *"The Eternal Memory of People"* (2021) *directed by Marina Kalinina*. What was shared between all these appearances of individual and collective agency is a possibility of promoting social transformation with the help of artistic and scientific methods.

Developers of art methodologies from the UoL highlight that occurring changes in the ABAR can be seen "as communally produced construction of the world" that is "dialogic and ready to recognize the changes" (Jokela et al., 2015, p. 445). Quite certainly, the flow of time dictates multiple changes in everyday reality: unstoppable ramifications of "exploration" of identities, bodies, communities, places, localities, natural resources and non-human actors. Current complicated situations uncover existing rigid constructions of cause-and-effect relationships, as well as various hierarchies in which societies are involved. Historical memory shows that the path to emancipation lies in collective action, often centering art as a lighthouse in the wavy windy ocean, as a ray of freedom and social

justice. Decolonial thinking that grows apart from Eurocentric knowledge production goes hand in hand with supporting agency and ability to act: "The decolonial stance involves a conscious choice of how to interpret reality and how to act upon it" (Tlostanova, 2019, p. 165). With the enhancements of technological development, the now moment illusively appears to be taken away the very second it has taken place, vanished as a ghost faster than ever before. Overlapped with dominant discourses of the capitalist system, this merger postpones the experience of co-being and does not let a subject happen. According to Mignolo and Escobar (2013, i) structural decolonization "becomes the horizon to imagine and act toward global futures in which the notion of a political enemy is replaced by intercultural communication and towards an-other rationality that puts life first and that places institutions at its service, rather than the other way around".

In this art-based action research the overall aim of the art is to bring people together in order to reflect on the past, present and future. This aim supports different modes of thinking and recognizes historically oppressed ways of perceiving reality as well as indigenous forms of cultural knowledge. In this article we are asking how participatory art can address the idea of art overcoming different perspectives of distances by focusing on two art projects. By distance in this article, we do not mean only the spatial distances, but also distances between one and the surrounding reality, distances between histories and cultures, distances between many voices and perceptions of the world.

## Realiziation
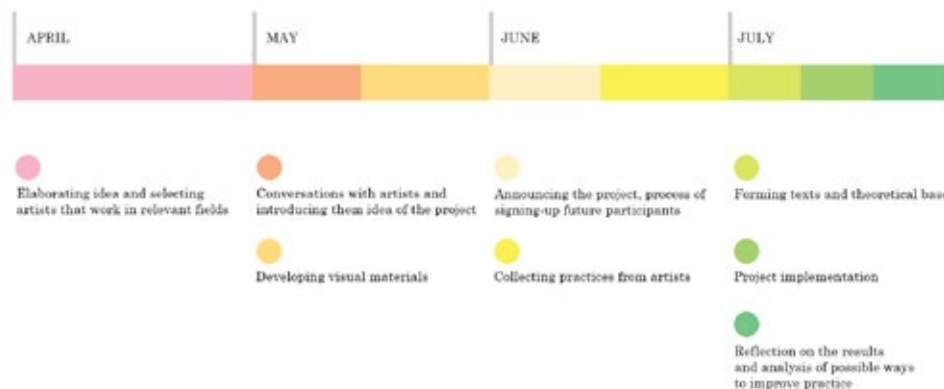
### Project I: the Art laboratory

**Figure 5.** Research plan for the Art laboratory project (2019).

**Figure 6.** Object-based portrait of Sasha and Arina, practice by Ieva Grigelionyte. Photo: Sardaana Khokholova, 2019.
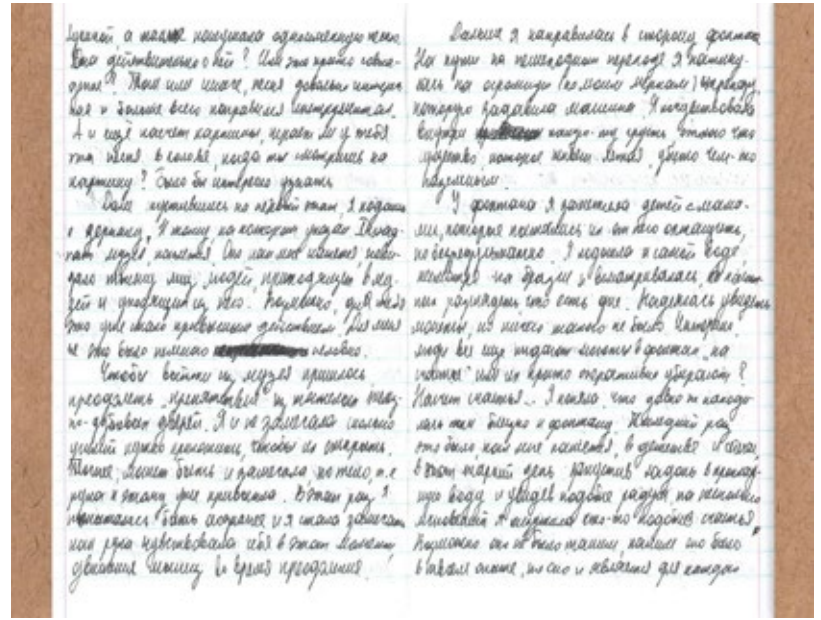
**Figure 7.** Letter from Valerie, practice of writing textual partitures by Ekaterina Yushkevich. Photo: Dzhuliiana Semenova, 2019.

On the basis of the National Art Museum of Yakutia along with these objectives, the Art laboratory was held from the 16th to 28th of July, 2019. The process of preparation, implementation, and post-project reflection took 4 months (Figure 5). The project was supported by artists from Russia, Japan, Australia, Germany, Switzerland, Poland, Iceland, Finland, Canada and the United States.

Constructed to make space for collective thinking, the series of 10 workshops invited people of different ages to join interdisciplinary art practices. Participants addressed several themes which can be defined as eternal topics that are present in the lives of everyone: object, memory, sound, space, place, nature, action, the Other, synthesis, landscape. The logic behind workshops was to invite artists with relevant art practice to suggest and propose an assignment on the given theme to help understanding miscellaneous phenomena. Received assignments addressed:

- historical and cultural contexts of the place – Ikuru Kuwajima "Translating local text into image";
- surrounding ecosystems – Jai McKenzie and the Perennial Institute "A day with the nature", Tanja Koistinen "Dérive in the green fields";
- everyday experience – Ieva Grigelionyte "Collecting as a creative process", Laura Heuberger "Synthesis as a strategy";

- human connections – Ela Orleans "Memory of time recreation", Ekaterina Yushkevich "A letter to a dear friend";

- metaphysical ideas – James Bachelor "Mapping the body in space", Irina Ivannikova "Refusal to act as an action", Martha Skou "Exploration of connections between sound, vibrations and visuals".

Each day the group explored new art forms: installation, text, performance, environmental art, photography and video. For instance, Ekaterina Yushkevich proposed to write a letter to a dear friend with detailed instructions about how to spend some time in the city. Later, after receiving a letter from a friend, participants were invited to follow instructions and to write a letter back. The main aim of the practice was to view letters as a way to dismantle distances by shifting modes and changing conditions of interacting with one another, as well as with the place we experience everyday.

More intersectionally the Art laboratory group engaged in psychogeographical drifts, automatic writing as wandering practice, contemporary choreography techniques and dialogical discoveries of nature. A great example for these experiments is practice in which participants were asked to spend a day in a garden or forest with a pack of plant creativity cards prepared by Jai McKenzie and her project – the Perennial Institute. Small exercises included imagining life of a plant, reading a tree, reflecting about plant adaptation, getting closer to root systems, breathing by photosynthesis, interviewing a plant.

**Project II: the Practices of co-existence**

The second project started in the spring of 2020 after communicating with neighbors through the glare from the balcony and later reflecting about a question: *How is co-ex-*
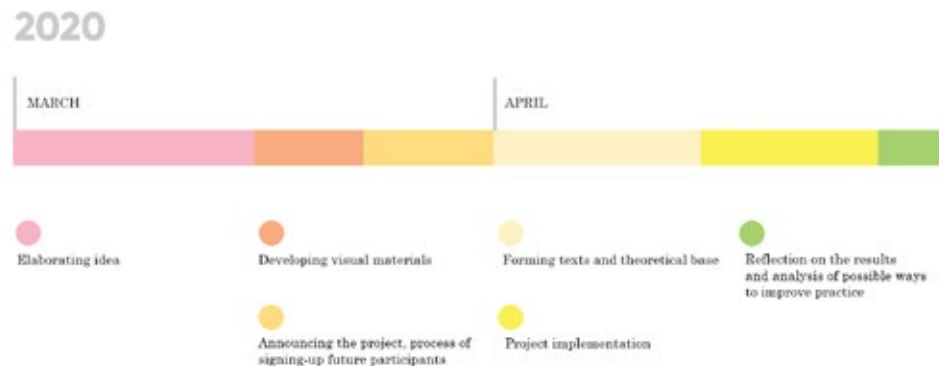


**Figure 8.** Timetable of the Practices of co-existence project (2020).

*istence possible in the present conditions of the lockdown and massive rates of alienation? How can one shorten the ever increasing distance from others? Is it possible to practice closeness to other beings while staying home?*

The Practices of co-existence made an attempt to find answers to these questions through art assignments that were created to practice empathy by learning to understand the other person's point of view and to care enough about others to offer support when it is most needed. We live in a world which is growing materialistic and individualistic, caring more about the idea of progress and human-wise singularity, which are often presented as a dominant narrative. In many ways these trajectories complement one another and suppress who we are as a community, how we build relationships with people and expand our worldviews by being attentive to others.

Assignments were inspired by ideas close to the perspectives of indigenous peoples of Yakutia. In Sakha ontologies objects, places, and natural phenomena have their own agency, spirits and powers: cultural practices of people are acknowledging these existences, which impact their lives (Kulakovsky, 1923) from deep times. Similarly, in object-oriented ontologies of the Western philosophy (Bryant, 2011; Harman, 2011; Morton, 2010) and more precisely in the actor-network theory (Latour, 2005), the principle of generalized symmetry describes human and non-human actors in the same terms, practically equalizing them. This ontological turn is critiqued by indigenous scholars, who highlight that it fails to cite non-Western cultures who long have had these beliefs (Todd, 2014; Tuck, 2014; Watts, 2013).



**Figure 9.** Practice delicated to shifting the gaze towards a window. Image: Art laboratory, Yakutsk, 2020.

**Figure 10.** Practice on hidden messages in Morse code. Image: Art laboratory, Yakutsk, 2020.

As mentioned, one of the main aims of the second project was to discourage social exclusion by making space for encounters with oneself and each other. During 10 days, each morning participants received art practice (Table 1) that they were invited to participate in: observing multiple scapes around, sending messages in Morse code, addressing everyday objects from new angles (for example, the window as the space for interaction), mimicking dinners of each other, and others. The idea was to make a link between participants through dialogues that were constructed in the logic of relay race, but with no competitive dimension to it: *A makes art practice and sends signals to B, B receives signals, makes art practice and passes his/her signals to C, and so on.* 15 people took part in the project, making it possible to engage with one another during the pandemic.

**Figure 11.** Extract from an audio-excursion "LIfe of Anna Neustroeva". Artwork and collage: Marina Sivtseva, 2020.

**Figure 12.** New potentiality of a window. Image: Irina Ivannikova, 2020.

| № | Practice |
|---|---|
| 1 | To write a partiture of the lunch for the Other.<br>*Inspired by Alisson Knowles and her work "The Identical Lunch"* |
| 2 | To send a secret message to the Other using the Morse code. |
| 3 | To create a mask from everyday objects and invite the Other to think of the name for it. |
| 4 | To write a piece of text, in the end resulting as a collective story about artist Maya Kust. |
| 5 | To imagine a new possibility for windows in a flat and make it come true. |
| 6 | To write instructions, following which the Other can understand your way of perceiving reality and experience of daily life. |
| 7 | To curate an exhibition in a flat and let the Other create an artist statement and title for it.<br>*Inspired by Marcel Duchamp, who addressed a box as an exhibition space, and Hans Ulrich Obrist, who made an exhibition in his kitchen* |
| 8 | To contact the Other and get to know how she/he feels today. Then, to combine different objects into one sculpture that would be consonant to the mood of the Other.<br>*Inspired by Erwin Wurm and his work "One minute sculpture"* |
| 9 | To tell a friend/sibling/colleague/someone close about our practices and ask what kind of practice they would propose in the context of our collective endeavours. Then, write it down and send the practice to the Other. |
| 10 | To write about the dream you remembered and send it to the Other. Once received the dream, try to translate it to any form (object, collage, photograph, poetry, video). |

**Table 1.** Practices of co-existence.



**Figure 13.** Strategy for art-based action research project: case for the Practices of co-existence (2020).

The Art laboratory and the Practices of co-existence were built and implemented by similar steps shown in Figure 13. As one can see, a participatory art-based project is a never-ending process of learning, adapting, brainstorming and constant movement towards sensitive forms of being-with. Working with a theoretical base includes getting familiar with institutional and non-institutional local and global knowledge. During the whole life cycles of projects, it helped that both facilitators have artistic backgrounds: Sardaana in graphic art, Juliana in performative photography. Nevertheless, the focus was not on the esthetic dimension of participant's works, but meanings born by collective thinking throughout the process. Consent to use data included information about names, ages, occupation, comments, as well as documentation, visual images, produced texts, interview and survey results.

## Project outcomes

Even though translating art into words is a difficult task and "artistic knowledge is not something that can always be reduced to language" (McNiff, 2013, p. 35), both projects encouraged participants to engage with experimental ways of knowledge production and practice togetherness through art. Approaches to building social relationships went in accordance with thoughts about Paulo Freire's practice of emancipation, formulated in the foreword of "Pedagogy of the Oppressed" (Freire, 1970) as "education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world" (Shaull, 1970, p. 34). In the existing reality, fields of art and culture often remain very particular cases of inequality and suppression. In the context of institutional art education in Yakutia there is a visible domination of Soviet heritage: state-only art institutions still cherish the impact of academic art with its mastery of professional realistic skills, positions of power in teacher-student relationships, separation of "high" and "low" art. The Art laboratory and the Practices of co-existence avoided distances in these senses: there was no evaluation, no vertical hierarchy. Instead, sharing experiences and ideas, inclusion of different voices and perspectives, transparency of the processes was at the core of these projects. Last but not least, contemporary art opened up a possibility to discuss power relations. In the long-term timeframe, it was a beginning of a long journey, a journey towards "a world where no one would be an other anymore, where there will be other economic options

**Figure 14.** Museum on a fridge. Artwork and photo: Irina Ivannikova, 2020.

**Figure 15.** Mask practice. Artwork and photo: Ekaterina Egorova, 2020.

than neoliberal global capitalism, other ways of thinking than Western, and other ways of communicating with nature than exploitation" (Tlostanova, 2019, p. 174).

The multi-cultural dialogue and international exchange were surprising outcomes that were not put as a goal from the beginning, but came along the process of the Art laboratory. Overall, 18 people participated in the experimental format of distance-based art practice, among them art college students (5), university students (6), pupils from high schools (3), those who are interested in art (4). As post-project in-depth interviews show, participants highlighted that the Art laboratory promoted their social-emotional skills, developed and stimulated their artistic practice. Another point was in shifting the mode of perceiving reality, as one respondent stated "we accessed ordinary scenarios of everyday life from angles we have not thought of before." All participants (18) were positive about the experience of participation and showed high interest in future programs and continuations.

Post-project surveys were also held after the Practices of co-existence, which provided a space for mutual support throughout adaptation to changing circumstances of social reality. 14 respondents agreed that the project helped them to develop empathic relationships with the world. Two participants noted that this form of online social engagement contributed in seeing new ways of engaging with people, places and objects.

In the spring of 2021, the Art lab continued with shortening the distance, at this time through thinking about relationships between people and non-human citizens of Yakutsk in the project titled "62°02'N 129°44'E". Shifting to alternative optics and collective imaginaries, the series of art-based practices invited people to recognize experiences and sensibilities of stones, trees, landmarks, buildings, streets, pathways, and empty places. At the moment of writing the article, the project is ongoing.

## Conclusion

The presence of distance implies some remoteness of A in relation to B, or the awareness of A of some metric or mental distance with which A relates itself. As Barad suggests, individuals exist "through and as part of their entangled intra-relating" – and this connection brings space, time, meaning and matter to existence as well (Barad, 2007, p. ix). When we reflect about distances, a lot depends on how we are relating to these phenomena, which perspectives we are thinking from. In the process of creation, it does not imply regressivity of creative processes. In the case of the Artlab distance, remoteness, intervals, spaces to overcome were among the co-actors of artistic practices.

The distances we imagine are never as far away as they seem. Two projects discussed in the article contributed to reflecting and outlining a person's own guidelines in relation to various phenomena of the universe, viewing distance as a possibility of new connections, imaginations, ways of knowing and being that have not existed before. Intertwining arts-based action research, indigenous ontologies and decolonial option, the Art lab initiatives fostered critical reflection and empathic ways of co-being in circumstances of the neoliberal modernity. These aims were achieved by acknowledging many ways of being, feeling and living in the world. Getting away from vertical hierarchy, the process-oriented collective art making opened up a possibility to recognize power relations and awaken subjectivity through means of art. The youth of Yakutsk shortened the distance between one another by having self-determination, articulating themselves and their ideas through mindful experimentation and collaboration.

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# Education for Sustainable Development in the Arctic: Experiences from a Marine Debris Project

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In this comparative study, we present our experiences from teaching an interdisciplinary arts-based project focusing on marine debris at three island schools located in rural Northern Norway and Alaska. This project within Education for Sustainable Development (ESD) aims to use Natural Science and Arts Education systematically and purposefully in lessons about these challenges and to equip pupils with ownership and action competence to act sustainably.

Marine litter and the spread of microplastics is considered one of the greatest global environmental challenges. It is a threat to wildlife, ecosystems, harvesting of living resources in all the world's oceans. Animals are exposed to great suffering, they can choke on plastic parts that get wrapped around their bodies or get digestive problems due to ingestion. Plastic waste is the biggest problem, since plastic does not really decompose. Exposed to the power of nature plastic over time is divided into smaller and smaller parts – microplastics. This tiny plastic particles, which also can contain toxins, are introduced into the food chain. This worsens people's quality of life and health, and causes great financial damage (Norwegian Environmental Agency, 2014; Norwegian Government, 2021).

In February 2014, the article authors were guest lecturers at the University of Alaska Anchorage (UAA) as part of a collaboration with the University of the Arctic (UArctic) and the Arctic Sustainable Art and Design (ASAD) network. We visited the Anchorage Museum and saw the exhibition "Gyre: The Plastic Ocean". The works of 25 international artists combined artistic and scientific knowledge to focus on the global challenge with marine litter.

The visit to the museum made a strong impression on us and inspired us to focus on marine litter along the coast in Northern Norway. We made the artwork "New Species" inspired by Natural science Taxidermy Collections (Figure 1) that was exhibited as part of Relate North Exhibitions (2017) and Arctic Arts Summit (2019). Further we used the problem in our own location-based and interdisciplinary teaching with a focus on inquiry based and creative working methods for primary schools in the region and teacher educations at Nord University, Nesna Campus.

**Figure 1.** *New Species.* Artwork inspired by Natural Science Taxidermy Collections. Photo: Mette Gårdvik, 2017.

We planned a teaching program on marine litter in line with the Scandinavian model for ESD (Scheie & Korsager, 2017; Scheie & Stromholt, 2019; Sinnes, 2015, 2020). Dilemmas between the perspectives of social, environment and economy must be elucidated and competence for sustainable development, in both theory and practice, must be promoted among the participants. Teaching about such complex issues as marine litter must be interdisciplinary and requires competence and teachers from several subject areas. In our program, we emphasize competencies from Natural Science and Arts and Crafts. The project on marine litter was developed from Norwegian management documents for educational institutions and carried out at several Norwegian schools, kindergartens and in teacher education. We took the project with us to an island school in Alaska where we experienced both a geographical and a school cultural distance.

## Project Description

In the autumn of 2014, we started development on the project "Sea Monsters Conquer the Beaches. Community Art as an Educational Resource - A Marine Debris Project ". The project is described in more detail by the authors (Stoll et al., 2017; Sørmo et al., 2018) and analyzed in relation to the framework for planning teaching programs with a focus on sustainable development (Sinnes, 2015; Stoll et al., 2017). The University of the Arctic, Nordland County Municipality and Nord University have supported the project

**Figure 2.** Marine litter engages children of all ages. Photo: Mette Gårdvik, 2014.

development financially. With a focus on marine litter and micro-plastics, pupils work inquiry based and creatively, with the main goal of developing their action skills by:

Increasing knowledge about marine litter and increase community involvement in clearing local beaches.

- Giving participants ownership of the problem and motivation to make sustainable choices for the future in order to improve the situation.
- Initiating creativity and creative processes where the goal is to develop the ability to take steps and solve problems.
- Making the local community aware of the problem through public exhibitions and newspaper articles about the project.

In the teaching project (Figures 2, 3, 4), we emphasize practical and active ways of working where pupils are challenged to draw feelings, thoughts and experiences they have about the topic of marine litter. Pupils dramatize food chains with and without micro-plastics. In addition, they must work inquiry based in the laboratory by studying micro-plastics in cosmetics and toothpaste in the microscope, and by examining differences between natural and synthetic fibers in clothes.

As an important part of the teaching, we have also arranged for the pupils to go to their local beach to clean, research objects and build a sculpture of the rubbish as an Artist Statement (Eco Art). In this work, they must decide where the sculpture will

**Figures 3 & 4.** Practical and active ways of working. Photos: Mette Gårdvik, 2016, 2018.

stand, justify the choice and gain experience in working in three dimensions and create a sculptural form with the material they themselves have collected. The participants document the process and the finished work by taking pictures. Finally, the sculpture must be dismantled, the materials documented and sorted before the local waste company takes it away.

Dialogue, change of opinion and active work around the pupils' feelings about the topic are emphasized in all parts of the project, where we guide the pupils in exploratory conversations to initiate critical thinking and develop their understanding. Pupils get the opportunity to practice subject focused communication, argumentation, presentation and documentation. Respect for others' opinions and point of view and concept learning are also important elements.

## Research Question

This article focuses on pupils' practical skills and their visual expression and what this means for pupils' action competence in education for sustainable development. We also look at the different frameworks and traditions in the different schools and what significance this has for ESD. The experiences from the project implementation within two different school cultures can help us to shed light on the following issue: *In what way is facilitating practical and aesthetic work processes important for pupils to develop motivation to act in a sustainable way and develop faith in the future?*

## Theoretical Grounding

### The Scandinavian model for ESD

In the Scandinavian model for ESD, the theme of the teaching must be in the UN's sustainability goals (UN, 2015), and emphasizes that the issues are based on dilemmas that embrace both social, economic and environmental perspectives in Sustainable Development (SD) (Sinnes, 2015). The subjects included in the teaching must be made visible and this interdisciplinarity requires competence and thus teachers from different subjects. Cultural sustainability is not mentioned explicitly as a sustainability perspective, but is mainly included in the social perspective. However, cultural sustainability is recognized as an equal perspective, and deals with people's relationships with each other and their attitudes towards local communities and the environment

(Härkonen et al., 2018; Sazonova, 2014). Offering pupils nature, culture and local experiences and letting them experience the interaction between nature and people before and now, can help them enjoy nature and culture in their own local environment and appreciate being outdoors. The *place* helps to build the pupils' identity, and it can lead to the pupils feeling a stronger sense of belonging and motivation to take care of the place by giving ownership to the issues in their own local community (Figure 5) (Gabrielsen & Korsager, 2018; Sørmo et al., 2019). Leavy (2015) emphasizes that human experiences cannot be understood if they are separated from the environment in which they arise.

Traditionally, issues within SD were rooted in the curricula for social sciences and natural sciences. Now, however, we find in Scandinavian curricula competence goals that can be used in interdisciplinary teaching in most school subjects. It highlights six key competencies that are particularly important in ESD; critical thinking, creativity, communication and collaboration, system understanding, action competence and future thinking (Mogensen & Schnack, 2010; Sinnes, 2015; Scheie & Stromholt, 2019). Action competence, i.e. the pupils' ability to act for sustainable development, is the ultimate goal of ESD (Stevenson et al., 2013; UNESCO, 2015; Sinnes, 2015; 2020).

Creativity is mentioned as a key skill in ESD (Korsager & Scheie, 2014). Creativity is important when knowledge is to be transferred to other contexts and used in new ways,

which characterises the concept of in-depth learning (Sawyer, 2014; Sinnes & Straume, 2017). Creativity can be meant as a cognitive, an innovative and creative, or a physical skill, but the emphasis on the cognitive side of creativity seems to be most prominent in an in-depth learning perspective (Dahl & Østern, 2019).

ESD and in-depth learning are closely linked since both are about system understanding and the transfer of knowledge and skills to new situations. Both include creativity, problem solving, critical thinking and teamwork (Pellegrino & Hilton, 2012). The topics in ESD often challenge pupils emotionally. In-depth learning is also about having the body on the team, getting the body to produce the affects and emotions that motivate, inspire, desire and demand, in short, to make the pupil want to learn (Dahl & Østern, 2019).

## Arts and Crafts and ESD

Didactics in Arts and Crafts emphasizes the interaction between school and society, and between past, present and future (Nielsen, 2009). Solheim (2009) says that the subject is particularly well suited as a competence builder due to the subject's anchoring in specific working methods, flexible result orientation and the ability to give pupils an ownership of their own education. It is pointed out that the subject can create a good social environment characterized by security, well-being and mastery, which in turn lays the foundation for an increased level of function in the pupils and creates positive learning opportunities.

Mantere (1995) argues that the importance of art and environment-based education is that sensitivity to the environment can be developed through artistic activities. Innovative people, who have the ability to work interdisciplinary, prove to be adaptable and creative problem solvers, and it is important that pupils have the opportunity to practice these skills through education (Coutts, 2013; Eisner, 2002). According to Eisner (2002), children in the arts will learn that a problem can have more than one solution and that a question can have more than one answer.

Arts and Crafts are well suited for teaching in sustainable development in that aesthetic competence is a source of development on several levels, from personal growth, via influence on one's own local community, to creative innovation in a larger perspective (Gårdvik, 2011). Arts and Crafts can be a safe arena for pupils to critically explore and experience cultural and ecological problems that affect their own lives and futures (Milbrandt, 2002). Østergård (2013 p. 6) says about ESD:

Admittedly, basic science knowledge plays an important role here, but when the task is to facilitate that pupils can connect with the world, more than knowledge is needed. What we need is an education that meets the world, that facilitates rich, aesthetic experiences, and that enables and develops the diverse relationships we have with the world. To achieve this goal, both the science and the arts in the school, no matter how different they are, must go in the same direction.

## The Affective Aspect of ESD

ESD includes affective components and seeks to create attitudes such as beliefs about, visions of and motivation to act for a sustainable future. At the same time, the ESD theme contains problems that can arouse heavy emotions, which can be difficult for the pupils to cope with. How pupils master these challenges is dependent upon the teaching facilitating interaction, processing and communication of stressful events and negative emotions (Folkman, 2009). Ojala (2013) criticizes that ESD pays little attention to the emotional aspect and that this can hinder pupils' reflections on the topic and thus also their learning and action.

Verbal language is a poor medium for communicating emotional nuances, according to Bradshaw (2010). Visual expressions, such as drawings and sculptures, can provide insight into children's feelings and what they want to share with others about their thoughts of the world (Frisch, 2013; Van Manen, 1990; Hopperstad, 2005). Art opens up for unconscious emotions to be given a physical expression. Without appearing as a therapist, an Arts and Crafts teacher can give pupils the opportunity to express themselves artistically about their possible fears now and fears for the future, and at the same time process the emotions in a safe environment.

Mantere (1992, p. 23) says about children's drawings:

"It is a therapeutic act to receive these images with respect for the pupils' inner view of the world, but at the same time try to convey a positive attitude to life and give them hope for the future."

Drawing can simultaneously support children and young people's development of agility, originality and imaginative thinking, in addition to helping them to grow emotionally, to express themselves and to cope with new situations (Lowenfeld & Brittain, 1976).

## Art and action - Eco Art

Artists have throughout the ages worked with ecological and social themes, and have contributed to changing the values and attitudes of public consciousness (Brenson, 2001). Social Art Practice and Community Art are about empowering and liberating both individuals and communities to achieve personal, social, cultural or political change through art. The goal is to increase the quality of life (Permar, 2019; Hiltunen, 2008; Austin, 2008) and this is directly linked to the concept of "cultural sustainability", which is about increased social interaction and sense of community in the local community, through collaboration (Illeris, 2017; Jònsdottir, 2017).

Eco Art is defined under the general term Environmental Art, which is a collective term for art forms that are concerned with the environment (Thornes, 2008). Eco Art is expressed through socially engaged and often community based art, and is characterised by a focus on systems and contexts in the environment. It can be either ecological, geographical, political, biological and cultural or a mixture of these. The purpose of Eco Art is to arouse emotions and create awareness and commitment in the individual. At the same time, the goal is to stimulate dialogue between people to change our behavior by respecting life on the planet, which is important in ESD.

In a teaching perspective, Mantere (1995, p. 1) claims that: "Arts-Based Environmental Education puts the relationship between the individual and her environment at the centre of education". Pupils become more receptive to sensory impressions and observations through the use of artistic methods to express personal thoughts and experiences about nature. Local art, landscape art and community art are creative learning arenas that generate new understanding and insight.

## Method

In this comparative multi-case study (Creswell, 2007; Stake, 1995), we compare our experiences from teaching and carrying out the project. The study deals with three cases at two island schools in Northern Norway and one in Alaska. The schools are part of small island communities, where the resources from the sea are important prerequisites for settlement and industry. All the islands have beaches where the trash from the marine industry is clearly visible. The selected schools are multigrade and in this survey we focus on the intermediate level. The authors were with the pupils in the implementation of the entire project at all the sites. While we developed and carried out the project in Nor-

way and planned to carry it out in Alaska, the various regulations and school cultures meant that the project had to be scaled down in Alaska.

### Case 1; two Norwegian multigrade schools

We had 6 hours of continuous teaching with a total of 25 pupils (4–7th grade). The program was equally implemented at both schools. After the theoretical introduction, the pupils were allowed to draw their feelings, thoughts and ideas about marine litter and carry out inquiry based work in science by researching micro-plastics in cosmetics, examining what materials our clothes are made of and making a scrubbing cream using coffee grounds.

### Case 2; a multigrade school in Alaska

In Alaska, we met pupils in grades 4–7, a total of 28 pupils with 2.5 hours of instruction in each class, spread over two days. The theoretical introduction, drawing and exploratory work in science were as in the Norwegian schools. The security for the pupils was quite extensive, and a beach visit was not arranged. Therefore, it was not possible to take the pupils out to clear a beach and create an eco-art sculpture.

To accomplish in-depth understanding, we based the analysis on our observations, statements from pupils, and survey on the pupils visual artworks as individual drawings and eco art sculptures from the Norwegian Schools. The analysis of the empirical data is based on our three different understandings and interpretations. From discussions between us, we present the essence of our experiences from the project implementations.

### Ethical considerations and validity

One of the aims of the project was that pictures of the pupils' aesthetic expressions should be published in exhibitions/newspaper articles. Both student teachers and school leaders were informed of this and have given their consent to publication, also for the use of figure 2 with children. The study is limited in time, space and scope, and the results are therefore not universal. We can still argue that our findings should contribute to a greater focus on practical and aesthetic work processes in ESD.

## Results and Discussion

### Experiences from inquiry based and creative work tasks

We were aware that we would encounter a different teaching tradition in Alaska, but were surprised at how big the differences were. In Norway, teachers are more supervi-

sors and the distinction between teacher and pupil is relatively small where teachers in Alaska represent authority figures. We found the pupils in Alaska to be reluctant to start assignments and work independently. This may be because they were unfamiliar with working in this way and used to the teachers directly instructing. Another factor was that we were guests from abroad and the school and pupils perhaps behaved particularly polite, orderly and respectful.

In Norway, pupils had access to a separate science room, while in Alaska, only the oldest pupils had access. Therefore, we had to conduct the experiments in the school kitchen. All three schools had microscopes, but these were used to a small extent in teaching. The Norwegian pupils were more used to working independently in practical science activities. The pupils quickly started to choose what they wanted to investigate and do the experiments that were described in an experimental setup. We were able to guide them and correct when deviation from the experimental setup became too great. In Alaska, we had to instruct and show the pupils to a much greater extent what to do, guide them through each step of the experiment, and they were very careful about using the laboratory equipment. We had to reassure the pupils several times that what they were doing was right and encourage them to continue while we explained what to do next.

Both in Northern Norway and in Alaska, the majority of the pupils were eager and thought it was exciting to draw with pastel chalk. Many went into a deep concentration and attention was directed towards the drawing. The oldest pupils at the intermediate level had slightly greater challenges in figuring out what to draw than the youngest, both in Norway and in Alaska. The pupils from Alaska found it especially difficult to draw from the imagination. The drawing skills were also different. Where the pupils at the intermediate level in Norway could easily draw a fish, the children in Alaska had problems. One of the reasons may be that the pupils in Alaska do not get, as do the pupils in Northern Norway, "free" drawing assignments. The pupils in Alaska were also very concerned with keeping their desks and fingers clean and needed assurances that the colors could be washed away. They were unfamiliar with using pastel chalk whereas some of the Norwegian pupils experimented so excessively with the colors the drawings became cluttered and messy. Others had very clear ideas about what to draw and just needed easy access to many colors and the drawings were under way.

In Alaska, we noticed that the pupils' previous work exhibited in the classrooms consisted primarily of prefabricated teaching materials. Several of the other teachers also presented to the pupils similar materials they themselves had put a lot of time and energy into designing for use in teaching. We observed that the pupils liked these activities, but in rela-

tion to ESD didactics, such types of activities will do little to contribute to developing pupils' imagination and creativity when the practical aesthetic learning processes are controlled to such an extent. Innovative people, who have the ability to work interdisciplinary and independently with practical tasks, prove to be adaptable and creative problem solvers, and it is important that pupils have the opportunity to practice these skills through education (Coutts, 2013; Eisner, 2002). According to Eisner (2002), children in the arts will learn that a problem can have more than one solution and that a question can have more than one answer. Creative and inquiry based activities are bodily approaches to learning that motivate pupils to want to learn (Dahl & Østern, 2019), and this will promote the development of attitudes and actions for sustainable development in pupils. In the Scandinavian model for ESD, it is a key element that pupils themselves work exploringly and creatively.

### Content and expression in the children's drawings

In this context, we do not focus on children's drawings as a genre, but look at what the drawings tell us about pupil's feelings, experiences and understanding of marine litter. We see that the children in Northern Norway and Alaska have the same theme and that what was repeated was an expression of empathy with animals, system understanding, action competence and fear and dread. In ESD, the themes are often emotionally charged and difficult to deal with emotionally and drawing can help children express themselves and act as a possible outlet for and processing of heavy emotions (Van Manen, 1990; Mantere, 1992).

Many pupils have drawn "typical" landscape pictures with sky, sea and mountains (Figure 6), but most of the drawings contain animals that suffer due to marine litter (Figure 6, 7, 8, 9)

Pupils talked while drawing, compassion is strong and pupils say:

"It's a little sad that animals, that they eat [plastic]", "it's scary to think that it's an animal (…) that eats" and "it was a little disgusting", "it's awful!"

It is clear to us that pupils see connections and understand systems within the theme of marine litter.

A pupil says in the drawing session:

"They eat plastic because they do not know what it is, they think it is food. And then they end up, or the plastic makes it less and less space, then they die of hunger because they cannot eat anything."

And another pupil says:

"It is not fair that what humans do affects the animals."
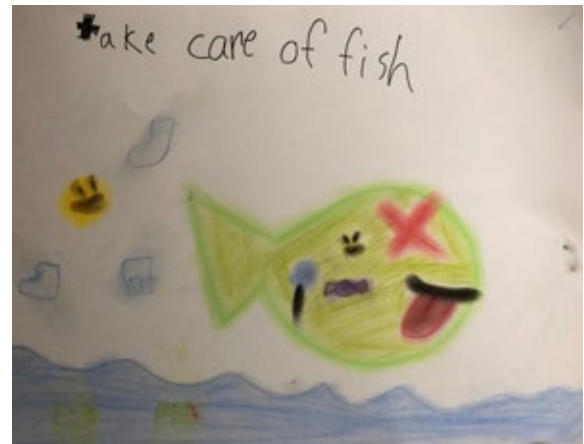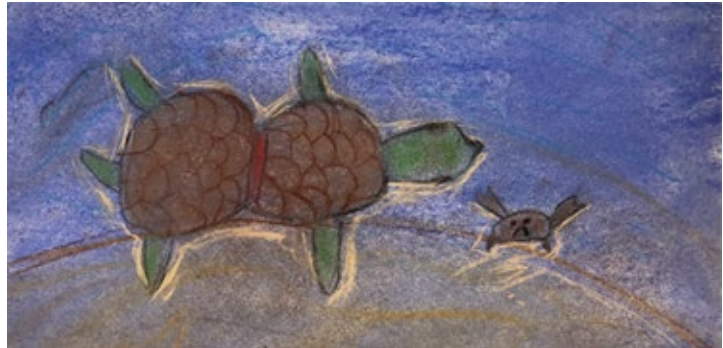
**Figures 6, 7, 8 & 9.** Empathy with animals. All photos: Mette Gårdvik, 2018–2019.

Figures (10, 11 and 12) describes human activity from boat freight and the fishing industry as the reason why animals are injured and die, or have rubbish from land-based activities and micro-plastics as a theme.

Some drawings thematize that people can improve the garbage problem by taking active action (Figures 13, 14). In figure 14, a pupil's value perspective is clarified with four very small people working in teams to pick the beach clean of garbage among three giant dead fish. The three large fish with crosses in their eyes represent hopelessness, where marine litter seems infinitely large in relation to what we humans can do. The image evokes strong emotions in us. In other drawings (Figures 15, 16, 17, 18) we see depravity with details and symbols we associate with fear and death. The feelings are strongly visible and show more hopelessness than faith in the future.
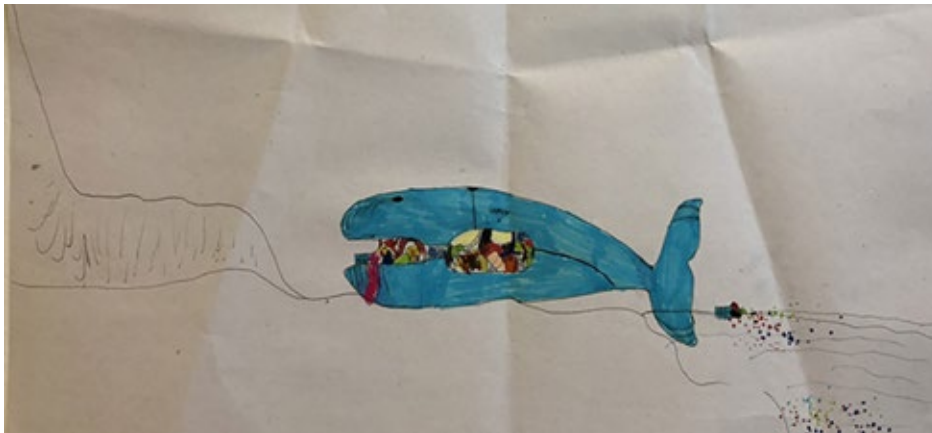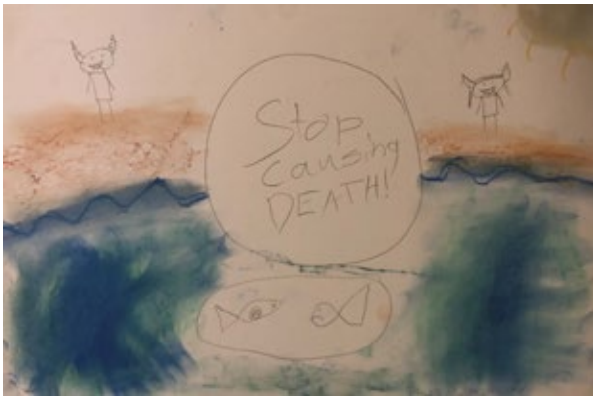
**Figures 10, 11 & 12.**
Children understanding
systems. All photos:
Mette Gårdvik, 2018–2019.

**Figure 13.** People picking
up trash to improve the
difficult situation. Photo:
Mette Gårdvik, 2018.

**Figure 14.** Feeling small
compared to the big
environmental challenge.
Photo: Mette Gårdvik,
2018.

**Figures 15, 16, 17 & 18.**
Death and disaster.
All photos: Mette
Gårdvik, 2018–2019.

Even though we observed a certain degree of imitation (Frisch, 2013), the drawings still had characteristics of the individual pupil's world of life. This is in line with Hopperstad (2005) and Van Manen (1990), who claim that drawing says something about the experiences pupils have as active, living and sensory individual, which represents the world of pupils and what they want to share with others.

A pupil talks about his experiences with plastic in the sea with his grandfather:

My family was going to drive out with a big boat like that, and my grandfather is very focused on litter. And then while we were driving he saw a plastic bag out in the water and then he grabbed the handle on the side of the boat and leaned down to get hold of (the bag).

Verbal language is a poor medium for communicating emotional nuances according to Bradshaw (2010). It is important that the teacher opens up for visual expressions and oral statements to be treated respectfully in the classroom, and at the same time try to convey hopes for the future. In this way, the teacher can help pupils to express themselves and cope with the difficult emotions (Lowenfeld & Brittain, 1976; Mantere, 1992). In an ESD perspective, this is a central task and crucial for pupils' reflections on the topic and thus also their learning (Folkman, 2009; Ojala, 2013). In the comparison of the different cases, we experience the importance of the children in the teaching project being given the opportunity to express themselves visually. Practical aesthetic work processes are thus central to ESD so that pupils can express and process emotions, and develop hopes for the future.

## Garbage Collection and Sculpture Building

The Norwegian pupils got to work on their local beach and it was clear that they were used to learning in the outside classroom. We experienced that they appreciated being outdoors and showed great commitment in the work of looking for rubbish. Through the work of garbage collection and sculpture building, these pupils gained ownership of the place and developed a strong relationship and a great responsibility to take care of it.

A pupil said after the project:

.. this summer [..] I remember several times when we went swimming with friends and friends who start throwing rubbish in the sea. Then we said, "No, you have to jump into the sea and pick it up again because there shouldn't be cans and paper out in the sea, it's not good".

Experiences in nature are important for pupils to want to take care of the environment (Gabrielsen & Korsager, 2018; Sørmo et al., 2019). In ESD, issues based on pupils' immediate environment are essential to make the teaching engaging, relevant and rooted in their world of life, and at the same time provide the experiences that include affective aspects (Sinnes, 2015; Gårdvik et al., 2013; Stoll et al., 2015). It is clear that the experience of picking up rubbish on the beach was crucial for them to be able to understand the extent of the problem.

A pupil says:

"There was a lot more rubbish than I thought, there was a lot we found that you did not expect to find on the shore."

Another pupil shared his feelings:

"I think if we do something about it out there, we know how it feels."

**Figure 19.** Garbage sculpture made of Norwegian pupils. Photo: Mette Gårdvik, 2018.

Development of identity and involvement in issues related to one's own local environment is also important in relation to the cultural sustainability perspective (Sazonova, 2014; Leavy, 2015; Härkonen et al., 2018). On the Norwegian beaches, the rubbish consisted of various materials, mostly plastic, but also wood and metal. Pupils eagerly talked about where the waste could come from, and were motivated to explore this further in the project's follow-up.

The approach to sculpture building was relatively free, with the Arts and Crafts teacher guiding the process. The pupil groups were aware that the sculpture should have a built-in message that was to be communicated to society and expressed their feelings through it. A pupil says: "The sculpture made a great impression on me and symbolized, "Don't litter!".

Pupils chose to send a message to the outside world about compassion and symbolism related to death and danger. A group of pupils found a dead seagull while cleaning the beach, and this bird was placed as a crown on top of their rubbish sculpture (Figure 19). One pupil thought that this was "ingenious" as a description of how dangerous marine litter is, and "symbolizes the death that all the rubbish brings with it".

In the same way as with drawing, we see that the affective appears in pupils' sculptures. Here, creativity is embodied and the creative way of expression seems to motivate and engage pupils to develop good attitudes and to act for sustainable development. In this way, Arts and Crafts contributes centrally to ESD didactics and this challenges the more cognitive definition of the concept of creativity (Korsager & Scheie, 2014). This is in line with Dahl & Østern, (2019), Sinnes & Straume (2017) and Damasio (2000) in relation to their views on in-depth learning which includes the affective and bodily, sensory, relational and creative part of learning in depth.

Many also see opportunities to directly influence their surroundings in a positive way:

> Yes, it has changed me… (I) have realized how much (garbage) there actually was, and that it (beach cleaning) is important because of society, the environment and the future. Now I throw away plastic I see on the ground and things lying outside.

Exhibitions and media reports from pupil's work in the project provide attention and lead in a cultural sustainability perspective to a strengthened relationship with the local environment (Härkonen et al., 2018; Sazonova, 2014).

In Alaska, it was not arranged for us to bring pupils out to clear a beach. However, at the school's Open Day their drawings of marine litter were exhibited.

Activities that motivate pupils to campaign for sustainable development are an important part of the Scandinavian ESD model. It is not enough to just become aware of a challenge, pupils must also be able to act actively for sustainable development (Sinnes, 2020). In Alaska, we could not contribute to pupils' experience and understanding of creating ownership and responsibility for their own environment related to marine litter in the same way as in Norway.

It is obvious that the development of action skills for sustainable development can not only take place in the classroom. In order to give the pupils a sense of responsibility and ownership for their local beaches, the schools should facilitate active and physical learning environments. Teaching should aim to be realistic and relevant for pupils.

## Conclusion

We are aware that both Northern Norwegian schools and the school in Alaska represent different teaching traditions that we can most likely experience in all places, both in Norway and in the USA. However, our experiences with the various ways of facilitating practical and exploratory work in teaching are well suited to shed light on important aspects of ESD.

We experienced that pupils in Alaska and Northern Norway reacted differently to our hands-on teaching. The differences were mostly related to the pupils' practical skills and in their need for teacher instruction. We observed differences in both the class room culture and the pupils' habits in being physically active in learning situations. Place-based environmental education that demands the use of the outdoors and physical activity were faced with different traditions. Also, the pupils' use of imagination and practical-aesthetical skills, as well as the use of prefabricated materials in teaching, differed.

These differences may have consequences for the pupils' possibilities to touch and feel the world realistically in a school setting. Combining theoretical science knowledge, which is crucial for their understanding of the problem with marine debris, together with practical-aesthetical knowledge gives the pupils a holistic approach to the challenges of marine debris. In order to give the pupils a sense of responsibility and ownership for their local beaches, the schools should facilitate active and physical learning environments. Teaching should aim to be realistic and relevant for pupils. In ESD, real life experiences are prerequisites for being able to, and also wanting to act for a more sustainable future.

Translation: Gary Hoffman, Nord University, Nesna.

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# Living in the Landscape in the Time of COVID-19

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In recent years, the University of the Arctic's Thematic Network, *Arctic Sustainable Art and Design* (ASAD), has conducted several educational projects, courses and workshops highlighting the social and culture-sensitive active principles of place-based art and design education (Härkönen, 2021; Hiltunen & Zemtsova, 2015). The *Living in the Landscape* (LiLa) project is one of its latest educational initiatives, where universities from Finland, Norway, Sweden and Russia have collaborated (Härkönen & Stöckell, 2019; Jokela, et al., 2018). In this chapter, we discuss the challenges and opportunities of the LiLa collaboration in the time of the COVID-19 pandemic.

The LiLa summer school series was developed using art-based action research methodologies (Jokela, 2019; Jokela et al., 2019) to promote culture-sensitive and sustainable art-based learning on the socio-cultural landscapes of the European Arctic region and to bring together MA and PhD students, researchers and scholars from different disciplines. The development of multidisciplinary educational and scientific collaboration through the LiLa project was designed to meet the emerging challenges related to the environment, population and economic life in the region caused by climate change and globalisation. The project aimed to find culturally and socially sustainable solutions via scientific and practical interventions of the project to meet the needs for education targeting sustainable development in the North and thus benefit the inhabitants, communities and other stakeholders. The practice we developed aims to focus investigations on both traditional forms and phenomena of culture and their current practices and challenges as well as to reflect how their encounters and dialogue could be presented through art.

When discussing the challenges of the North and the Arctic, distance has always been one of the most prominent issues. In our view, distance refers not only to the geographical distance between nations or, for instance, universities operating in the area but also cultural distance, including that between indigenous and non-indigenous ways of living, which is very often seen as the distance between traditions of the past and

innovations of modern times. In the LiLa project, distances have also been observed between different disciplines: natural sciences, humanities, education and the arts. All LiLa partners understand that in higher education, more extensive collaboration across disciplines is required. We contend that only an active, multidisciplinary approach can identify the relationships between northern phenomena and their adaptability in a complex system wherein different elements are interdependent.

Through merging the research and education of art and other academic disciplines LiLa aims to offer students more versatile and practical studies, allowing them to better develop their own expertise in authentic and multidisciplinary learning situations. A practical higher educational aim of LiLa is to develop art-based pedagogical methods for joint fieldwork studies, which help participants to better understand the eco-cultures of Northwest Russia and the north of Nordic countries and find ways to support sustainability in these regions. This is not expected to only benefit students but also strengthen the expertise of the teaching staff.

From a wider perspective of the Arctic and northern societies, the aim of LiLa is to promote art-based, place-specific and participatory activities that elevate rural or semi-urban places and locations in Russia and the Nordic countries.

## Rationale and Theoretical Concepts

In several disciplines, scholars have pointed out how the northern environment is rapidly changing and cumulatively impacting nature, the economy, social life, wellbeing and the culture of the people living in the region (Nordic Council of Ministers, 2011). Several scholars have suggested that higher education should increase investments in creative and circumpolar cooperation, as challenges are common throughout the Arctic. To ensure more uniform and beneficial development of the whole region, extending accessibility for good practices is seen as essential (Karlsdóttir & Junsberg, 2015; Petrov, 2014; 2016; 2017).

The focus on the development of LiLa is related to the ASAD network's agenda on reviewing the environment and community from the participatory perspective. It stresses grassroots human agency in exploring how traditional knowledge of communities' eco-cultures, such as indigenous knowledge (Valkonen & Valkonen, 2018; Virtanen & Seurujärvi-Kari, 2019) natural and cultural heritage of landscapes (Fairclough, 2009; Fairclough et al., 2014; Ingold, 1993; Smith, 2006), can provide better and more sustainable ways to contribute to the development of rural and semi-rural areas in the North (Vodden et al., 2015). In the Arctic, the interconnection of the ecological and the cultural

aspects is intense, and this nexus can be described as 'eco-cultures'. This concept highlights the specificities of neighbouring communities and places – for example, a village includes its location and residents. During ASAD activities, the concept of *northern knowledge* is now used to describe the tactile, situated understanding and knowledge communicated in material cultures and visual symbols (Huhmarniemi & Jokela, 2020a, 2020b; Jokela et al., 2021). The northern knowledge system differs from indigenous knowledge because situated knowledge, integrated with the eco-culture and living traditions, is formed and carried by non-indigenous residents in the Arctic as well. Northern knowledge incorporates cultural heritage and the tacit comprehension of material culture and it can be shared not only with the new generation but also with newcomers as situated learning.

To increase the impact of multidisciplinary education collaboration, the northern and Arctic environments in LiLa are approached not only as scientific and geographical concepts but also as spaces and places for symbolic community created through art (Hiltunen, 2010). Thus, the central themes of the LiLa project, besides environmental questions, are the expressions of the northern environmental and material culture, such as art, handicrafts, narratives and living in nature (Härkönen et al., 2018).

The pedagogical basis of higher education is place-specificity (Härkönen, 2021; Jokela & Hiltunen, 2014), situationality (Granö, el al., 2018) and cultural sensitivity (Manifold et al., 2016), where learning is seen to take place via social interaction (Tynjälä, 2016). One of the main principles of the Lila summer school was to test and promote culturally sustainable practices, where the place, its features and inhabitants were actively engaged in the processes. The contextual circumstance of LiLa also brought to light the interdisciplinary matters in education. It offered possibilities for students to discover through different collaborative tasks how to weave together the different ways of knowing and create new thinking (Hollmén, 2015). LiLa's pedagogy emphasises art-based approaches to multidisciplinary education. It is based on the ability of contemporary art to offer alternative ways of knowing and expressing knowledge but also considers art's role in ecology (Demos, 2016) and how all the disciplines can contribute to sustainable development in their specific ways.

## Art-based Action Research as a Methodological Approach

Methodologically, LiLa as a development project can be considered as a case of art-based action research (ABAR) (Jokela, 2019). ABAR shares some common features with

international arts-based research, artistic research and action research. In all of these research approaches, practical and theoretical forms of research are simultaneously conducted. Through utilizing ABAR, this was a central form in the way the study was constructed.

More as a research strategy than a complete method, ABAR has been developed at the University of Lapland to combine artistic practices with regional development and community empowerment (Jokela, 2019; Jokela & Huhmarniemi, 2018; Jokela et al., 2015) in formal and informal education (Hiltunen, 2010) and in higher education (Härkönen, 2021). Research topics are situated in the middle ground between art and other academic fields, such as the social sciences, education studies and regional development.

The ABAR methodology has widely been in use within the ASAD network. Since 2012, when the ASAD network was established (as part of the University of the Arctic organisation), Arctic educational institutions in the fields of art and design have collaborated to foster cultural life in the Arctic and to strengthen vitality and regional development through art, design and culture (Jokela & Coutts, 2018). ABAR and place-based art implemented in the ASAD collaborations have been promoted as a way to integrate artistic work, education, research and regional development. Building on the existing eco-cultures in the Arctic towns and villages, on the skills and strengths of locals as well as on contemporary art and international collaboration, this research approach seeks to represent an alternative to conventional top-down and nationally coordinated development projects.

As a potential 'innovation' of the school, we have used the ABAR methodology to create ways to merge art and design education, natural sciences, humanities and social sciences to develop new pedagogical methods of fieldwork for education targeting sustainability in the Arctic.

LiLa requires a reflective art-based approach to perception, knowledge building and representation. Using cyclical, reflective and iterative ABAR methodologies, we aim to develop professional methods and working approaches of the artist–teacher–researcher in art education at university level. An important aspect of ABAR is that it accepts cultural expressions that configure, communicate and express human relations to nature non-verbally through art or handicraft, verbally through oral narratives, literature, letters and blogs, or multimodally through music and performances. This study uses the reflective research data collected during the second LiLa School 2021; the data include discussions documented during the practices, planning and process descriptions of the
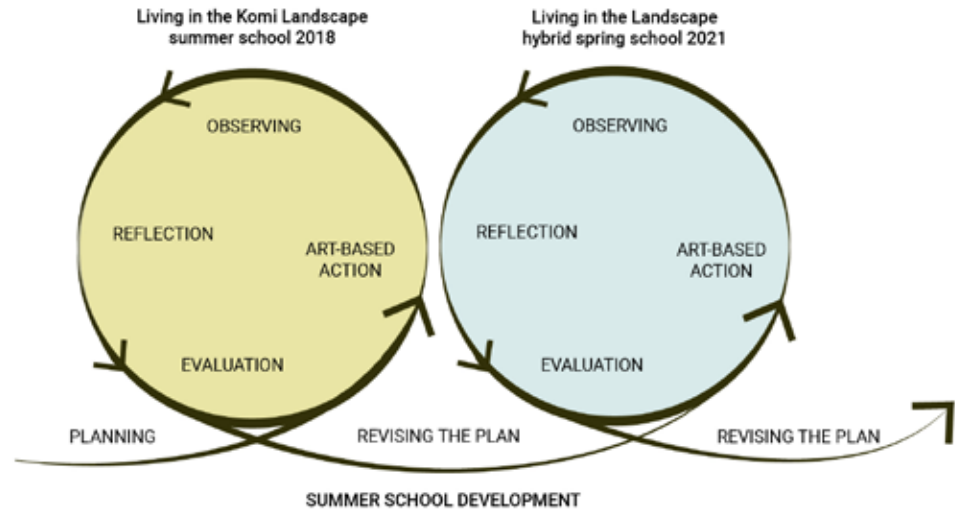
artworks and other activities and stored on a digital platform, tutors' planning discussions, final digital exhibition and participants' visual essays, written by the school participants for the exhibition catalogue, to open the processes of their artworks (Härkönen et al., 2021).

Next, we present LiLa's two annual development cycles (see figure 1) as an ABAR project: the first school as the first cycle is based on place-specific collaboration and pedagogy, and the second school as the second cycle is based on a digital and hybrid model considering the new challenges caused by the COVID-19 pandemic.

## The First Cycle: Living in the Komi Villages

The first LiLa international Summer School took place in the Komi Republic of Russia in 2018. This interdisciplinary school was organised as the ASAD network's collaboration, and the participants included master and doctoral students from the University of Lapland (art education and AAD), the Syktyvkar State University (Fine Arts and Natural Sciences), Arctic University of Norway (Cultural Anthropology) and the Uppsala University (Social and Cultural Anthropology).

The Russian partners organised various activities to meet the aim of the school to investigate the Komi cultural landscape in situ. These included a lecture phase and ac-

**LIVING IN THE LANDSCAPE 2018**
**PLACE-BASED SUMMER SCHOOL PHASES**



Planning meeting → 1. Pre-readings → 2. Lecture phase → 3. Field work in Komi villages → 4. Exhibitions in the National Library of the Komi Republic and in the Syktyvkar State Universtiy → Evaluation and analyzing collected data

**Figure 2.** Six phases of place-based LiLa Summer School 2018. Figure: Mari Parpala, 2021.

tivities in the city of Syktyvkar and a fieldwork phase in the villages of the Komi Republic. The aim was to conduct place-specific interdisciplinary research through different methods and produce artistic outcomes of the process for the final exhibition at the end of school. Besides offering the students authentic learning environments and opportunities to build international networks, the emphasis was on interdisciplinary learning and ways of integrating different research orientations in landscape research. Moreover, the emphasis on producing art-based research outcomes through interdisciplinary work was seen to broaden the perceptions on knowledge production and on presenting research results. This became evident through the evaluation of the themes, discussions and reflections presented in the final art-based productions.

The lecture phase introduced landscape research from different fields by the respective scholars to initiate the plans for data collection in the villages of Komi. The fieldwork phase introduced the Komi traditions and culture through different master classes and meetings with people from the local village communities. Every activity ensured cultural sensitivity and cultural sustainability while working with the locals. The place-specific research practices ranged from interviews with local people to artistic interventions and natural science experimentations were reflected throughout the school. The different perceptions of the Komi sociocultural landscape were artistically processed in teams and individually during the school and the following summer break. The outcomes were displayed at the exhibition at the Syktykar University gallery and the Komi national library.

The exhibition also operated as a dialogical space, where the exchange and sharing of the knowledge and expertise gained could be negotiated. This, for example, raised the visibility of art and art education as an essential actor in education for sustainable development in the Arctic. For the wider audience, the exhibition offered a better understanding of how the creative work of artists, teachers and researchers can contribute to northern social–cultural and economic settings as well as to international cooperation.

**Figure 3.** An important part the summer school was gathering around the table to discuss of the activities of the day. Photo: Antti Stöckell, 2018.

**Figure 4.** Besides the school participants, local people gathered to view the exhibition and discuss the representations of the Komi sociocultural landscapes. Photo: Antti Stöckell, 2018.

The results of the LiLa activities in Komi were evaluated through research articles (Härkönen & Stöckell, 2019; Jokela, 2019). The best experiences of the international, multidisciplinary, place-specific and art-based pedagogical practices were collated and developed for the following LiLa Summer School which was to be held in Helgeland, Traena Island, in coastal Nord Norway in 2020.

## The Second Cycle: New Challenges due to COVID-19

In 2020, LiLa faced a novel situation when COVID-19 prevented any use of the developed place- and community-based fieldwork pedagogy central for the aims of the summer school. The first measure to safeguard these aims was to postpone the school to 2021. It became apparent rather quickly that the situation would not change and that the school would have to be organised online if we wished to organise it at all. This put the aims of the school into scrutiny; in particular, the community aspect had to be reconsidered. There were many worries related to the new situation, like one of the coordinators expressed: 'Even with distances you are able to teach and convey knowledge, but the embodied learning and trading situation where also the senses are highly important will be missing'.

Eventually, the second school took place in spring 2021. This time it was organised by three ASAD partners: the Nord University of Norway, the University of Lapland and the Pitirim Sorokin Syktyvkar State University of Komi Republic of Russia. The students and researchers came from the fields of art education, teacher education including natural sciences, art and craft, music education and fine art and design.

Instead of organising an intensive, two-week school similar to that in Komi, the seminars took place once a month via Zoom. The communality and physical meetings were organised mainly for the country teams but the activities aimed to engage everyone from different countries. More effort was required to establish communality and the sharing



**Figure 5.** Seven phases of hybrid model LiLa Summer School 2021, Figure: Mari Parpala, 2021.

of experiences between the participants online. Worries lurked in the organisers' minds: 'How would the landscape investigation and sharing of experiences take place meaningfully in online settings'? The idea of spending time in the physical landscapes was a main one that was not to be abandoned.



**Figure 6.** The students from Komi connected the bird-related activity to the process of making organic paper; I started sewing the birds that I spotted, and the Norwegian team sent heartfelt greetings from the coast, where the birds seemed much more exotic than inland birds. Photo: Victoriya Lihacheva (left) & Elina Härkönen (middle/right), 2021.

## Reducing the Distances using *Padlet*, Small Online Exercises and Teatime Meetings

The school started in January with pre-readings, and everyone familiarised themselves with anthropologist Tim Ingold's article *The Temporality of Landscape* (1993). His writings on dwelling in a landscape significantly defined the practices during the school. He called the everyday chores related to landscapes *the taskscapes*, and these themes were reflected in almost every assignment, workshop and final art-based production of the school.

The lecture phase centred on getting familiar with the concepts of landscape research and preparing online presentations of the socio-cultural elements of the three locations. The atmosphere was distant at first, and it was easier to concentrate on online presentations and lectures. Small environmental exercises started to break the ice and bond at least the groups in each country.

Small side-tasks were included when the workshop week in March was approaching. The team from Komi launched a postal exchange related to birds living in each country. This was a timely task during the season when birds started to arrive for summer at each location. It allowed the participants to observe not only nature awakening in their neighbourhoods but also the similarities and differences in nature at these locations. Receiving something tactile via land mail from each place when the birds had started to arrive was enchanting. It made the other participants seem more real.

The sociocultural landscapes started to appear during the workshop week. Each day, one team had a workshop related to the seasonal traditions or a story related to the landscape. In addition, ideas for the art-based productions as the final tasks of the school started to take shape with the revealing and sharing of the sociocultural elements in the participants' sometimes commonplace landscapes. These workshops appeared to the authors to engage the participants even more. The following visuals (Figure 7) show glimpses of the tasks:

These meetings, posts on *Padlet* and ongoing communication with all the participants individually led to bonding in the group. The gradual bonding between the participants stirred desires to travel to each other's location after the pandemic.

The school became a part of spring 2021, and the meetings were much anticipated by the participants. After all, the new situation showed that distances can open new dimensions that push us to work, collaborate and participate differently. Efforts were put into the final productions, and the results were presented in a virtual exhibition. The exhibition was held as part of the University of Arctic Congress in Reykjavik, Iceland, in May 2021. Owing to its virtual form, the exhibition could not be physically presented to the local audiences; nevertheless, it reached a wide audience. The exhibition was directly presented to those who discuss the future of the Arctic region and the importance of education and research in it. The possibilities of art education to develop virtual university teaching came to the fore. We hope the exhibition also grabbed the attention of political decision-makers in the region, as the UArctic Congress was part of a larger collaboration. In 2021, Iceland held the chairmanship of the Arctic Council.

## Art Works Engaging over Distances

The LiLa school ended with a digital exhibition to which each participant, both tutors and students, made their own art-based contribution. The diverse exhibition built on the *StoryMap* platform and opened at UArctic Congress 2021 in Reykjavik was impres-

**Figure 7.** The Komi team walked us through their traditional spring celebration.
Photos: Screenschots from the Zoom meeting.

**Figure 8.** Dumpling-making was introduced as part of Komi everyday life; we made
dumplings together during a Zoom meeting. Images: Screenshots from the Zoom meeting.

LiLa 2021  + 14  ● 21d

# LiLa 2021 Project Map

Make a padlet of your own LiLa-project and link to this map on your location. On your own Padlet-page you can post pictures and notes on your own project and eventually place the narrative there too. The instructions for creating the padlet page and writing the narrative are pinned on this map in the Arctic Sea .

sive and featured a variety of implementations and content choices (see, for example, the exhibition catalogue, Härkönen et al., 2021). Tim Ingold's (1993) *taskscape* guided the selection of content related to people's relationship with everyday landscapes. Some of the works were realised in the countryside, almost in the wilderness. Central to these works was winter, with different uses of snow and ice. Some *taskscapes* were found in urban environments – from a built environment to grocery stores and imported fruits. One of the key themes was related to post-humanism and the mission to see and understand the landscape through non-human experiences. The landscape was viewed through a Lappish dog's movements using a *GoPro* camera, and eider duck's nesting was secured by making wooden eggs and placing them to mislead predators such as foxes and minks.

All of these different perspectives to the landscape relationship could be the subject of deeper analyses and their productions could be examples of how geographical, cultural and communication 'distances' were bridged. In this article, we take a closer look at two art works that significantly reduced the cross-distant nature of the LiLa school and

**Figure 9.** The Finnish students uploaded a project map on *Padlet* to collect each participant's final productions and processes at the same place. As the pins on the map show, the school undertook a large number of different projects related to *taskscapes* and dwellings in the landscape. The students will use the platform as data for their master's theses. Map: Google Maps ™ mapping service, 2021.

show how LiLa's place-based and participatory methods were transformed into digital activities during the COVID-19 pandemic.

Mette Gårdvik's final production addressed the tradition of Fisherman's mittens in coastal Norway. She engaged participants to knit a pair of mittens by giving instructions and organising voluntary knitting nights via *Zoom*. These meetings created space for not only sharing memories related to knitting traditions in each country but also exchanging life experiences and getting to know each other better on a personal level.

The mittens that were completed during the spring were sent to Mette, and she collated them together into an installation and presented them in video format. Maikki Salmivaara, one of the participating students, reflects on the experiences of Gårdvik's project:

> It combines the beauty, the tradition and the contemporary of the Arctic together. We carry them in our hands, affecting our doing in the wintertime which, as you tell us, has been taken into account in making the appropriate mittens for the fishermen. This tactile aspect bridges the virtual distance and makes it possible to transmit and share sensory feelings (Härkönen et al., 2021).

The other project that actively sought to bridge the distances was the collaboration between Lidia Kostareva, Elina Härkönen and Lotta Lundstedt, who continued their artistic collaboration through their shared interest in natural dyes. They experienced each other's dyeing locations via *Zoom* and shared their usual processes over these virtual meetings. Their previous collaboration using *Zoom* meetings had focused on the material sharing

**Figure 12.** A screenshot of one of the knitting meetings organised by Mette Gårdvik, 2021.

**Figure 13.** A selection of mittens knitted during the LiLa School 2021. Photo: Mette Gårdvik, 2021.
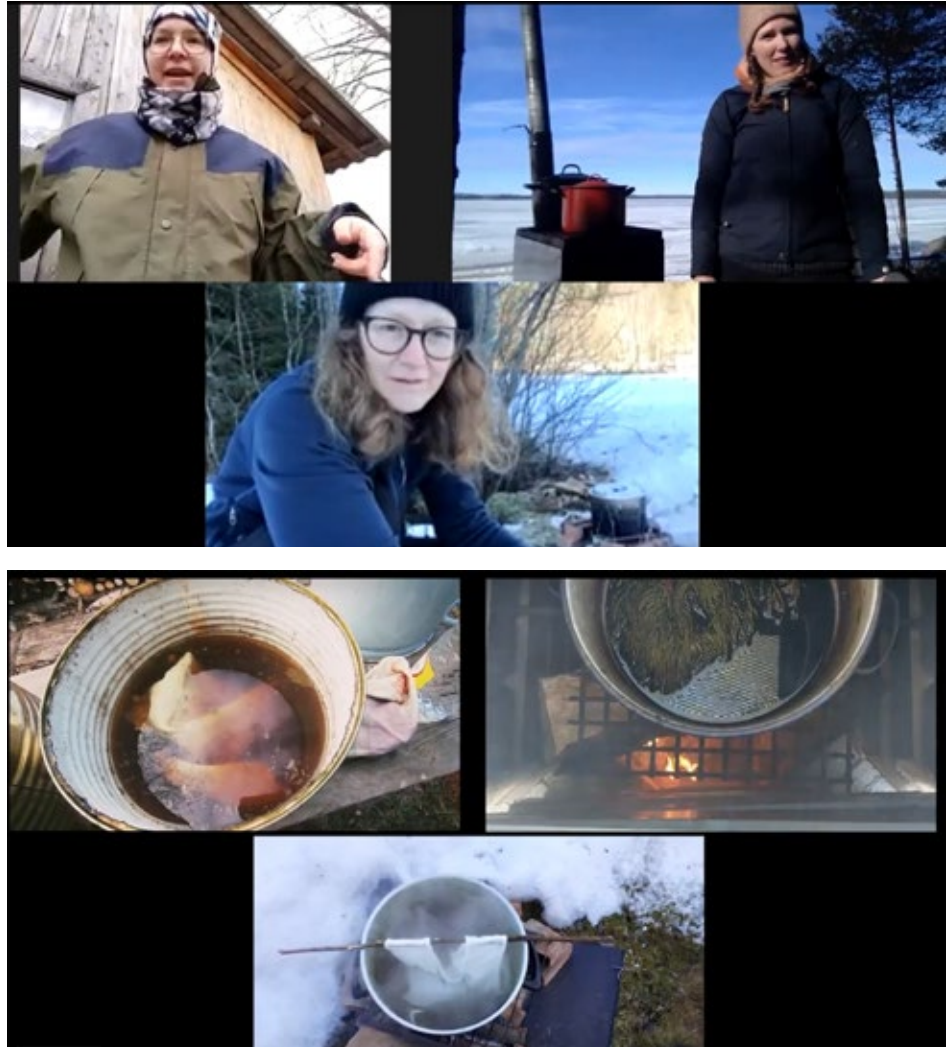
**Figure 14.** Screenshot of the *Zoom* meeting from the three dyers' locations, 2021.

**Figure 15.** The processes were filmed and collaged together into a video narrative showing the natural dyes in three landscapes. Screenshots of the video process by Lundstedt, Härkönen, and Kostareva, 2021.

**Figure 16.** Lidia's location for natural dyes in Komi. The other locations were in the Finnish Lapland and in Mid Sweden. Photo: Lidia Kostareva, 2021.

of natural dyes and resulted in a quilt. The second collaboration aimed to see how the materials are actualised in each of the dyers' landscapes in Russia, Finland and Sweden.

Lidia (Härkönen et al., 2021) described the process:

> We spent two days off getting to know each other's dyeing process and land-scapes. The weather, internet connection and time made the process more diffi-cult. Spring in Komi met the end of winter in Finland and Sweden. We shared a piece of everyday life, our rhythm of life and favourite places.

As a result, we got a video where three places and three processes are combined to-gether. For the participants, the very process of communication and creation of creative work became a more valuable experience than the result itself. Projects like this can be expanded to bring together creative people, dyers and beyond, all over the world'.

## Results and Discussion

Reflecting on the LiLa experience, a few remarks related to bridging the distances can be made: first related to geographical and cultural distances, second to the distances be-tween art, science and different disciplines, and third related to how digital collaboration when bridging distances challenges us to think about looking at the concept and essence of a work of art in a new way.

When it became apparent that LiLa could not be implemented in a place-based manner as it was initially developed, the main disappointment was related to not being able to share the landscapes physically or dwell collaboratively in any of the locations together. However, when the planning for hybrid realisation began, new possibilities emerged. One of the tutors reflected: 'I would say the opportunities where in broadening the perception of landscape into every participant's own locations. It was not only the landscape where we would visit but actually an equal opportunity to present each and everyone's attachments to certain places. In this way, LiLa was connected to different eco-cultures in Norway, Russia and Finland and formed a dialogical space for learning with different existences of northern knowledge systems and developing ways for shar-ing the new understanding in art-based ways.

In the LiLa project, we also designed, tested and reflected on art-based dialogical and pedagogical ways to connect different disciplines, which are often perceived as fragmented knowledge. This was done through art-based expression, culture-sensitive awareness and understanding of the northern landscape. Bridging distances through

interdisciplinary work was manifested in two levels. First, the activities combined the methods of art and different disciplines to study the landscape. Second, the focus was on integrating the pedagogy of visual art, craft, music and science education. The participants from natural sciences, for instance, described the impacts when nature is viewed through cultural and art-based aspects. Karin Stoll (Härkönen et al. 2021, p. 54) reflected in her final production how she became aware of the similarities in the taskscapes and the traditions of making homemade shoes in Northern Norway, where she lives, and Southern Germany, where she is originally from. She says: 'Bavarian grass shoe making in Northern Norway is like walking between cultures and being deeply connected to both of my landscapes'.

In LiLa's artworks and art-based realisation as a whole, appeared as collective symbolic and material interaction between human beings and their environment. This intentionally moved away from the traditional way of seeing artistic dimensions only as human interaction between individual artist and perception of art's universality appearing and understood only in human encounters. Tim Ingold's anthropological and phenomenological way of looking at the landscape seems to be a great opening and an inspiration for LiLa's multi-disciplinary and art-based activities. Ingold (2000, p. 155) explored the human as an organism that 'feels' its way through the world that is itself in motion. Thus, Ingold's landscape is an ever-changing 'relationship'. The relationship and the motion are present in all LiLa's art works, including those with post-humanistic aims towards learning and researching with others than human: with snow, forests, dogs and eiders (Ulmer, 2017).

Perhaps the most significant difference between the art works of participants from art education and those from natural sciences was not based on how the art-based process is realised but on how it is presented as art. For natural scientists, the visual essays that were produced alongside the artworks represented an appropriate way for art-based expression. Those from visual arts and music mainly relied on digital video and sound and on editing even when the art works seemed to belong to the category of land art or environmental art. The change in the art forms resonates with the change in the concept of landscape. In his article *The Temporality of the Landscape*, Ingold (1993) noted than in Western art, landscape is traditionally understood as a wide panorama and as an image of pristine, static and epic nature. Ingold denied the separation of humans from the landscape. His concept underscores the impossibility of the perception of the landscape from a distance and emphasises the role of various senses in shaping our understanding of the landscape. We see this in parallel with the current post-humanism trends in nature and landscape focus on contemporary art (Demos, 2016). According to the definitions

of contemporary and sustainable Arctic art (Jokela et al., 2021), the Arctic landscape is still essential, but now it is observed in videos and photographs, offers material for installations and environmental art and takes place in performances. Many contemporary artists from the North and the Arctic transform their northern knowledge and traditions related to landscapes with the help of digital technologies and showcase their work in international art exhibitions. Thus, COVID-19 has guided us in updating the activities and working methods of contemporary art education.

Besides art education, LiLa's hybrid model had an economic dimension. Traveling in the North is difficult and expensive, as the traffic routes in each country are mainly built on a south–north axis, towards the capitals. Transverse travel in the east–west direction is expensive. In this sense, LiLa's hybrid model provided a good starting point for developing ASAD network cooperation and bridging geographical distances in more economical ways.

## Conclusion

LiLa is a valuable example of the ASAD network's activities and demonstrates how the network can identify and share contemporary and innovative practices in teaching, learning, research and knowledge exchange in the fields of arts, design and visual culture education, even in difficult situations such as those caused by COVID-19. The members of the network are art and design institutions and art education universities across the circumpolar area; therefore, the experiences gained through LiLa can provide opportunities to combine traditional knowledge with contemporary academic knowledge cultures in other northern academic institutions. Participatory and digital methods implemented in LiLa can support networking, knowledge exchange and the creation of new collaborations in Arctic art and culture education for sustainability. The second LiLa provided opportunities to narrow the geographical and multidisciplinary distances as well as the distances owing to the COVID-19 pandemic between the participating countries.

LiLa shows how the use of art-based methods allow to better obtain and express experience-based information and offers alternative ways to share the gained understanding about the eco-cultures of the northern and Arctic regions. We see that LiLa's impacts also reach a wider society in the Arctic through the exhibition activities we developed. All the exhibitions held during the LiLa project have introduced new research and education approaches to the Arctic society in addition to understanding, representing and

developing the region. The University of Arctic and the ASAD network are beneficial forums for sharing broader knowledge and thus influencing the regional development in the Arctic countries. Simultaneously, these efforts help promote and highlight the profile of the arts education as an essential actor in regional development work.

The development of the joint studies implemented in the LiLa project corresponds to the training organisations' and society's need to create a close and long-term cooperation between experts from different fields and different universities in the northern region. The results of LiLa are important for the initiation of new collaborations; LiLa enables the realisation of summer schools and other joint studies and the continuation of further curriculum planning and cooperation.

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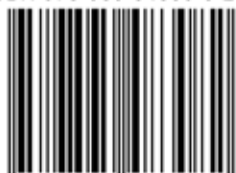
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In this book, the eighth in the *Relate North* series, we present nine chapters exploring the multifaceted notions of 'distance' or 'distances', particularly in the Northern and Arctic context. Featuring distinguished artists, designers, researchers and academics each contribution explores different dimensions of what distant and distances mean with the focus on Northern and Arctic perspectives of contemporary art, design and education.  In each essay the theme of distance is about more than a measure between locations rather,  it can refer to multifaced northern eco-cultures and communities including, for example, distances between Indigenous and non-indigenous groups of the North and the Arctic.

Drawing on projects and studies from Canada, Finland, Norway and the Sakha Republic, Russia this book explores contemporary practices in art and design, arts-based research and knowledge exchange in education.  The contributing authors provide thought-provoking accounts of current practice in these regions. The studies in the book interpret the terms 'arts' and 'design' broadly to include, for instance, place-based art design; textile crafts; Indigenous making and socially-engaged art. This book will be of interest to a wide audience including, for example, anthropologists, geographers, sociologists, artists, designers, art educators and practice-based researchers in addition to those with a general interest in Northern and Arctic issues.