

# RELATE NORTH

ART & DESIGN FOR  
EDUCATION AND SUSTAINABILITY

Edited by

Timo Jokela & Glen Coutts



**RELATE NORTH**  
Art & Design for  
Education and Sustainability



# RELATE NORTH

ART & DESIGN FOR  
EDUCATION AND SUSTAINABILITY

Edited by Timo Jokela & Glen Coutts



Rovaniemi 2018

© 2018 Authors and the copyright holders of the images.



"The peer-review label is a trademark registered by the Federation of Finnish Learned Societies (TSV). The label will indicate that the peer-review of articles and books has been performed in line with the quality and ethical criteria imposed by the academic community".

Federation of Finnish Learned Societies. (2015). Label for peer-reviewed scholarly publications: Requirements for use. Retrieved from <https://www.tsv.fi/en/services/label-for-peer-reviewed-scholarly-publications/requirements-for-use>

Layout & Design: Anna-Mari Nukarinen

Lapland University Press

PO Box 8123

FI-96101 Rovaniemi

Tel +358 40 821 4242

[publications@ulapland.fi](mailto:publications@ulapland.fi)

[www.ulapland.fi/lup](http://www.ulapland.fi/lup)

ISBN 978-952-310-928-5 (pdf)

# CONTENTS

Timo Jokela & Glen Coutts	
Preface . . . . .	6
Lindsay Blair	
Reconfiguring the Historical Ontologies of Northern Communities in the Art of Will Maclean . . . . .	10
Jonna Häkkinen & Milla Johansson	
Arctic Design for a Sustainable, Technological Future . . . . .	32
Tarja Karlsson Häikiö	
Art-Based Projects as Cultural Tools for Promoting Sustainability in Preschool and Compulsory School . . . . .	52
Antti Stöckell	
Making Wooden Spoons Around the Campfire: . . . . .	80
Dialogue, Handcraft-based Art and Sustainability . . . . .	80
Timo Jokela & Glen Coutts	
The North and the Arctic: A Laboratory of Art and Design Education for Sustainability . . . . .	98
Jessica Hein	
A Geography of Earth and Sky: Parallel Practices of Walking and Drawing . . . . .	118
Contributor Details . . . . .	130

*Timo Jokela*  
& *Glen Coutts*  
University of Lapland, Finland

## Preface

Pre



The book you are now reading is the fifth in the *Relate North* series. As in previous volumes, the contents reflect the range of research and practice that is going in art and design in northern and Arctic countries. The title of the book was also the theme of a symposium and exhibition that took place in Rovaniemi, Finnish Lapland, in November 2017. The question of how the interconnected topics of education and sustainability might be addressed through research in art and design formed the basis of a call for papers for that conference. From a large number of submissions, papers and artworks were selected by the academic steering group. The events were attended by delegates from 12 countries around the circumpolar north and beyond.

At the closing of the symposium, we issued a call for contributions to the delegates and circulated the call widely. Selection was a two-stage process, potential authors were invited to submit a short synopsis and a subsequent selection invited to submit a full chapter or visual essay. We received many more proposals than it was possible to publish in one volume, and our task of selecting what we thought the most interesting proposals was not easy. Each contribution was then subjected to double blind peer-review. This book is the result of that process. We are indebted to the authors, reviewers and the staff at the University of Lapland Press for making this publication possible.

At the closing of the symposium, we issued a call for contributions to the delegates and circulated the call widely. Selection was a two-stage

process, potential authors were invited to submit a short synopsis and a subsequent selection invited to submit a full chapter or visual essay. We received many more proposals than it was possible to publish in one volume, and our task of selecting what we thought the most interesting proposals was not easy. Each contribution was then subjected to double blind peer-review. This book is the result of that process. We are indebted to the authors, reviewers and the staff at the *Lapland University Press* for making this publication possible.

In 2014, the first book in this series was published: *Relate North: Engagement, Art and Representation*. Since then, the series has remained dedicated to the identification and sharing of contemporary practices in arts-based research and academic knowledge exchange in the fields of arts, design and art education. Each volume has consisted of scientific peer-reviewed chapters and visual essays. The *Relate North* series has now included writing by academic researchers, artists, designers, art educators and practice-based researchers.

Contributions were sought that concerned issues surrounding art and design for education and sustainability. In addition, the general themes of Northern and Arctic perspectives on art and design; potential benefits to education for sustainability of art and design practice; context-sensitive research methods and arts, crafts & design practices. Further, we hoped that our contributors would interrogate the complex relationship between education, sustainability, design and contemporary visual arts. We were not disappointed.

The *Relate North* books (Jokela & Coutts, 2014, 2015, 2016, 2017) have as an underlying philosophical standpoint, a focus on Northern and Arctic issues in the field of arts, design and visual culture. The series aims to advance understanding and seek to improve arts, design and visual culture education particularly amongst people living in Northern and Arctic areas. An additional aim is to introduce original ways of rethinking the status of contemporary arts, design, craft and new practices in art education in a Northern and Arctic context. This volume continues in that tradition with five chapters and a visual essay.

As one might expect in a book entitled 'Art and Design for Education and Sustainability' many of the contributions focus on sustainability issues and how art, design and education might have roles to play in addressing the multitude of issues related to sustainability. The United Nations *Agenda 2030 Sustainable Development Goals* (UNESCO, 2015) identified 17 goals that need to be tackled, one of which, SDG4, is quality education. We believe that the contents of this volume offer a good insight to some of the ways that researchers, artists and academics are confronting the difficult issues raised by the sustainability agenda, from work in the studio to art-based projects in the field. Diverse in nature, the chapters range from critical analysis to personal reflection, but all are thought provoking.

In the opening chapter, Blair writes about the work of the Scottish artist, Will Maclean. She presents an analysis of two of Maclean's works, one an exhibition based on the 'ring net' fishing system and the other a piece of public art that

references the 'Highland Clearances'<sup>1</sup>. In her essay Blair reveals the multifaceted nature of the artist's work, his rigorous research and precision, together with the way his work is inextricably tied to people and place.

Precision is also a key element in design issues, and the next chapter outlines ways in which sustainable 'human-centric' processes might be developed in an Arctic Design methodology. Häkkinen and Johansson take as their focus two exhibitions at Milan Design Week to illustrate the design model they propose. The fragile and beautiful Arctic environment is an integral element of the design process, product creation and testing.

The third chapter focuses more directly on education, in this case early childhood and compulsory school education. Häikiö argues that sustainable education is now one of the 'overarching goals in the curriculum for early childhood education and for compulsory school in Finland as well as in Sweden'. In particular, the author discusses wider issues such as the ways that 'cultural activities' can be used to facilitate the discussion of sustainability issues.

In a deeply personal and reflective account of the long tradition of making wooden spoons around the campfire, Stöckell touches on major issues of the significance of handcraft, tradition, making and sharing. The impact of such activities combined with the potential of physical exercise (hiking) and working in the natural environment on wellbeing are threads running through the author's contemporary artwork.

The closing chapter explores the notion of the Arctic region as a ‘laboratory’ for testing the role that art and design might play in promoting aspects of sustainability. Jokela and Coutts ponder the interrelationship of art, design and education. The authors discuss the Arctic environment as a ‘testing ground, or ‘laboratory’” for specially devised art and design methods, the potential of art education for sustainability and posit the idea of a new genre of art and design education.

The closing contribution to the book is a visual essay, from a Canadian artist who discusses a portfolio of work that drew on the notion of getting lost. Her work has its origins in knowledge she gained from a series of interviews with people who are navigators. Hein’s work is about getting lost, as she writes ‘I found myself in unexpected moments where the places I know suddenly became unfamiliar’.

Editing a book is a team effort and, as editors, we have been extremely fortunate to have the support of a remarkable group of people, without whom none of the books in the series would have been possible. We therefore want to express our sincere thanks to the authors, artists, designers. Our thanks are also due to the academic reviewers and the Board of Lapland University Press. Special debts of gratitude go due to our designer Anna-Mari Nukarinen and to Anne Koivula of the *Lapland University Press*. In both cases, their patient professionalism has been very much appreciated.

*Timo Jokela and Glen Coutts*  
Rovaniemi, November 2018

## References

- Jokela, T., & Coutts, G. (Eds.). (2014). *Relate North 2014: Engagement, art and representation*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2015). *Relate North: Art, heritage & identity*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2016). *Relate North: Culture, community and communication*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2017). *Relate North: Practising place, heritage, art & design for creative communities*. Rovaniemi: Lapland University Press.
- UNESCO (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>

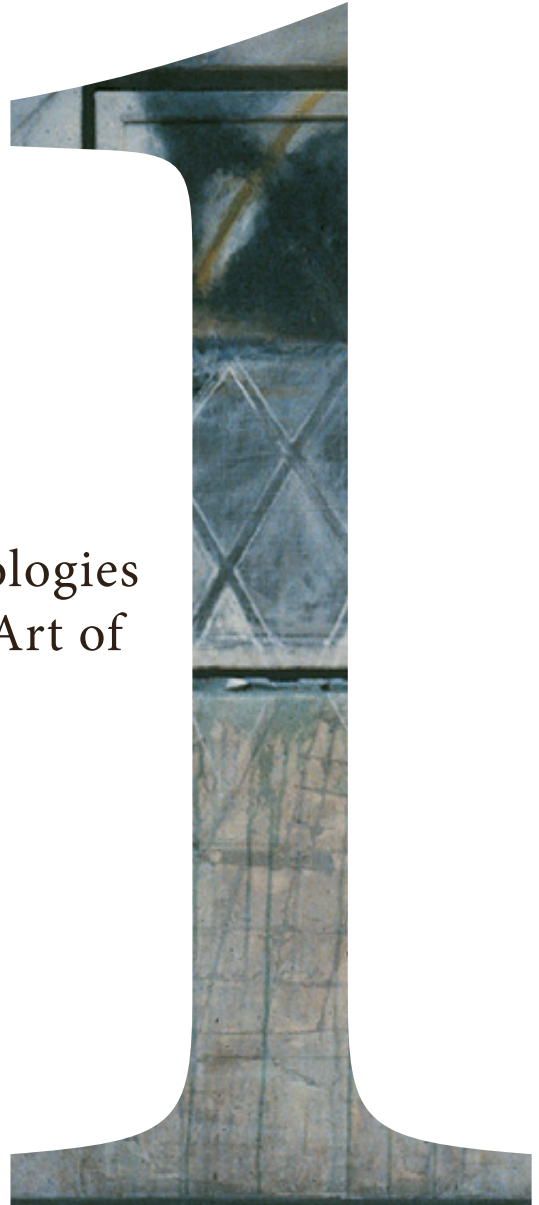
## Endnote

<sup>1</sup>The Highland Clearances were forced evictions of people from the highlands and western islands of Scotland that took place during the mid 18th to mid-19th centuries. During that period, the people were ‘cleared’ from the land, principally to make way for the introduction of sheep farming.

*Lindsay Blair*

University of the Highlands and Islands, Scotland, UK

Reconfiguring the Historical Ontologies  
of Northern Communities in the Art of  
Will Maclean



**T**he poet W. B. Yeats wrote of the source of inspiration, of the point at which he discovered his direction, of that which clarified all that was to become most important to him:

It was through the old Fenian John O’Leary I found my theme. He gave me the poems of Thomas Davis, said they were not good poetry but had changed his life . . . I saw even more clearly than O’Leary that they were not good poetry . . . but they had one quality I admired and admire: they were not separate individual men; they spoke or tried to speak out of a people to a people; behind them stretched the generations. (Yeats, 1970[1966], pp. 15–16)

It was his famous first meeting with Yeats that turned J.M. Synge into a legend of the Irish Literary Revival. Encountering the somewhat younger writer in Paris in December 1896, Yeats claims to have given him crucial advice on his career: “Give up Paris. You will never create anything by reading Racine . . . Go to the Aran Islands. Live there as if you were one of the people themselves; express a life that has never found expression” (Yeats, 1968, p. 63).

In his essay ‘Old Songs and New Poetry’ Sorley MacLean writes:

A few months ago my brother John, who is as well qualified to give an opinion as anyone I know, said that the greatest of all Scottish works of art is *Cumha na Cloinne*, the ‘Lament for the Children,’ attributed by the tradition of pipers to Patrick Mòr MacCrimmon and therefore of the 17th century. I hardly demurred, but suggested that if it is not *Cumha na Cloinne* or some other one of the great pibrochs, it is one of those Gaelic songs of the two and a half centuries between 1550 and 1800 – the songs in which ineffable melodies rise like exhalations from the rhythms and resonances of the words, the songs that alone make the thought that the Gaelic language is going to die so intolerable to anyone who knows Gaelic and has in the least degree the sensibility that responds to the marriage, or rather the simultaneous creation, of words and music. (MacLean, 1985, pp. 106–119)

In the catalogue accompanying the exhibition *Will Maclean: Collected Works 1970–2010*, there is a transcript of Maclean's conversation with fellow artist, Sandy Moffat. Moffat asks Maclean to speak about his own relationship with the past:

As I said earlier my father did pass on to me a knowledge and a passion for the culture. As you rightly say 'part of one's own flesh and blood.' The transcription of ideas – it is a huge question. I suppose it is the sum of parts that include – the collections of the Highland folklorists, J.F. Campbell, R.C. MacLaglan and Alexander Carmichael, the poetry of MacLean, George Campbell Hay and Angus Martin, the painting of Giorgio De Chirico, William McTaggart, Anselm Kiefer, and the sculpture of Joseph Cornell, Fred Stiven and H.C. Westermann. Then the 'art of the sailor' and the people of the seaboard tribes. Alexander Mackenzie's *History of the Highland Clearances* (a book my father said should always be, with the bible, at my bedside) Donald Macleod's *Gloomy Memories* and later James Hunter's *Making of the Crofting Community*. Then the landscape itself. In Skye, Dun Caan, Camus Mallaig, and Suisnish and in Coigach, Stac Pollaigh, Badentarbert and Achnahaird. (Maclean, 2011, p. 57)

We are struck first by the way Yeats insists on the primacy of the loss of individuality – the sense that the artist speaks for a people, not for himself. His advice to Synge that he became participant observer amongst a marginalised community on the West of Ireland directly parallels his own sense of self-discovery. The same notion concerning the incomparable value of the oral tradition as preserved on the edges of the modern world is expressed in Sorley MacLean's account of the Gaelic songs of the sixteenth to the eighteenth century. MacLean's regard for the tradition cannot be separated from his own development as the foremost Modernist Gaelic writer of the twentieth century. Will Maclean's litany of influences includes international Modernists and Postmodernists but it is predominantly 'of the folk'. It is primarily testament to his determination to speak for a people rather than for himself. His statement reveals a sense of the

many voices, the marginalised voices, the subjugated voices; a sense, above all, of 'heteroglossia'. The sense of the carrying stream: the voice of the people, the 'mutations from below', as Foucault would have it, is allied with a conviction that there are truths there just below the surface awaiting unearthing (Foucault, 1986[1970], p. 290). What we could say is, also, that all of the testimonies above bear the marks of a Utopian Structuralism – a belief that there are systems which operate like linguistic structures enabling us to understand reality. Yeats, Synge and MacLean (S) all convey a regard for a folk culture which Russian formalists like Vladimir Propp and Roman Jakobson had used as a paradigm for his Structuralist principles. Maclean (W) identifies the Highland folklorists, Campbell and Carmichael, first of all in his list of influences. As the Eurocentric development of Modernism with its urban core has become more and more a contested area for debate, the peripheral areas with their strong interfusions with folk cultures are becoming a new area of focus once again. The notion of 'alternative Modernisms' lacks the political thrust necessary to impact on cultural hegemonies. However, we can now consider the concept of a singular Modernism that is experienced in fragmented and diverse ways across wide geographical and historical spaces according to the very uneven distribution of cultural or symbolic capital. This allows for the study of comparative aesthetics across a range of peripheral and semi-peripheral Modernities (such as developed in advanced cultures which are regarded as marginal in the context of European Modernism: the Scandinavian countries, the devolved British Isles and most of Eastern Europe). The social and political forces which brought these semi-peripheral Modernities into being have become, in the light of Reception Theories, New Historicism and the rise of Anthropology, resistant to the totalising theories (of Urbancentric Modernism or Postcolonial paradigms for example) and are presently undergoing focused, comparative research (Collective, 2018).

The sense of many voices – of 'hybridity', of 'heteroglossia' and of the 'intertextual' – this sense which is now inextricably linked with the Postcolonial began with the Russian linguist and theorist, Mikhail Bakhtin (1895–1975). These terms can too easily lose any sense of 'apparency' (Martin G. D., 1975, pp. 167–201), becoming little more than vapid ciphers, but Maclean's commitment

to these principles has been there since his earliest research into the herring fishing communities associated with the Ring-Net in the 1970s. This was long before Bakhtin's terminology became part of the cultural discourse. Bakhtin's terms were developed in relation to his theoretical treatise on the novel but they are clearly apposite to Maclean. If we take the term 'intertextuality', we need to regard it as something more than a formal, framing device in Maclean: there are the formal elements connecting his work to Surrealism or, more generally, to bricolage but it is an 'intertextuality' of a different order which characterises his art, overall. The place/work/folk nexus of Patrick Geddes describes most accurately the nature of Maclean's 'intertextual' explorations. The material substance of much of his work especially in the early years had an original functional mode of existence within the crofting/fishing/whaling/seafaring industries which remain the inspiration for his work to this day. There may be found references to aspects of history, especially of Highland history, aspects of industry, especially fishing and whaling, and to voyages of exploration. We find within his installations and box construction bits and pieces of all kinds of tools and implements that were commonly used within subsistence cultures.

Maclean gives a voice, or more accurately, voices to a range of communities which did not have a voice or whose voices were subjugated by powerful hegemonic interests of profit or control; they could be crofters cleared from the land, people stripped of their language, or people tied to industries such as fishing or whaling which are now residual in a society driven by the demands of late Capitalism. For Bakhtin, the novel was the form which best represented the disparate voices which were not assimilated within an assertive authorial narrative, but the novel as represented by Bakhtin's favoured novelist, Dostoevsky, is now almost unrecognisable; it has come increasingly to be regarded as the expression of originality or individuality. Maclean's work represents the dialogical in several different ways: he can be connected with the anthropological in his role as creative participant observer, to socially engaged art practice especially in the series of cairns which he was invited to design on the Island of Lewis in the Outer Hebrides and then, more generally, as a vital component in the Postmodernist project to resist the 'grand narrative' (Sim, 2001, pp. 7–11). The 'grand narrative'



could be political/nationalist or social or cultural aesthetic but Maclean's complex layering of meaning within an increasingly complex set of signifiers ensures that no easy alignment with any movement may be comfortably assigned to him. While Postmodernist 'intertextuality' may be associated with the 'appropriation' works of Cindy Sherman, Jeff Coons or Peter Halley as parody or pastiche, this is an 'intertextuality' utterly alien to Maclean. Maclean's purpose in his 'appropriation' of 19<sup>th</sup> century Highland artist William McTaggart's *The Sailing of the Emigrant Ship* (1895) image in *The Emigrant Ship* (1992) for example, could appear initially as an act of Postmodernist sabotage, but it is, in effect, more of an act of salvage – the salvage of the work from its place within an earlier Victorian 'grand narrative' including the marine art tradition.



*Figure 1. The Emigrant Ship; mixed media on board with slate and wood (1992).*

There is not a trace of satire as Maclean ‘appropriates’ material from his Highland heritage – pieces of crofting or fishing detritus of old postcards, pamphlets, posters, cuttings from journals which bear witness to a world of cultural memory which the artist refuses to relinquish. Any reading of his work – the ambiguity of the symbolism, the juxtaposition of the elements, the extensive manipulation of the metonymic fragment – demands the active participation of the viewer in order to produce a meaning. That meaning, because of the presence within the work of dissonant elements, will necessarily be contingent rather than absolute, will be dependent on the viewer’s willingness to probe beneath the ‘aura’ of the works themselves to the palimpsest beyond. One example here might be the use of the sheep’s skull in the box constructions which represent Maclean’s sombre reflections upon the Highland Clearances:

When sheep replaced people on the land, the displaced population had to turn to the sea for their livelihood; sheep skulls invoke this displacement. Such experience finds a very individual expression through a wide range of sources, mostly in folk and non-European, such as Egyptian, Eskimo and American Indian Art. Such sources were discovered by the Surrealists, whose famous map of the world questioned European cultural arrogance. (Woods, 1987, pp. 6–7)

There are, however, other analogical elements within the boxes – not so much the metonymic as in the sheep’s skull but the forms of tools and totems which interconnect the Northern cultures. Barbara Maria Stafford in her remarks about the curiosity cabinets in Renaissance times summarises concisely this analogical urge:

I believe these curiosity cabinets embody with great power and clarity the central idea of the analogical world view, namely, that all physical phenomena, from fallen stars, to Florentine stones, to magnified fleas, to the most skillfully chased silver goblets, can be cross-referenced, linked in reconciling explanation by the informed imagination. (Stafford, 2001, p. 169)

One of the features of Maclean's art which makes re-readings so profitable is the way that he finds unexpected analogous relationships between formal elements: the metonymic fragment – part of the stern sheet of a boat for example may figure as synecdoche on the one hand but within the same image the waterline may represent a metaphorical horizon and the same process occurs over and over in his reliquary boxes as the modest implements of the fishing culture become imbued with the sacred.

Felicia Hughes-Freeland takes the idea of tradition as found in the well-known essay 'Tradition and the individual talent' (1946[1920]) by T.S. Eliot and links Eliot's articulation of creativity with anthropology. One of the key concerns she identifies in the essay is "the centrality of innovation to artistic production" which she says "raises questions about texts and genres" (Hughes-Freeland, 2007, p. 209). A new work changes the whole of the existing order: "the past should be altered by the present as much as the present is directed by the past" (Eliot, 'Tradition and the individual talent', 1970[1966], p. 62). "Tradition is not a constraining factor but an enabling one, which is transformed even as it is built upon in time" (Hughes-Freeland, 2007, p. 209). I do think that the anthropological perspective is absolutely pertinent to Maclean – his work is genuinely collaborative and collectivist and exemplifies many of the elements highlighted in the Hughes-Freeland essay. Fundamentally, Maclean's work changes the history of Highland art moving it away from the drawing room pictures of clan chiefs, hunting scenes, castles or the later beach scene images of the Colourists to foreground, instead, the people who worked on the land or at sea and their struggle for survival. But it is not just art in this representational sense that he contests: he questions the narrow confines of categorisation which distinguishes between fine art and other forms were of making. A world of boats and gear and the skills of the engineer or the stone-dyker become part of a material culture which reverberates dialogically back in time.

Maclean's far reaching exhibition *The Ring-Net* at The Third Eye Centre in Glasgow in 1978 will serve as introduction to his radical re-thinking of what constitutes an art form. *The Ring-Net* is a collection of drawings, photographs and printed plans, numbering more than 340 items described by Richard



*Figure 2. Loading to Hold, The Ring Net, 1978, photograph.*

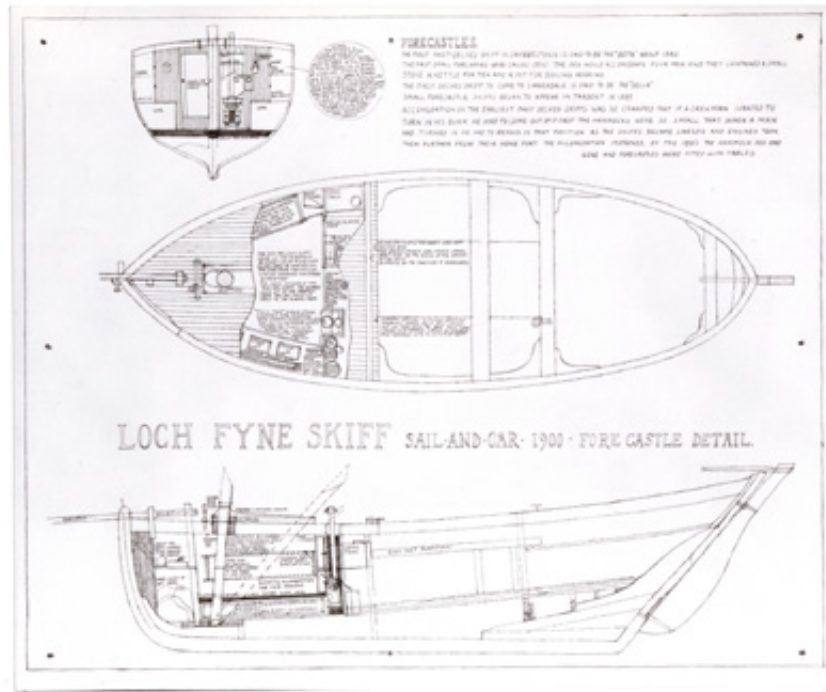
Demarco as “a work of scientific investigation” (Allerston, 1990, p. 13). The exhibition, first shown at The Third Eye Centre in Glasgow in 1978 has, in a number of ways, formed a template for his subsequent works. The subject of the exhibition is a particular method of herring fishing known as the Scottish Ring-Net.

Angus Martin collaborated with Maclean and his book *The Ring-Net Fishermen* (1981) was based on their research; his introduction begins with a short overview:

The evolution of the Scottish Ring-Net from a crude assemblage of drift-nets hauled onto the sandy beaches of lower Lochfyne in the mid-1830s, to a sophisticated deep-water method, requiring powerful motor boats and an array of electronic equipment, took 120 years to complete. Ironically, with the attainment or maximum development, a rapid decline began which, within the past decade, signifies

the unmistakable, and probably irreversible, end of that method of herring fishing. (Martin, 1981, p. 1)

The research was not confined to the fishermen and their methods of fishing but with the other associated industries: the design of the fishing boats, boatbuilding, engineering, sail-making, net making, curing, gutting and packing.



*Figure 3. Loch Fyne Skiff:  
The Ring Net; drawing (1978).*

The scope of the project belies its original brief. Rather than tackling particular aspects of ring-netting, the artist (Maclean) concerned himself with everything, from the equipment used by the fishermen to the food they ate. He even considered their cures for salt water boils. He wrote to Martin of his determination to ensure that the documentation be exhaustive: “Nothing must escape us – from

the makers names of the stove and cooking pot, to the brand of tobacco that the men used in their pipes did they all have the little metal lids that my grandfather had even as an old man” (Allerston, 1990, p. 19).

Enormous care was taken throughout to check and cross check the accuracy of information in the exhibition as Maclean was acutely aware that his audience would include experienced fishermen. This explains the lengths that he went to over details like hammock lashing, the development of decks and winches, brailers, net construction, net needles and natural signs for detecting herring. Maclean was insistent that the exhibition be seen in Tarbert and Campbeltown, the centres of research for the project: “it has to go where it will have a meaning” (Allerston, 1990, p. 54). Maclean’s sense of responsibility towards the audience of fishermen meant absolute fastidiousness in the collection and presentation of the documentary evidence. His concern is revealed again and again in his correspondence in connection with the exhibition: “no hanging nets” no “old skin buoys” but instead everything exhibited to be “defined, clean, considered, accurate” (Allerston, 1990, p. 68).

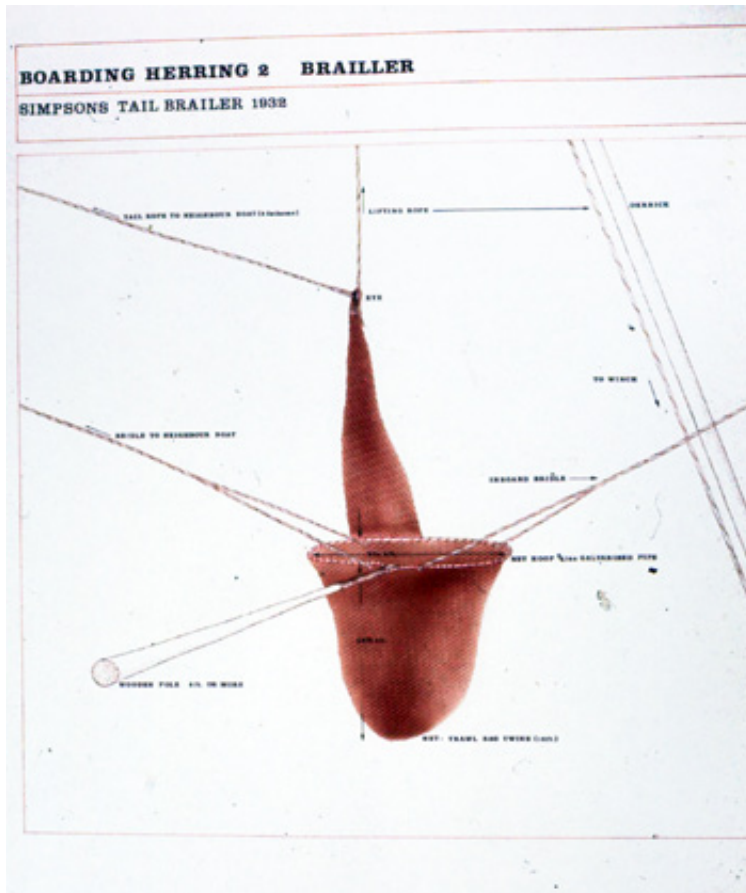


*Figure 4. Herring:  
The Ring Net; pen and  
ink drawing (1978).*

In many ways the vast scale of the project was driven by this relentless drive for documentary accuracy. The fact that he and Martin had worked as fishermen was all important to their research and their way of collecting information and assessing it, this also informed the decision about where the work was to be shown and, most importantly, their concerns about the reception of the exhibition by an informed audience of the fishing communities themselves.

The dominant features of *The Ring Net* need to be seen in the context of Maclean's work as a whole: the scope and rigour of his research, his collaboration with the community as participant observer and his absolute insistence on precision throughout. The need for exacting attention to detail in Northern Maritime communities is understood in a different way from other cultures whose survival is not dependent on the sea. As we have seen in *The Ring Net* research, the precisionist adhering to the design of the boats, the materials used, the making of the nets, the workings of the winch, the alignment of the net, the use of the brailers all testify to the paramount importance of functionality. This is exactly as we have seen in the Inuit priorities and practices in the North Atlantic especially in relation to the use of tools: the knife skills essential to the hunt and the needle skills essential to protection from the climate. In one memorable exhibit in *Relate North 2017: Art and Design for Education and Sustainability*, Rovaniemi 2017, we read the following from an unnamed Sámi informant: "Every woman has to know how to sew, otherwise she and all her family would freeze to death in the Tundra" (Usenyuk-Kravchuk, 2017). We find, in the work of Maclean, respect/reverence for the skills of the astronomer who reads the movement of the seasons by the position of the sun, the navigator who plots a course via the stars, the ship's draughtsman who designs a vessel capable of traversing the oceans, the fisherman who manages a boat in all weathers, reads the sea for signs of herring before he aligns a net, or the structural engineer who constructs the dwelling places as protection against elements and invasions alike.

Even in Maclean's most recent exhibition, *Will Maclean: Narratives*, at the Fine Arts Society, Edinburgh (April 2018), we are struck by the assembled and constructed nature of the work. At first glance we could be reminded of Surrealist boxes or the white, light relief works of Ben Nicholson from the



*Figure 5. Simpson's Tail Brailer: The Ring Net; drawing (1978).*

1930s but these resonances quickly fade as we engage with the Maclean works before us. Many of the pieces contain 'moving parts' which look as though they are designed to fulfil a specific function. The titles – Mariners Museum: Fictitious Sun, Mariners Museum: Storm Plotter, Mariners Museum: Taxonomy of Tides, Navigator's Box/Stormfinder, Science of the Bivalve, Baleen Zoomorphic, Longitudinal Section/Towards Gairloch, Impossible Alignments – testify to the mathematical/scientific dimension to the exhibition.

Formality and precision are the distinguishing features of Maclean's approach



*Figure 6. Impossible Alignments; found objects, sculpture, (2018).*



reminding us of the Scottish poet Norman MacCaig admonishing Magnus Magnusson in interview for casting up the issue of his lack of that wilder Gaelic mode. MacCaig replied, “I don’t know what you mean by the wilder Gaelic mode ... the Gaelic mode is very formal, classical and contained in all the modes of art: poetry, sculpture, you name it” (Alexander, 1977). This point is reinforced by Alasdair Macrae’s reference to MacCaig’s predilection for “authorial impersonality and an esteem for intricate formal patterns” (Macrae, 2010, p. 25).

When we remember Wilhelm Worringer’s seminal paper written in 1908 we realise that the opposing tendencies which he recognised in the arts of different peoples is still an essential key to the understanding of works of art today:

Whereas the precondition for the urge to empathy is a happy pantheistic relationship of confidence between man and the phenomena of the external world, the urge to abstraction is the outcome of a great inner unrest inspired in man by the phenomena of the outside world; in a religious respect it corresponds to a strongly transcendent tinge

to all notions. We might describe this state as an immense spiritual dread of space. (Worringer, 1997[1908], p. 15)

And then later:

... the highest abstraction, most strict in its exclusion of life, is peculiar to the peoples at their most primitive cultural level. A causal connection must therefore exist between primitive culture and the highest, purest regular art form. And the further proposition may be stated: The less mankind has succeeded, by virtue of its spiritual cognition, in entering into a relation of friendly confidence with the appearance of the outer world, the more forceful is the dynamic that leads to the striving after this highest abstract beauty. (Worringer, 1997[1908], p. 17)

Maclean's boxed artworks are full of mystery but they are also formal, exact and highly wrought. They appear to us as intricate pieces which have been designed and finished in a boatbuilder's yard or an engineer's workshop.

The Lithuanian poet Cselaw Milosz acknowledged the same opposition, defined above by Worringer, in the poem addressed to Robinson Jeffers who he refers to as 'a Scotch-Irish wanderer':

And you are from surf-rattled skerries. From the heaths  
where burying a warrior they broke his bones  
so he could not haunt the living. From the sea night  
which your forefathers pulled over themselves, without a word.  
Above your head no face, neither the sun's nor the moon's,  
only the throbbing of galaxies, the immutable  
violence of new beginnings, of new destruction.

All your life listening to the ocean.  
(Milosz, 2006, p. 74)

Milosz finds in Jeffers's poetry a divergent, alien aesthetic which can only be explained in the way that Worringer identifies above. He identifies that sense in the "Scotch-Irish wanderer" of a world of "surf-rattled skerries" and "the throbbing of galaxies"; a world that is menacing, destructive, chaotic.

Maclean's work manifests, as a distinctive feature, a formal precision, a geometric clarity and a scientific aspect. These elements are characteristic of a people whose relationship with the external world is one of strife – they represent the need for an art which opposes that world of strife, an art of order, of geometric accuracy. Maclean's art reveals, above all, a respect for the culture to which he belongs where the struggle for survival in more recent times has involved not just the sense of strife in relation to the natural elements but to human forces of oppression likewise.

Something of Maclean's response to landlord oppression is found in the land sculpture construction An Sùileachan (2013) designed collaboratively by Maclean and Marian Leven and situated at Reef on the West Coast of the Island of Lewis.



*Figure 7. An Sùileachan; stone, granite, iron and wood (2013). Photo: Dr. Colin Macdonald.*

Before attending to the significant historical and political background to the piece, I wish to draw attention to its formal properties. The working drawings and the list of source materials is a study in itself but it is the kind of mathematical precision as seen in all of Maclean's work that characterises the thrust of the enquiry. As detected in Worringer, above, it is the need to find an abstract form that will order the desperate struggles of a people against the powerful antithetical forces that they encounter. The visual statements of Maclean and Leven testify to their determination to find a solution, a control of space by formal means that characterises this remarkable land sculpture piece.

From the illustration of Robert Morris Observatory (1970) showing Maclean and Leven's debt to printed sources, to the research for the beacon and its projected alignment to the design of the Raider's circle and the workings of the stone arch, the source material and archival record is meticulous.

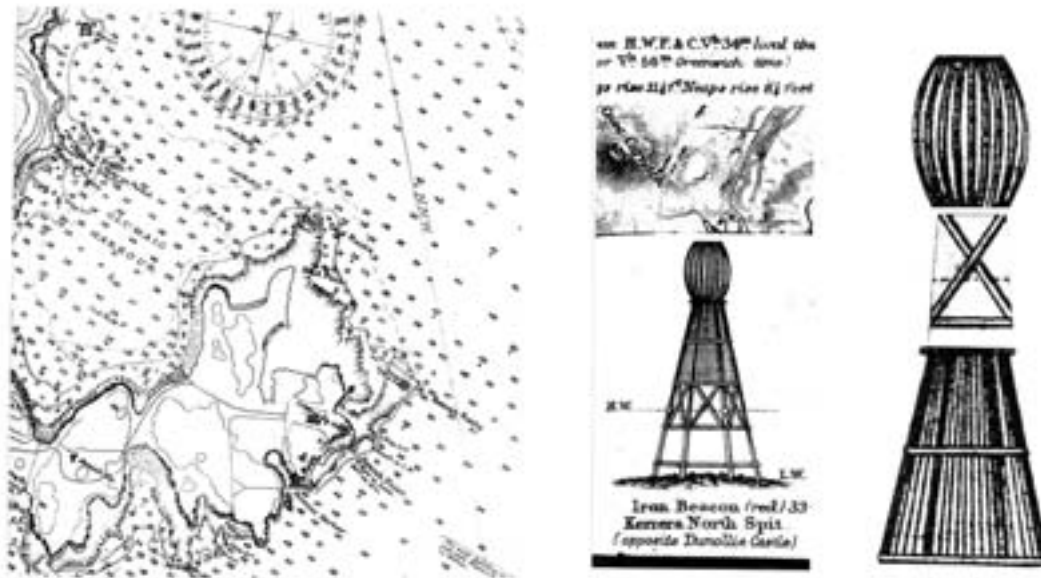


Figure 8. Iron Beacon: source material An Sùileachan (2013).

Figure 9. Plan Reef:  
source material for  
An Sùileachan (2013).

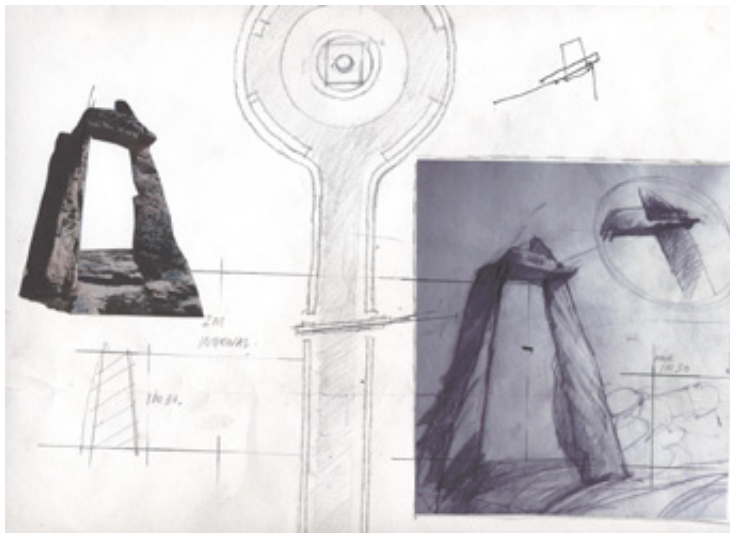
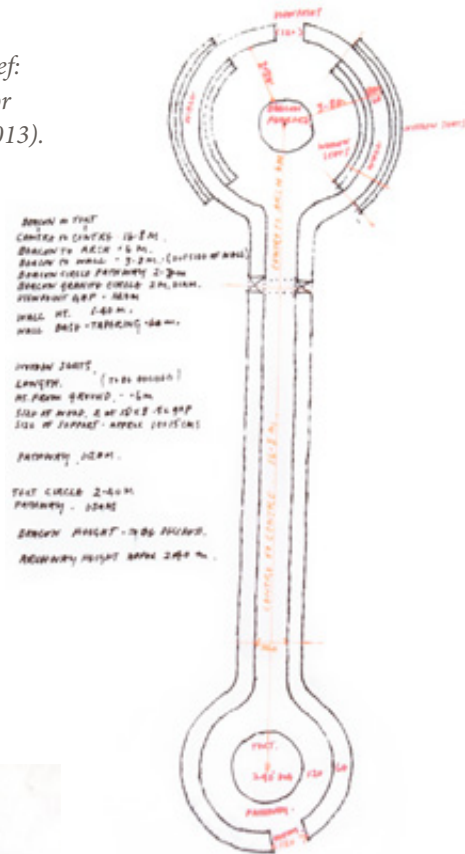


Figure 10. Arch:  
source material for  
An Sùileachan (2013).

The sense of the geometric/constructed formal enclosure of form as an oppositional force in its equilibrium to the injustices of history is communicated, is felt, is 'presented'.

An Sùileachan was created by Maclean and Leven following a trip that the artists had taken to St Kilda, the Faroe Islands and Iceland. Something of the Northern elemental quality of people's lives in these islands informs the metaphysical aura of the structure. In terms of the specifics of the forms, the distinctive doorway speaks of the Inuit tupqujaq, a large structure through which a shaman might enter the spirit world, and the two circular chambers of earlier research by the artists on the Pictish double-disc markings were revealed during the excavation of the East Wemyss caves in Fife.

An Sùileachan is dedicated to the Lewis people of the 19th century who were cleared from their land and to the 20th century Land Raiders of Reef. The eastern circle is inscribed with the names of the Reef Raiders. It is also dedicated to the recent Land Reforms and to the creation of the Bhalto Community Trust. As such, it examines the notion of the counter-narrative from the perspective of the dispossessed. It is a piece of Participatory Art. The raw unworked stone which comprises the structure is shaped into the passageway and chambers. They were lumps of stone, broken from the mountain originally, and then shaped into the houses and walls of Uig. The stonemason who built the walls, Ian Smith, gathered together the elements donated by the crofters. The massive stones for the archway, discovered by Jim Crawford another stonemason and historian, were located around the low water mark on Vuia Beag, an island in West Loch Roag close to the Bhalto Peninsula. The wood came from the old trees in the grounds of Stornoway Castle; local woodworker John Angus MacLeod made the seating. The brazier was forged by blacksmith John MacLeod of Stornoway from old graveyard railings. The artwork reflects far more than the perceptions of two individuals – that is, the artists Maclean and Leven. An Sùileachan works, instead, politically to engage the people of Lewis in a dialogical relationship with their histories.

In order to fully appreciate the nature of the challenge that An Sùileachan sets down before its audience, we need to explore the notion of response. As indi-

cated above in relation to Structuralism (and for that matter, Post-Structuralism) almost all models for responses to art make recourse to reading strategies of one kind or another based on hermeneutics. However, this is not the kind of response that is demanded at An Sùileachan – whilst the historical allusions and the formal sculptural language of the piece are of enormous academic interest, one's first reaction at the site will be sensuous rather than intellectual. We are struck by a feeling of awe at the site, of something akin to wonder, as we assimilate the material presence of the sculpted stone and the air that surrounds it. It is a stunning example of art as 'affect'. This idea of 'affect' is one developed primarily by Gilles Deleuze and Felix Guattari. Simon O'Sullivan has devoted a book length study to a reading of Deleuze and Guattari's concept of 'affect' and he describes the way that "affect is thought in two ways: as the affect of art on the body and as that which constitutes the art object. In both cases affect is oriented against an overemphasis on signifying regimes, but also habit and opinion" (Lyotard, 1988, p. 6). There is a problem with the reading of the cultural object in art historical or anthropological terms in that as we strive to understand its meanings, we become fixated on the object as an object of knowledge. The search for meaning within art – the hermeneutics of art – can have exactly the opposite effect to that intended: that is by subsuming the work under the aegis of knowledge or understanding it can be made into something recognizable and its power to startle is diminished in direct proportion to its comprehensibility.

Perhaps it is Lyotard who most succinctly identifies the way of sensing or mindset that allows us to become receptive:

to become open to the 'It happens that' rather than the 'What happens', requires at the very least a high degree of refinement in the perception of small differences...The secret of such asceticism lies in the power to be able to endure occurrences as 'directly' as possible without the mediation of a 'pre-text'. Thus to encounter the event is like bordering on nothingness. (Lyotard, 1988, p. 18)

At the beginning of this paper, we questioned the tenets of a too narrow binary Postcolonialism and the increasing need for a more inclusive paradigm to interrogate peripheral and semi-peripheral Modernisms. We have seen the ways that an anthropological approach can bring us to a renewed awareness

of the sensuous – the encounter with An Sùileachan, in particular, is first and foremost a physical one. We have seen that a purely hermeneutic approach can blind us to what is in front of our eyes as we search for inner meaning. However, it is also clear that whilst the sensuous is a starting point, it has to be allied to the interpretation of a code. The surface textures of the stone at An Sùileachan or the technical features of The Ring Net are ways to draw us into a dialogue – they represent innovative ways to open our eyes so that we might re-enter the other country of our pasts without the ‘assistance’ of a ‘grand narrative’ to guide us. As we have seen above in the discussion on Postmodernism, the surface similarities between Maclean’s work and the most renowned of the Postmodernists is misleading. The probing to the historical narrative, the ‘mutations from below’, remains the central task of interpretation – we have to analyse the formal elements which are used to redress the injustices of the past by giving voice to those whose voices were not heard. In order to understand the formal features of the peripheral and semi-peripheral Modernisms we have to investigate further the specific forces – social and political – which provoked them. Through a focus on two of Maclean’s artistic collaborations/interventions above – with Martin and the fishing community of Kintyre and with Leven and the crofting/coastal community of Reef – we have begun a dialogue about the vital role that art on the edge can play to help us reconfigure our historical ontologies.

## References

- Alexander, M. (Director). (1977). *Norman MacCaig: A man in my position* [Motion picture]. Pelicula Films.
- Allerston, P. (1990, May). *The ring net by Will Maclean* (Unpublished MLitt dissertation). St Andrews: University of St Andrews.
- Collective, W. R. (2018). “*New Europe*”. *Peripheral modernity and the literary world system*. Retrieved from <https://warwick.ac.uk/fac/arts/english/research/currentprojects/collective/project/nepmlws/>
- Deleuze, G. (2004[1994]). *Difference and repetition*. New York: Continuum.
- Eliot, T. (1970[1966]). Tradition and the individual talent. In J. Scully (Ed.), *Modern poets on Modern poetry* (pp. 60–68). London: Collins Fontana.



- Foucault, M. (1986[1970]). *The order of things: An archeology of the human sciences*. London: Tavistock.
- Hughes-Freeland, F. (2007). Tradition and the individual talent. T. S. Eliot for Anthropologists. In E. Hallam (Ed.), *Creativity and cultural improvisation* (pp. 207–222). Oxford: Berg.
- Lyotard, J.-F. (1988). *Peregrinations: Law, form, event*. New York: Columbia University Press.
- MacLean, S. (1985). Old songs and new poetry. In S. MacLean (Ed.), *Ris a Bhruaich: The criticism and prose writings of sorely MacLean* (pp. 106–119). Stornoway: Acair.
- Maclean, W. (2011). *Will Maclean: Collected works 1970–2010*. London: The Fleming-Wyfold Art Foundation.
- Macrae, A. (2010). *Norman MacCaig*. Tavistock: Northcote.
- Martin, A. (1981). *The ring-net fishermen*. Edinburgh: John Donald.
- Martin, G. D. (1975). *Language truth and poetry: Notes towards a philosophy of literature*. Edinburgh: Edinburgh University Press.
- Milosz, C. (2006). *Selected poems 1931–2004*. New York: Harper Collins.
- Sim, S. (2001). Postmodernism and philosophy. In S. Sim (Ed.), *The Routledge companion to Postmodernism* (pp. 3–14). London: Routledge.
- Stafford, B. M. (2001). *Visual analogy: Consciousness as the art of connecting*. Cambridge: MIT Press.
- Usenyuk-Kravchuk, S. (2017) Visual Explorations into the World of Arctic Nomads: The Everyday World of a Nomadic Woman: Needlework. In M. Huhmarniemi (Ed.), *Re-late North 2017: Art and Design for Education and Sustainability* (p. 23). Rovaniemi, Finland: University of Lapland.
- Woods, A. (1987). Will Maclean. In C. Runkel (Ed.), *Will Maclean: Sculptures and box constructions 1974–87* (pp. 5–11). London: Claus Runkel Fine Art.
- Worringer, W. (1997[1908]). *Abstraction and empathy: A contribution to the psychology of style*. Chicago: Elephant Paperbacks.
- Yeats, W. (1968). Preface to the Well of Saints. In A. Saddlemeier (Ed.), *J. Synge, Collected Works, Vol. 3*. (pp. 298–305). London: Oxford University Press.
- Yeats, W. (1970 [1966]). A general introduction for my work. In J. Scully (Ed.), *Modern poets on Modern poetry* (pp. 15–27). London: Collins Fontana.

*Jonna Häkkilä and Milla Johansson*  
University of Lapland, Finland

# Arctic Design for a Sustainable, Technological Future



In this chapter, we describe the design approach taken in two exhibitions, *Kaiku* (2016) and *Vaana* (2017), exhibited at Milan Design Week, Ventura Lambrate, by the University of Lapland. The two exhibitions combine an Arctic Design approach with visions for a sustainable and human-centric technology future. Arctic Design reflects the profile of the University of Lapland, Faculty of Art and Design. Situated at the Arctic Circle in Finland, Northern nature and culture are an integral part of the design context. Sustainability and respect for the fragile Arctic nature is at the core of Arctic Design. The inspiration for design is often sought from the Arctic nature, and is visible in both the materials used and the simple and pure forms of the design products. Sustainability is reflected in the use of natural materials and designing long-lasting, functional artifacts, where the aesthetics are found in the distinctive and purposeful style of the design. Wood, reindeer leather, snow and ice are materials with both traditional and contemporary applications. However, Arctic Design does not only build on tradition, but combines it with future visions. The interactive experiences of *Kaiku* and *Vaana* aimed to provide glimpses of the purity and serene beauty of the Arctic to the exhibition visitors, with a twist of the modern. In this chapter, we suggest how high-end technology can be integrated with design.

In this chapter, the term Arctic Design is used in a wide sense to cover different design approaches that have a linkage with the Arctic aspects, whether it is through the context, materials, message, or some other aspect. The work for the *Kaiku* and *Vaana* exhibitions has been conducted in collaboration with the students and the research programme *The Naked Approach – Nordic perspective to gadget-free hyperconnected environments* funded by Tekes, the Finnish Funding Agency for Innovation, demonstrating the close collaboration between the research institutes and the Faculty of Art and Design. The exhibitions form interactive spaces, where the visitors can touch and interact with the exhibition pieces. Whilst technology was used to create the interactive experiences, it was hidden in the exhibited objects and the technical components were embedded as part of the artifacts. Together, the interactive experiences were designed to communicate the fragility and beauty of the north, as well as demonstrate how

the technology can be integrated in future artifacts in a calm and aesthetic manner. The exhibition pieces also envision how technology can contribute towards a more sustainable future.

This chapter contributes to the academic discussion on Arctic Design, which has only just begun (Tahkokallio, 2012). The chapter provides insights on how design can combine and communicate visions of sustainable future, it also showcases examples where Arctic Design meets technology. In the next section, we discuss the design context; relevant technology trends, and introduce different dimensions of Arctic Design. We then bind these two themes together by introducing how they meet in two design exhibitions, *Kaiku* and *Vaana*, and present selected exhibition pieces in more detail.

## **The Design Context**

In the constantly changing world, the recent decades have demonstrated an increasingly fast development in technology as well as socio-economical changes, which have a great impact on our future. Trends such as global warming, increasing population, urbanization and the socio-economic challenges of consumer society have created ecological risks, which greatly affect the ecology and future of the entire planet. Sustainability has been recognized as a key challenge, which needs to be addressed with a wide spectrum of solutions across the society. The increasing awareness of the ecological challenges has directed more attention towards Arctic topics and increased the general interest in the Nordic area. In these discussions, the fragile nature of the Arctic and sub-Arctic regions is highlighted, as they are especially sensitive to environmental changes.

However, there are positive developments which can be harnessed for a better tomorrow. These developments can roughly be divided in two categories, which both are important and contribute to positive change for a more sustainable future: awareness and attitudes for behavior change and technological advances that will help to overcome a versatility of challenges. The two exhibitions presented in this chapter target both of the goals (increased awareness and technological advances). Firstly, the exhibitions presented here

highlight the special characteristic of northern environments and engage the visitors with topics relevant to the north and sustainability. This increases the general awareness for caring for the nature. Secondly, the exhibition pieces use new technologies combined with design, providing visions of more sustainable world and the roles that new technologies can play in it.

The design of interactive artifacts touches the field of Human-Computer Interaction (HCI) and brings together two different disciplines; computer science and product design. These two fields meet at the cross-section of interaction design, which is at the core of HCI, and which defines how the interactive systems are manipulated by the user and the kind of output that results. The outcomes aim to provide inspiring and interesting user experiences, where holistic design approach combines both utilitarian and hedonic aspects (Hassenzahl & Tractinsky, 2006). From the interaction design point of view, the physical artifacts in the exhibition need to be usable and reliable, yet at the same time inspiring and aesthetic. To understand the background to the interaction design in the exhibition as well as the technologies used, we next address these topics.

### **Towards Calm and Sustainable Ubiquitous Computing**

Computing in its different forms has emerged in (virtually) all fields of our everyday life. Interaction with smart phones, tablets, and different types of media gadgets are embedded in our (urban) lifestyle. Due to the technology miniaturization and decreased manufacturing costs, the trend of embedding smart computing modules into different products and everyday objects has gained speed. Smart watches, activity bracelets and home automation systems are commonly used today and represent examples of the world getting 'smarter'. The term 'ubiquitous computing' is used to refer to the approach, where sensors and other computing modules are embedded into our surroundings and where the world around us can detect, infer and respond to our actions and needs.

The vision of ubiquitous computing was presented by Mark Weiser in his seminal paper 'The computing for 21<sup>st</sup> century', which became a driving

vision for the research community (Weiser, 1991). In this vision, Weiser painted a world where the technology is so entwined with our surroundings, that it disappears into the background and so goes unnoticed by the user. The technical future is envisioned to be calm and the operations happening without distracting or loading the people (Weiser & Brown, 1997). When looking at the world today, we are still far from that vision, with different screens, displays and devices fighting of our attention.

Research on ubiquitous computing has been quite technology driven, first focusing on creating the technical functionality and making them feasible enough to be applied further. As the focus has been on developing the technology to enable new products, there has been less attention devoted to the user experience design and user centric approach (Väänänen-Vainio-Mattila, Olsson, & Häkkinen, 2015). Now that the technology has matured and, for example, accessible prototyping kits have been developed, there are better opportunities to explore the possibilities for design. Our design pieces apply different approaches that extend over the conventional solutions of interactive technology: tangible interactions, new materials, modular and adaptive computing units, and energy harvesting technologies. These elements contribute towards looking at the technology future from a different angle.

**Tangible User Interfaces** (TUIs) are User Interfaces (UIs), where the physical form factor is touched and handled for input in an interactive system. Tangible UIs go beyond conventional mouse and keyboard type user interfaces and are promoted, for example, in designing aesthetic and experience rich interactive systems, as well as a more intuitive way to interact with computers (Ishii, 2008). The physical nature of the user interface, its shape and materials, provide opportunities for designing expressions and mediate emotions, factors that conventional computing interfaces are criticized for (Hornecker, 2011). With tangible UIs, materiality plays a central role. The experience with materials is not only limited to haptic feedback and touch sensation, but materials also affect to the visual design and the style. With material selections, the designer can promote values and create associations, as for instance investigated by Häkkinen, He and Colley (2015) for natural materials. Tangible user

interfaces can utilize, for instance, wood or water as an interactive element, and thus emphasize the connection with nature. The tangible sensation can be used to create memorable and surprising user experiences and especially water has been described to intensify the experience with the system when touched (Pier & Goldberg, 2005; Lappalainen, Korpela, Colley, & Häkkinen, 2016).

**Wearable computing** is a term that covers different types of wearable form factors for interactive technologies and computing. Wearable computing includes a wide variety of different form factors, reaching from interactive garments to accessories such as jewelry, handbags as well as wrist-worn and head-mounted devices. Whereas a smartphone is today the *de facto* form factor for everyday mobile computing, wearable computing is estimated to be the next step in this evolution. Consumer products in the area now focus on smart watch and bracelet form factors, which have become commonplace especially in the area of wellness and activity tracking. However, the advances in material technologies, smart textiles and component integration, sensors and other electronic components are making their way into clothes (Häkkinen, 2017). As an output, wearables typically employ screens, single LEDs, or shape-changing (Schneegass, Olsson, Mayer, & Laerhoven, 2016). The concepts presented in the research domain have so far focused more on explicit information visualization rather than ambient displays for example, in a shirt-integrated information display for fellow joggers (Mauriello, Gubbels, & Froehlich, 2014). In addition, wearable computing opens up new perspectives from the sustainability point of view. For instance, the possibilities to use organic materials, waste and recycling aspects are areas that need further research.

**Printed electronics** is an area with a huge potential impact on manufacturing of consumer electronics. In printed electronics, the components and their wiring is printed on a flexible surface, such as paper. The ability to use standard roll-to-roll printing technologies enables low cost mass production and the area is under a vast development both in terms of the materials, such as inks and manufacturing processes. For sustainable technologies an especially interesting area is utilizing a printed electronic approach to manufacture solar cells. With computing becoming ubiquitous, energy consumption is an

important aspect to take into account. Energy harvesting techniques can be used to power distributed or mobile computing units and solar cells offer a clean energy option. Functional printed electronics solar cells have already been demonstrated, and they offer great potential for the future (Välimäki, Jansson, Korhonen, Peltoniemi & Rousu, 2017).

### **Arctic Design as a Possibility for Designers**

With Arctic Design, the design process itself can be quite conventional and universal, as explained in classic textbooks (Ulrich & Eppinger, 2016). Nevertheless, the context of the Arctic is unique in the process. As pointed out by Miettinen, Laivamaa and Alhonsuo (2014), the Arctic environment and conditions create special challenges and needs for product and service design. It demands expertise and understanding to apply the specific Arctic qualities to the design. Therefore, the Arctic viewpoint is researched widely at the University of Lapland and is part of its strategic profile. The university's vision is to create and to be recognized for, an international profile as an Arctic and Northern university of science and art (University of Lapland, 2018).

The Arctic environment works as an extraordinary source of inspiration. Traditionally Finnish designers have sought creativity from Lapland. One iconic example is designer Tapio Wirkkala's glassware *Ultima Thule*, designed in the 1960's, inspired by the melting ice. Furthermore, designers today use Arctic nature as a source of inspiration, since the natural surroundings are easily accessible and omnipresent. Designer Maija Puoskari was inspired by a peaceful view at her annual vacation spot in Lapland: the mountain Saana and the lake Kilpisjärvi. She captured the views in a mirror *Tyyni*, designed with Tuukka Tujula in 2015.

In Arctic Design, the connection with nature is almost instinctive; the materials used in design are preferably from nearby and sustainable sources, since the impact to environment is so evident. The principles for sustainable material selection often include aspects such as production methods, functionality, user preferences, design, price, environmental impact and lifetime of products



(Ljungberg, 2007). Genuine material qualities are often utilized and emphasized. Consequently, the design is affected by the choice of sustainable material.

The Arctic environment with its dark winters, cold temperatures and masses of snow and ice brings particular challenges to design, but is also an enabler. For instance, frozen lakes can be used as ice roads and dinner acquired with ice fishing. Skiing and ice-hole swimming are common cultural activities. Testing for harsh conditions is included in the Arctic product design process, in addition to the expertise in material and mechanical engineering (Miettinen, Laivamaa, & Alhonsuo, 2014). The harsh conditions work as an exceptional platform for product testing, and are utilized e.g. by the automotive industry.

In addition, the culture of Arctic areas is a valuable asset for creativity. It is specifically important and emphasized in Arctic Design to respect the native culture. Therefore, as well as a sensitive and fragile ecology, the Arctic areas are also dealing with very sensitive cultural issues (Hardt, 2012). Even if traditions serve as a source for inspiration, current Arctic Design is created for the future. The beauty of the Arctic can be found both in its wild nature and in its urban environments. The Arctic is not just ice and snow, midnight sun and mosquitos. It is also a way of living and thinking, embedded in the mindset and practices of people living in the North. To deal with the conditions and to enable comfortable living, it is common to use specifically designed products, such as window blinds to block the sunlight in the summer night, or winter tires for bicycles to continue riding in the snow. Restaurants and hotels made of snow and ice have become common tourist attractions.

There are vast design possibilities if seen from the Arctic perspective and Arctic Design as a concept has potential for the future. Distinctive design is remarkable in this time, when information is distributed real-time from anywhere to anyone, and globally designs can easily resemble each other. However, as expressed by Härkönen and Vuontisjärvi (2017) the definition of local becomes challenging as people move and travel more regularly. Thus, it is important that the specific qualities of Arctic Design are maintained, emphasized and respected.

## Arctic Design Exhibited – Vaana and Kaiku

### THE EXHIBITIONS

In the following sections, we present two exhibitions focusing on Arctic Design, *Kaiku* and *Vaana*. From the outset, a specific theme around Arctic Design was developed to be applied in *Kaiku* ('echo' in Finnish) and *Vaana* ('sparseness' in Northern Sámi). A multidisciplinary group of design students created the frame for the exhibition pieces, also reflecting the overall theme.

In *Kaiku*, the exhibition theme was to look at the Arctic beauty and everyday life in the North from a specific angle (Figure 1). People living in the Arctic area are an integral part of the environment. People's actions effect the fragile environment, as according to the Finnish saying, "when you shout in the forest, the same echo returns". This philosophy offered inspiration to create natural, fluent, and enabling design pieces that at the same time addressed the call for sustainability related to the Arctic.

In *Vaana*, the exhibition theme was to combine views on scarcity and minimalism in the Arctic (Figure 2). Inspiration for this interactive exhibition was the light and its significance in the Arctic environment. The design was driven by the experience of the long dark polar night. The Arctic winter intensifies the forms of the surroundings. In the time of the darkness, even the dimmest colours seem bright and inspiration is sought from the tiniest details.

Both exhibitions had a strong emphasis on interactivity and User Experience (UX) design, enabled with technology. With the exhibition pieces, interacting with the design pieces using your body and gestures gave a stimulating experience. The visitor was not only an observer, but also an interactive participant at the exhibition. With active participation, the connection with the context became more powerful. Authenticity and the seamless integration of raw and refined materials provided holistic experiences, which were emphasized when interacting with the products. The exhibition pieces combined the knowledge of the Arctic, design and technical skills and were a showcase of multidisciplinary design collaboration. The exhibitions introduced the aspects of sustainability in the materials, technology and topics. Sustainable design

was present not only in the materials, but also in the manner the exhibition was constructed. The ability to move the exhibition fluently from one place to another and to recycle the construction materials supported this ideology. The interactive spaces of the exhibitions were created in collaboration with *The Naked Approach* research project (2014–2018). *The Naked Approach* project



*Figure 1. Kaiku at Milan Design Week. Photo: Milla Johansson, 2016.*



*Figure 2. Vaana at Milan Design Week. Photo: Vaana-project/Teppo Vertomaa, 2017.*

conducted research towards a significant paradigm shift in the relationship between people and the digital world. In the vision, the digital surroundings would form an “omnipotential” environment around the user, providing all the information, tools and services that the user needs in their everyday life. The research program was built on strong Finnish assets: Nordic excellence in user centric design, and the globally respected quality in ICT, including emerging technologies in electronics manufacturing and integration (Häkkinen, Colley, Rantakari, Aikio, & Pentikäinen, 2016). In the research project, the University of Lapland had the role of designing and prototyping example cases aligning with this vision. The project’s theme was applied to the exhibitions, and the interaction design and technical implementation related to the exhibition pieces was conducted by *the Naked Approach* project.

#### **THE PROCESS AND THE VENUES**

The exhibitions were designed, developed and produced by multidisciplinary groups of bachelor degree students during their third year of study. The students represented industrial design, graphic design, interior design, clothing design and audiovisual media culture at the Faculty of Art and Design, University of Lapland. Students applied to the project with motivation letters, and the most promising team was selected by the supervisors. In addition to creating the exhibition content, the students also learned collaboration skills at several levels. The students communicated with research projects, companies, design fair organizations, press and sponsors. They learned how to manage a multidisciplinary project with realistic budgets, resources and schedules. Selected students were responsible for the exhibition frame: structures, lighting and other design elements. This resulted in a project, which was demanding, but also rewarding for the students. Over the year, a change in students’ ways of working towards a more professional and independent style was observed.

During the design process, the products were prototyped and tested in various stages. Testing was an important part of the design process, and several iterations were made. In both *Kaiku* and *Vaana*, the most challenging issues were related to ensuring the technology was as invisible as possible, whilst func-

tioning immaculately. After the pilot testing, the exhibition frame and pieces were developed and fine-tuned according to the feedback. Special attention was given to make the exhibition as memorable and fluent in interactivity as possible. As the user experience is subjective in nature, it is important to understand how exhibition pieces were perceived. Therefore, it was also central to study how users reacted to the interactive and multisensory exhibition elements.

**Arctic Design Week**, organized annually in Rovaniemi, Finland, was the most important pilot test for the exhibitions. The event includes exhibitions, seminars, workshops, and participatory events with a focus on Arctic design (Jokela & Tahkokallio, 2015). As Arctic Design Week takes place in February, it therefore allows time for further development before Milan Design Week, held in April. Arctic Design Week was also an effective learning point for the design students to organize the exhibition with everything that is included: invitations, press releases, posters and flyers, advertisement in social media, opening ceremonies, and introducing the exhibition pieces for the audience. Most importantly, it enabled acquiring feedback during the exhibition. The Arctic Design Week audience is international, and therefore, in addition to the local audience, it allowed collecting comments from an international public who are interested in Arctic Design. Also, according to Jokela and Tahkokallio (2015), the event is considered the most important local setting to introduce results from the Faculty of Art and Design. In addition to enhancing understanding of Arctic Design among the faculty, the event also strengthens the international importance of the locality (Jokela & Tahkokallio, 2015). With these interactive exhibitions, we encouraged discussions about the importance of unique areas of design in the arctic. However, the most significant fact according to Jokela and Tahkokallio (2015, pp. 131) is that the event has “provided students and teachers with a learning environment outside the university where various actors come together”.

**Ventura Lambrate at Milan Design Week**, Italy, was the main venue to present *Kaiku* (2016) and *Vaana* (2017) exhibitions. Ventura Lambrate is an exhibition area presenting young designers of the future and traditionally, in total, about 20 academies have been chosen to participate in this area. Overall, Ventura Projects are carefully curated design events in major design

hotspots like Milan, New York and Dubai with a high focus on contemporary design – both by new generation designers as well as by established brands and labels ([www.venturaprojects.com](http://www.venturaprojects.com)). The 7th edition of Ventura Lambrate in 2016 experienced an inspiring atmosphere in a unique area full of new design and concepts with 1873 journalists, 100,000 visitors and 27 academies, of which the University of Lapland was one. In 2017 the event had over 115,000 visitors and 22 academies participating the event with 12,000 square meters of space in 18 locations ([www.venturaprojects.com](http://www.venturaprojects.com)). The Milan Design Week is one of the main design events in Europe where indications of the future of design are seen. Therefore, it is an important platform also for the University of Lapland's visibility as a design school.

#### EXAMPLES OF THE INTERACTIVE DESIGNS

In the following, we present selected exhibition pieces from *Kaiku* and *Vaana*, and introduce how sustainable technology visions are integrated into them.

**Solar Shirt.** The Solar Shirt (Figure 3) is an interactive garment, which detects the level of noise pollution in the wearer's environment and illustrates it with a garment-integrated display (Roinesalo, Virtanen, Lappalainen, Kylmänen, & Häkkilä, 2016). The Solar Shirt is a wearable computing design concept and prototype, which combines several aspects relevant for Arctic Design including the values grounding the design, sustainable technologies, and material selections. The style and the material of the garment were designed to reflect the simplicity and silence of a snowy world, and associating it with the purity of nature. The Solar Shirt uses reindeer leather as its main material, giving it a soft and luxurious feeling. The concept uses printed electronic solar cells as part of the garment design. The cut-out patches of solar cells, developed by Finland's Technical Research Center VTT, are placed at the back and on the chest of the garment to capture the sunlight. Integrating solar cells to the design illustrates a design vision towards zero energy wearable computing.

The design of the Solar Shirt started from sketching scenarios and ideating the shape for the garment. Turning the concept into a physical prototype was then started, and different iterations were tested with a human size mannequin.



*Figure 3. Solar Shirt.  
Photo: Jonna Häkkilä, 2017.*

After several iterations (Häkkilä, 2017), the first full prototype was constructed from felt before the final design made of reindeer leather. The functional solar cell components were tested, but, due their insufficient power production, for the purposes of the concept an additional battery was added to run the noise sensor and electrochromic display components. The solar cells however provide an inspiring example of how they can be embedded as part of a holistic garment design in the future.

#### **Breaking of the Dawn jacket**

is a winter jacket, which detects the ambient light level and utilizes LEDs to light up the darkness (Roinesalo, Lappalainen, Colley, &

Häkkilä, 2017). The garment is made of reindeer leather, and was inspired by the Northern winter, the glittering snow and auroras. The jacket design was targeted to be both aesthetic and functional, fitting to the winter context. In subarctic conditions, sunlight plays an important role affecting people's everyday life. The concept integrates LED lights (at the hem) and a colour-changing ornament pattern (at the chest), which is made of thermochromic ink (Figure 4). A light sensor embedded in the garment measures the ambient light level and with dim light conditions, the LEDs light up and heating elements, hidden behind the thermochromic ink ornamental design, turn on. In the Arctic winter, the lights support the user's visibility in the darkness.

The jacket was created through iterative design, with several experiments with the materials and technology integration. The first prototype was made of

cloth and employed large areas of thermochromic ink. Based on the experiments, for the final prototype, the heating element configuration was redesigned, and the patterns for colour-changing visuals were made visually lighter, to resemble snowflakes. The electronic elements were attached to a separate inner lining, which was then integrated to the garment. The final garment was made from reindeer leather, reflecting the traditional reindeer herding industry of the Arctic areas. This was complemented with sheep fleece from a local producer, placed in the collar and cuffs.

**The Water Table** was a table-based installation, where visitors could place their hands in a flowing stream of illuminated water to adjust its colour (Lappalainen, Colley, & Häkkilä, 2017). Two streams of water, illuminated with blue and red lights, were flowing and merging to one stream, illuminated with purple (Figure 5). Restricting the flow of water from the red (or blue) source stream reduced the amount of it in the lower stream, accordingly, creating different hues of purple. The hands placed in the flowing water were detected with capacitive sensors, placed on the upper part of the stream. The water bowl design was modelled based on the Lemmenjoki river in Lapland, Finland, and using Light Detection And Ranging (LIDAR) radar data. LIDAR data mesh count was reduced and scaled vertically to provide better and smoother flow of water on a smaller scale. The water trough was then vacuum-formed from 4mm opaque acrylic sheet, and an aquarium pump was used to



*Figure 4. Breaking of the Dawn jacket.  
Photo: Jonna Häkkilä, 2017.*



provide a constant water flow to the “river”. The water was circulated from a 20 litre tank hidden underneath the table construction.



*Figure 5. Interacting with the Water Table. Photo left: Milla Johansson, 2017. Photo right: Vaana-project/Teppo Vertomaa, 2017.*

**The Solar Cell Tree** was a modular interactive installation, where hexagonal modules were embedded to a tree shaped construction (Figure 6). The hexagonal shapes made of wood included different computing elements, creating a modular and reconfigurable interactive system. By removing and attaching the pieces, different sensor-display constructions could be made. This type of modular computing devices represents a future vision, where technical gadgets can take different forms according to the use context and user’s needs.

In the Solar Cell Tree installation, the hexagonal modules were composed of illuminating displays, sensor modules, or printed electronic solar cells elements. The exhibition visitors could remove and attach the modules, thus

creating different light effects to the tree. The tree, as well as the frame of the modules were made of wood, creating a warm and aesthetic design.

## Discussion

When Arctic Design as a concept is expressed in physical objects, it becomes more tangible to comprehend and discuss. Designers in Arctic areas often integrate Arctic values naturally into their design work. Arctic Design is a combination of art, science and design aiming to solve the particular issues of remote places and sparsely populated areas (Jokela & Coutts, 2015). By living and working in the Arctic areas, designers are familiarized with these principles, and the contact to the surrounding environment are apparent. However, when someone from a different background, context and experiences approaches the design work, it is perhaps easier to recognize the unique features of the outcomes. Specifically, when the results are exposed to an audience in an international forum, the particularity of the Arctic approach is emphasized.

In order to share views on Arctic issues with the design world, it is necessary to take part in international design events. It cannot be expected that people visit the North in order to explore the visions of design in the Arctic, but we need to travel to where major design events are taking place. Design events work as a meeting place and a forum for networking internationally, presenting



*Figure 6. Solar Cell Tree. Photo: Vaana -project/Teppo Vertomaa, 2017.*

new talent, launching new products, and bring knowledge to the participants about important design issues. Currently, Arctic Design is being discussed and defined as a concept (Tahkokallio, 2012). Making Arctic Design known in major design events enables more participants to enter the discussions. It is also important to drive discussions to create awareness amongst decision makers about the Arctic values and fragility of the nature.

The design exhibitions *Kaiku* and *Vaana* provoked curiosity and enthusiasm among exhibition visitors, as was evident by their reactions and comments. Especially, the tangible aspects, such as placing a hand in water and feeling it flow through the fingers, evoked positive reactions, expressed with smiles and enthusiastic comments. In our experience, a very effective way to engage visitors in design events is to let them participate and interact with the design pieces. This contrasts with the customary way of displaying design pieces in a gallery-like manner, where the visitor is prohibited to touch the products.

The pieces presented in *Kaiku* and *Vaana* are all interactive in some way that associates with the Arctic. By being specialists in Arctic Design, it is our task to raise the consciousness and make Arctic issues visible to others. It is important to showcase the specialty of the circumpolar environment and the shared values concerning design. As pointed out in earlier research, physical contact with natural elements can create strong associations and memorable experiences (Häkkinen et al., 2015). With the exhibition pieces, we aimed to raise different aspects of Arctic Design, and create experiences that would provoke interest in the fragility and beauty of the Arctic, as well as nature in general. Design can also be used as a tool to communicate the possibilities of future technologies, such as embedded solar cells and tangible user interfaces.

## References

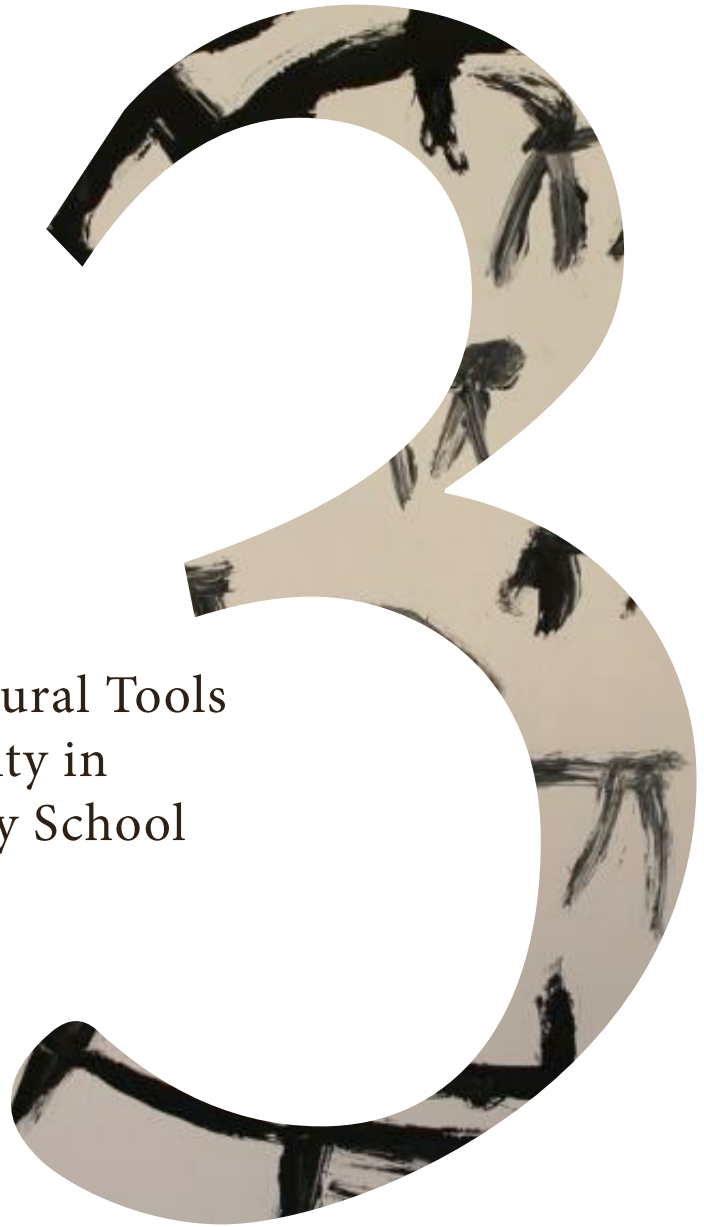
Häkkinen, J. (2017). Designing for smart clothes and wearables: User experience design perspective. In S. Schneegass & O. Amft (Eds.), *Smart textiles: Fundamentals, design, and interaction* (pp. 259–278). Cham: Springer.

- Häkkinen, J., Colley, A., Rantakari, J., Aikio, J., & Pentikäinen, V. (2016). *On the road to digital paradise: The naked approach*. Oulu: VTT.
- Häkkinen, J., He, Y., & Colley, A. (2015). Experiencing the elements: User study with natural material probes. In *Human-Computer Interaction – INTERACT 2015* (pp. 324–331). Cham: Springer. doi:10.1007/978-3-319-22701-6\_24
- Hardt, M. B. (2012). The story of the frozen ice or the art of sustainable design in the Arctic. In P. Tahkokallio (Ed.), *Arctic design: Opening the discussion* (pp. 48–53). Rovaniemi: University of Lapland.
- Härkönen E., & Vuontisjärvi H.-R. (2017). Arctic art & design education and cultural sustainability in Finnish Lapland. In T. Jokela & G. Coutts (Eds.), *Relate North: Practising place, heritage, art & design for creative communities* (p. 87). Rovaniemi: Lapland University Press.
- Hassenzahl, M., & Tractinsky, N. (2006). User experience – a research agenda. *Behaviour & Information Technology*, 25(2), 91–97.
- Hornecker, E. (2011). The role of physicality in tangible and embodied interactions. *Interactions*, 18(2), 19–23. <https://doi.org/10.1145/1925820>
- Ishii, H. (2008). Tangible bits. Beyond pixels. In *Proceedings of the 2<sup>nd</sup> international conference on Tangible and embedded interaction (TEI '08)*. New York, NY: ACM. doi: 10.1145/1347390.1347392
- Jokela, T., & Coutts, G. (2015). Preface. In T. Jokela, & G. Coutts (Eds.), *Relate North: Art, Heritage and Identity* (p. 11). Rovaniemi: Lapland University Press.
- Jokela, T., & Tahkokallio, P. (2015). Arctic Design Week: A forum and a catalyst. In T. Jokela, & G. Coutts (Eds.), *Relate North: Art, heritage and identity* (pp. 119–123). Rovaniemi: Lapland University Press.
- Lappalainen, T., Colley, A., & Häkkinen, J. (2017, September 4). Water table: Utilizing flowing water as an input mechanism. In *The 2<sup>nd</sup> NatureCHI workshop at Mobile-HCI 2017*. Vienna, Austria.
- Lappalainen, T., Korpela, J., Colley, A., & Häkkinen, J. (2016). Experiential tangible UI for controlling lighting. In *UbiComp 2016. Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct* (pp. 317–320). New York: ACM. doi:10.1145/2968219.2971380
- Ljungberg, L. Y. (2007). Materials selection and design for development of sustainable products. *Materials & Design*, 28(2), 466–479.
- Mauriello, M., Gubbels, M., & Froehlich, J. (2014). Social fabric fitness: The design and evaluation of wearable E-textile displays to support group running. In *Proc. CHI'14. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 2833–2842). New York: ACM. doi:10.1145/2556288.2557299
- Miettinen, S., Laivamaa, L., & Alhonsuo, M. (2014). Designing Arctic products and

- services. In T. Jokela, & G. Coutts (Eds.), *Relate North 2014: Engagement, art and representation* (pp. 105–109). Rovaniemi: Lapland University Press.
- Pier, M. D., & Goldberg, I. R. (2005). Using water as interface media in VR applications. In *CLIHIC '05 Proceedings of the 2005 Latin American conference on Human-computer interaction* (pp. 162–169). New York: ACM. doi:10.1145/1111360.1111377
- Roinosalu, P., Lappalainen, T., Colley, A., & Häkkinen, J. (2017, September). Breaking of the dawn jacket. Light in the Arctic winter. In *Proceedings of the 2017 ACM International Symposium on Wearable Computers* (pp. 232–237). New York: ACM. doi:10.1145/3123021.3123074
- Roinosalu, P., Virtanen, L., Lappalainen, T., Kylmänen, A., & Häkkinen, J. (2016). Solar shirt. Design of an environmental awareness wearable. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct (UbiComp '16)* (pp. 495–499). New York: ACM. doi:10.1145/2968219.2971350
- Schneegass, S., Olsson, T., Mayer, S., & van Laerhoven, K. (2016). Mobile interactions augmented by wearable computing: A design space and vision. *International Journal of Mobile Human Computer Interaction*, 8(4), 104–114.
- Tahkokallio, P., (Ed). (2012). *Arctic Design – opening the discussion*. Rovaniemi: University of Lapland.
- Ulrich, K., & Eppinger, S. (2016). *Product design and development*. (6<sup>th</sup> ed.). New York: McGraw-Hill.
- University of Lapland. (2018) *University of Lapland Strategy 2025*. Retrieved from <https://www.ulapland.fi/InEnglish/About-us/Strategy-2025>
- Välimäki, M., Jansson, E., Korhonen, P., Peltoniemi, A., & Rousu, S. (2017). Custom-shaped organic photovoltaic modules – freedom of design by printing. *Nanoscale Research Letters*, 12(1), 117.
- Väänänen-Vainio-Mattila, K., Olsson, T., & Häkkinen, J. (2015). Towards deeper understanding of user experience with ubiquitous computing systems. Systematic literature review and design framework. In *15<sup>th</sup> IFIP TC 13 International Conference on Human-Computer Interaction, INTERACT 2015* (pp. 384–401). Berlin, Germany: Springer. doi:10.1007/978-3-319-22698-9\_26
- Ventura Projects. (2018). Retrieved from <http://www.venturaprojects.com/>
- Weiser, M. (1991). The computer for the 21<sup>st</sup> Century. *Scientific American*, 265(3), 94–104.
- Weiser, M., & Brown, J. S. (1997). The coming age of calm technology. In P. J. Denning, & R. M. Metcalfe (Eds.), *Beyond calculation: The next fifty years of computing* (pp. 75–85). New York, NY: Springer.

*Tarja Karlsson Häikiö*  
University of Gothenburg, Sweden

Art-Based Projects as Cultural Tools  
for Promoting Sustainability in  
Preschool and Compulsory School



**T**hrough the use of artistic and cultural tools in daily educational and aesthetic practice, participation and cultural inclusion for children can be achieved. The chapter includes examples of art educational work in early childhood education and compulsory school that aims at enhancing children's rights to participation in society with artistic and cultural tools. Aesthetic practice is (Bendroth Karlsson & Karlsson Häikiö, 2014), and sustainable education has become, an important part of preschool and school and is today emphasized as over-arching goals in the curriculum for early childhood education and for compulsory school in Finland as well as in Sweden. A growing diversification and globalization are part of society today, and therefore it is necessary to highlight questions about sustainability and interculturality in education. An increasing diversification challenges a conception of society as culturally homogeneous (Nejadmehr, 2012), and brings forward a need to highlight a variety of methods for learning about ways to establish knowledge acquisition, as well as promote critical and inclusive practices. In an increasing multicultural, visualized and global society, it becomes crucial to reflect on changing conditions, and a revision of the traditional educational methods in preschool and compulsory school becomes necessary. This chapter asks how we can we work with methods to encompass more complex questions in relation to education and learning and what part work with art education, sustainability and participation can have in this?

In the chapter is discussed how agency and cultural participation can be created for children and young people by using art and culture as tools in the formation of knowledge and learning through art experiences and art education. Later on I discuss how cultural activities and organization of environments can be used as opening for reflection on issues about sustainability using explorative processes and creative dialogues in public spaces, the preschool atelier or in the art classroom. In the chapter there are examples of writings in the curriculums for early childhood education and compulsory school in Finland and Sweden that have implications for environmental ethics and sustainable education, and the role of education in creating an inclusive and sustainable society. A transformative approach to learning is claimed to empower children's visual capacity

and knowledge-building. Art educational activities are claimed to constitute agency for children through cultural participation, meaning through offering empowerment and possibilities for children to act on their own terms, through making personal choices and exploring the world.

In a 2016 UNICEF-report, Kailash Satyarthi claimed that children deserve equality, freedom and quality education to be basic rights and that the world needs a more inclusive and sustainable society. He stated that for the first time, clear targets have been set through the adoption of the *Sustainable Development Goals* (SDGs).

Sustainable societies can only have a prosperous future when their children are safe, educated and healthy... We have an opportunity to embrace peace, equality, inclusivity and sustainable development by ensuring freedom for all. But we can only do so when governments, businesses, civil society and citizens unite, and when each carries out its role willfully and effectively. (Satyarthi, 2016, p. 86)

Work with sustainability in relation to education can thus be seen from environmental, social or economic perspectives (Macdonald & Jonsdottir, 2014). Wals, Stevenson, Brody & Stevenson (2014) refer to the importance of developing a greater global awareness where perspectives are different from the traditional school-oriented forms of acquiring knowledge, and the need to encompass new strategies for learning leading to opportunities for greater insight into what is happening in the world.

### **Sustainability and Cultural Perspectives in the Curriculum for Preschool and Compulsory School**

In Finland and Sweden, as well as in Norway, early childhood education and pre-school activities are based on statutory and official documents such as the curriculum (Rantala, 2016; Taguma, Litjens & Makowiecki, 2013; Nygård, 2017). In the steering documents for early childhood education in Finland the



primary task of the educators is to promote the personal wellbeing of children, to strengthen forms of behavior and to consider ways to relate to other people, and to gradually increase the independency of the children (Rantala, 2016; Stakes, 2005). In the instructions for the child's early childhood education and care plan in Finland there is an emphasis on the individual child even though the significance of the group, group activities and the learning environment is also described (*Varhaiskasvatussuunnitelman perusteet*, 2016). Cultural diversity and sustainability can also be identified in the curriculum as aspects that should be implemented in the early childhood education:

In the education of children, the Finnish cultural heritage, national languages and the cultural, linguistic and visual diversity of the community and the environment are valued and exploited. This requires, from the pedagogical staff, knowledge about other cultures and different views, and the ability to see and understand things from many perspectives and to settle in another persons' position. Different thinking and practices are being discussed constructively as well as new ways of working together. At the same time, culturally sustainable development is promoted. (*Varhaiskasvatussuunnitelman perusteet*, 2016, p. 63)<sup>1</sup>

In the curriculum for compulsory school in Finland there are the same kinds of formulations in the guidelines:

Pupils will grow into a world that is culturally, linguistically, religiously and visually diverse. A culturally sustainable way of life and a multifaceted environment require cultural know-how based on respect for human rights, interaction skills and means to express themselves and their views. (*Perusopetuksen opetussuunnitelman perusteet*, 2014, p. 21)<sup>2</sup>

In the curriculum for compulsory school, in the learning goals for the subject visual arts, an inter-relationship between aesthetic education and sustainable

development is encouraged, through the teacher taking account of issues on cultural diversity and sustainable development when choosing content and methods in the teaching (Peruskoulun opetusasuunitelman perusteet, 2014).

In the regulation on a new curriculum for early childhood education in Sweden (Förordning om läroplan för förskolan, SKOLFS 2018:50) these perspectives are described as follows:

The education should be conducted in democratic forms and lay the foundation for a growing interest and responsibility in the children to actively participate in society and for sustainable development – economically, socially and environmentally. Both a long-term and global future perspective need to be made visible in the education.... Education in preschool should lay the foundation for the children to understand what democracy is. Children’s social development requires that they are able to take responsibility for their own actions and the environment in preschool. Children have the right to participation and influence. The needs and interests that the children themselves express in different ways shall form the basis for the design of the environment and the planning of the education. (Förordning om läroplan för förskolan, SKOLFS 2018:50, pp. 2, 11)<sup>3</sup>

Another perspective that is highlighted is the need for children to create an understanding for others and to show compassion and empathy since the “education shall be characterized by openness and respect for differences in people’s perceptions and ways of life”, “give the children the opportunity to reflect on and share their thoughts on life issues in different ways”, and the preschool should give children possibility to develop “cultural identity as well as knowledge of and interest in different cultures and understanding of the value of living in a society characterized by diversity” (Förordning om läroplan för förskolan, SKOLFS 2018:50, p. 2).<sup>4</sup>

According to the curriculum for the compulsory school in Sweden, the teacher is responsible for ensuring that every pupil enjoys a good learning environment and has gained knowledge about sustainable development in the

education in compulsory school (Läroplan för grundskolan, förskoleklassen och fritidshemmet, Lgr11, p. 14). In the curriculum it is written as follows:

Through an environmental perspective, they [the pupils] are given the opportunity to take responsibility for the environment themselves and can directly influence and acquire a personal approach to overall and global environmental issues. Teaching will highlight how society's functions and our ways of living and working can be adapted to create sustainable development. (Läroplan för grundskolan, förskoleklassen och fritidshemmet, Lgr11, p. 10)<sup>5</sup>

These new directives, described above, encompass sustainability, cultural diversity and highlight the importance of aesthetic activities and children to be creative and form knowledge in different ways. Even though empathy, sustainability and multicultural perspectives have gained a more prominent role, still aesthetic subjects and questions on interculturality are given less emphasis in the learning goals in the curriculum (Lorentz, 2016). For instance, aesthetic perspectives are only described in one of the achievement goals in the Swedish early childhood education curriculum (Förordning om läroplan för förskolan, SKOLFS 2018:50). This means that aesthetic education is still marginalized in Swedish early childhood education (Ehrlin & Wallerstedt, 2014), but also in compulsory school. Alexandersson (2011) has pointed at historically opposed perceptions on aesthetic and practical school subjects compared to other school subjects with a more theoretical subject-base, and on repeated changes in political perceptions and government decisions on the importance of aesthetic subjects for children and young people's learning and development.

### **Theoretical Perspectives on Agency, Participation and Transformative Learning**

In the area of education there has been a major change in the view of childhood in the last decades, from a perception of children's learning and development as

being socially constructed from a developmental psychological perspective, to a view where children can be understood as social actors on their own terms (James, Jenks, & Prout, 1998). This means that increased agency and possibilities for active participation for children and young people, as well as access to different institutions, situations and places, have contributed to the inclusion of children in society and given them a status as citizens in their own right (Colls & Hörschelmann, 2009; Morrow, 2008; Schmidt, 2011). Social constructionist theoretical perspectives are based on a view of knowledge generation which sees children as empowered and knowledge as socially and relationally constructed (Dahlberg, Moss, & Pence, 1999), and have come to influence Nordic early childhood education powerfully during the past decades (Bjervås, 2011; Carlsen, 2015; Dahlgren, Moss, & Pence, 1999; Hansson, 2018; Karlsson Häikiö, 2017a; Rantala, 2016).

These paradigmatic changes in the area of early childhood education have led to changes in the perception of the relationship between child and adult and in the conception and operationalization of quality in teaching. An inclusive and participatory paradigm (Hujala, Fonsén, & Elo, 2012) challenges an educational paradigm based on the perception of individual performance as the sole perspective in learning. The inclusionary approach takes into consideration both the cultural context and the subjectivity of quality (Dahlberg, Moss, & Pence, 2007; Hujala et al., 2012; Moss & Pence, 1994; Tauriainen, 2000). By seeing children as active subject creators, rather than objects of observation, new research methods and educational practices have evolved in the production of knowledge and understandings of children's lives (Dahlberg, Moss, & Pence, 1999; Lenz Taguchi, 2012; Moss, 2014; Olsson, 2012, 2014; Pascal & Bertram, 2009). Learning processes can be seen as transformative, where different forms of creation and communication is used simultaneously through use of different expressive forms as cultural tools, but also tools for learning (Häikiö, 2007; Karlsson Häikiö, 2017b; Mezirow, 1997; Säljö, 2010). A transformative approach to learning means that knowledge is generated and transformed during the learning process in constantly renewing situations (Stirling, 2014).

The Nordic countries' core values on education are based on democratic perspectives where children are to be seen as co-creators of society (Korpi, 2006;

Rantala, 2016). Still, when children should be seen as equal participants in society, they are not in reality always given priority either politically or economically (Heckman, 2011; Persson, 2014; Tallberg Broman, 2014). Education can even be considered to partly include nationalistic and mono-cultural perspectives (Lahdenperä & Sandström, 2011; Lunneblad, 2013, 2014). The paradigm shifts, progressive influences and critical pedagogy have led to a questioning of self-evident assumptions and called for increased awareness of the need for new perspectives. Radical thinking about transformative pedagogy can be derived from a longer tradition of socio-cultural enthusiasm and liberative pedagogy (Giroux, 2011; Kurki, 2000).

In recent years, ethically reflective and complex post-humanist approaches have replaced traditional and essentialist approaches to upbringing and education. New perspectives acknowledge the importance of learning environments and materials as agents in intra-active relationships and children and pupils as agentic or as in *becoming* (Hultman, 2011; Lenz Taguchi, 2012; Olsson, 2012, 2014; Rautio, 2012, 2014). Rautio (2014) broadens the perception of learning, questioning the point of view where an individual child builds knowledge about the world. In Rautio's (2010) research education and aesthetics is supported by ideas from sociology and human geography as well as environmental ethics. Rautio claims that studies on everyday life in relation to aesthetics and education outside of institutional art education are rare.

Materiality and access to spaces in society can be seen as a right for children and as a part of a sociocultural and socio-political context. Access to artistic and cultural experiences in preschool and compulsory school affects what agency children and pupils receive in relation to the community and society. Studies of children participating, e.g. in research, describe children's participation through decision-making (Clark, Kjørholt, & Moss, 2005; Kumpulainen, Lipponen, Hilppö, & Mikkola, 2013; Pascal & Bertram, 2009) and give examples of more inclusive and participatory educational practice. Studies of children's relationship to materials, spaces and environment, where children and pupils are giving agency to materials in the production of documentation, books and maps, thus contribute to new social studies of childhood (Bendroth Karlsson,

2014; Hultman & Lenz Taguchi, 2010; Hohti, 2016; Karlsson Häikiö & Ericsson, 2017; Lenz Taguchi, 2012; Magnusson, 2017).

## **Visual and cultural tools for empowerment and learning**

In the field of art education and visual culture, social perspectives have become increasingly important (Kallio-Tavin, 2015). Based on this perspective, visual knowledge in educational practice can be related to and problematized from both ethical and political aspects, as well as feminist, sustainable and multi-cultural dimensions. Evaldsson and Sparrman (2009) claim there to have been a long absence of studies on children's own initiatives in relation to material culture as part of their lives. Research in the field of child and youth culture often focuses on questions about identity and children's involvement in cultural activities, with relevance for questions of democracy, governance, equity and social development in a broader sense. Aesthetic and cultural activities open for reflection on democratic issues through explorative processes and creative dialogues in the preschool atelier or in the art classroom to promote interaction. Through participation in formal and informal educational settings and different kinds of spaces for learning, children's agency and active participation in experiencing and learning can be promoted (Karlsson Häikiö, 2018; Kumpulainen et al., 2013). Children activities in art-based project work, both within and outside of preschool and compulsory school, give children access to learning environments and monitor meaningful activities through the use of art as a cultural tool (Rusanen, Rifà-Valls, Rui, Bozzi, & Karlsson Häikiö, 2011).

Art and aesthetic learning processes can contribute to the creation of intercultural skills in different schools and school forms (Elam et al., 2017). Semetsky (2011), referring to Buber, describes new inclusive perspectives in the field of education and discusses, among other things, Deleuze's concept of becoming-other, with a clear focus on understanding the other.

... the idea of moral interdependence expands from individual lives to the mutual interactions of various religious, ethnic and national

groups. The idea of becoming-other, as well as of confirmation, emerges from our awareness of moral interdependence – that is, self-becoming-other by means of entering into another person’s frame of reference and taking upon oneself the other perspective. (Semetsky, 2011 s. 140)

Lorentz (2016) defines intercultural skills as ability to communicate “with people of different backgrounds with regard to ethnicity, culture, language, religion, etc.” (2016, p. 161). By working with developing intercultural skills, preschool and compulsory school can be a culturally inclusive environment for children, pupils, as well as for parents, and in this way create a sustainable educational environment through cultural participation. Cultural participation involves inviting children and other actors, to be co-constructors (Dahlberg, Moss & Pence, 1999) in different educational settings based on collaboration.

Elam, Hansson Stenhammar, Karlsson Häikiö, Kupferberg, Nejadmehr & Wallin Victorin (2017) describe aesthetics and culture as driving forces, acts of empowerment, and as working methods where inclusive practices and intercultural pedagogy encompass dialogical processes to create empathy and understanding for each other. Cultural participation (Elam et al., 2017), cultural institutions (Rogoff, 2003), and use of cultural tools (Säljö, 2010) can be used for creating conditions for learning, socialization and development. Cultural differences can in this way be integrated into the educational settings and contribute to learning. Cultural institutions, as art galleries and museums as places for learning in alternative ways, have played an important role in making art and culture stronger in educational practice since the 2000s, according to Rusanen (2007, p. 101–108). She states that one role of education is to enforce children’s knowledge of the cultural heritage, which also is visible in the Finnish curriculum for early childhood and compulsory school. Experiencing art works as well as architecture or design artefacts can enrich the daily life of children (Bendroth Karlsson, 2017; Rusanen et al., 2014). Building up visual knowledge and using art as cultural tools in education can strongly affects children’s perceptions and beliefs about their environment and the world. Children producing visual arte-

facts and narratives develop communicative skills that can enforce learning and provide school work dimensions useful for social and democratic purposes, or for citizen education. Citizen education means learning in social and collective contexts but the purpose is the public good and that learning is dynamic, not static (Burt, Lotz-Sisitka, Rivers, Berold, Ntshudu, Wigley, Stanford, Jenkin, Buzani, & Kruger, 2013). Below some projects are described that exemplify use of cultural tools and art-based educational projects that also is connected to participation with and aim to create inclusion for children and youth in society, but also is connected to sustainability.

### **Art-based project work in compulsory school: Cultural participation**

An art educational project, with children between 7–17 years as participants in compulsory schools, took place between years 2012–2013. The project was conducted in the arctic areas in five different Nordic countries (Faeroe Islands and Greenland in Denmark, Iceland, Norway and Finland) (Karlsson Häikiö, 2016). The project, where most of the participating children either belonged to minority groups or lived in minority cultural areas, aimed at creating possibilities for the children and youngsters to describe their life world, their thoughts and interests in visual form through art and writing workshops. The aim of the project was also to provide children and young people with the opportunity to process and work with their cultural identity. Through the workshops and through exhibiting the children's artistic works publicly in the different countries, sharing ideas with other children in the partaking countries, understanding of background, heritage, and hybridity was made possible. The workshops were held in classrooms in a familiar environment for the children, but held by a visiting visual artist and the author as an artist and researcher.<sup>6</sup> In the art and writing workshops children and youngsters chose their own topics in their production of images with mostly analogue, but also digital tools.

In the participating compulsory schools in the arctic area of Finland close to Norway and Sweden, the pupils had different cultural backgrounds, Finnish



and Sápmi, or both. The pupils chose topics related to their daily interests and hobbies like skiing, snowboarding, taking care of their pets such as cats or dogs, or other animals their families held such as cattle, horses, reindeer, sheep. Their paintings also described phenomena in nature, for example, aurora borealis, snowstorm, waterfalls etc. Some of the pupils produced images that somehow resembled touristic pictures of Lapland like snowfall, mountain views in the autumn of the fauna in the arctic area. Ollila (2004) found that young people in Lapland look at their environment partly from a tourist perspective. Other pupils produced images that concerned activity or movement, as speed, wind, and different visual phenomena, while other children produced images of activities like motor sleighing, mountain hiking or reindeer herding. The project was in this way a contribution to investigation about use of cultural activities and visual learning strategies in diverse school environments in different countries in the Nordic arctic area.

#### **PAINTING REINDEER HERDING**

Rautio (2010) has described the life and beauty of a remote village in the north of Finland with an aim to contribute to a positive rhetoric and discussion on sustainability concerning living in remote places, like villages in the northern arctic area, from an ethnographic perspective on an “actively constructed everyday life” (2010, pp. 22, 28). Reindeer herding is an ancient practice of nomadic, indigenous people and a circumpolar phenomenon. Today, reindeer herding “represents traditional, nomadic ways of life for 24 different indigenous people across the Arctic, and involves close to 100,000 people in all” (Pogodaev & Oskal, 2016). Herding with domesticated reindeer is accompanied by nomadic activities such as hunting, fishing and gathering. Today the herders are organized, and the aims for the circumpolar association the Arctic Council includes work with, besides issues on herding, reindeer husbandry and food processing, giving voice to indigenous people, their traditions and communities, also e.g. increasing understanding of impacts of climate change, change and globalization, technology, protection of biodiversity, and providing opportunities for young people to live their life in the arctic area.

One of the images that a 7-year-old boy painted in the art workshop described the circular fenced area that the reindeer is fenced-in into when they are to be caught for marking, slaughter, etc. In the painted picture there are different representations of reindeer, some are of more symbolic, two-dimensional character, while other are more natural and show a more three-dimensional character. In the dialogue with the boy I understood that he had a lot of experience of the procedure of herding reindeer. He struggled with the painting of the reindeer and referred to his memory and his knowledge of the situation where the reindeer are in the circular fenced area (Picture 1). I asked if the situation looked like this, he nodded and told me about the procedure with the reindeer. We started to talk about how the reindeer were represented in his painting and I soon understood that he tried to paint the animals from different angles. So, we talked about how reindeer can be looked upon and what they look like when you see them from different perspectives, from close or afar etc.



*Figure 1. Painting of reindeer herding in Finnish Lapland. Painted by a 7-year old boy in a compulsory school in year 2013. Photo: Tarja Karlsson Häikiö, 2013.*

After this dialogue the boy felt more self-confident and seemed to be relieved. He also painted a motor sleigh on the cardboard. Afterwards I pondered upon why he felt the painting to be difficult. Was it an odd situation to participate in the art workshop with strange people? Was it the free choice to paint what he wanted? Was it a new situation unusual to him as a school activity where children normally are supposed to take instructions from adults? Was it the effort to paint his experience from memory? Or that the material, painting with acrylic, was new to him, or maybe the format of painting on a cardboard?

Later on, while visiting the conference *Relate North* in Rovaniemi in 2017, I looked at photographs of reindeer herding at the conference art exhibition. Some photographs, presented in the exhibition, named *Boazoeallin – poroperheen arki* (Boazoeallin – the daily life of a herding family, author's translation), were the artistic part of Korinna Korsström-Maggas thesis at Lapland University, and showed herding life from a herder's perspective. In the photographs the activities of children taking care of the reindeer was portrayed; feeding the reindeer, riding motor sleighs following the reindeer, catching the reindeer with lasso, cuddling with the reindeer on the porch to the house etc. The exhibition and photographs were very informative and reminded me of the art workshops and the painting of the little school-boy made some years earlier. Through photographs, visual artefacts and production of images and other artistic artefacts as cultural tools, identity and heritage can be explored, expressed and used as means for engagement and inclusion in different kinds of societal situations and settings.

### **Art-Based Project Work: Art and Sustainability**

The emphasis on sustainability in the curriculum in the Nordic countries contributes to development work based on the SDG objectives. The objectives concern all forms and levels of education aiming at contributing to and creating awareness of sustainable education and society. In the *EESD Manifesto; Educate towards environment and sustainable development*, children and adults, teachers, associations, communities, authorities, municipalities, universities, unions, companies, etc., are called to contribute to a sustainable future. Here is

presented common teaching methods, that promotes participative strategies, and are relying on three fundamental axis: 1) Learning by action and by pedagogical activities, 2) A systemic approach in order to embrace diverse and interrelated issues, and 3) Multiple partnerships which are established in the territories (*The 2030 Agenda for Sustainable Development*). Here follows some examples of work with art and sustainability in preschools and with preschool children, where active participation in cultural activities and public spaces, as well as systemic thinking is used to create learning environments.

#### **SUSTAINABILITY PROJECT WORK: CREATIVE RECYCLING CENTERS**

Sustainability and creativity have grown to be important parts of the Swedish preschool practice. Aesthetic practice is today connected to sustainability through work with art pedagogics, art-based practice and work in an explorative and creative way in the atelier and outdoors (Bendroth Karlsson & Karlsson Häikiö, 2014; Sørenstuen, 2013). In my opinion the influence of the Reggio Emilia approach, seeing the learning spaces as third educator (Häikiö, 2007), and working in ateliers and work with open materials, has influenced preschool and contributed to this development. The interest in toxic-free and ecological preschools from architecture and the construction business are another indicators of this influence, but which also places great demands on the use of materials in the preschools. In Sweden Creative Recycling Centers (Picture 2) for pedagogical purposes for preschool, school and community have started to spread where different communities are investing resources in the form of staff, premises and economical means to emphasize the importance of sustainable development work. The Creative Recycling Centers is e.g. inspired from REMIDA, the creative recycling center, Fondazione Reggio Children in Reggio Emilia, Italy (Hansson, 2018).

Also new theoretical perspectives on materiality have opened for new perspectives on intra-action (Barad, 2003) between children and materials and in relation to early childhood education in Sweden. According to the new materialist perspective things and materials intra-act with our bodies and the learning body and material are in a mutual, inter-twined transformation (Lenz



*Figure 2. Compilation of photographs from Creative Recycling Centers in Sweden. Compilation from homepages: Tarja Karlsson Häikiö, 2017.*

Taguchi, 2012). The body can also alter material and transform the out-side world. Hansson (2018) describe how preschools use recycled materials for pedagogical purposes and how the materials are used in relation to creative activities, construction play, and defines it as flexible or non-flexible. Flexible, or open materials (Häikiö, 2007), are not pre-defined and have transformative qualities used in play, in creative or learning activities. This is in contradiction to non-flexible materials which have a sole or pre-determined purpose.

#### **SUSTAINABILITY PROJECT WORK: ART AND ECOLOGY**

An example of work with sustainability is from a preschool in the Western Sweden that has an ecological approach and where the preschool building itself, the architecture and house construction, and the pedagogical environments are made by sustainable materials. The preschool only prepares ecologically grown food. Preparing food and cooking, is a central activity at the preschool and the

children are part of the daily kitchen activities. There is an interaction between the kitchen and the work in the preschool atelier and the creative work. At the preschool the educators set the spaces for learning with inspiration from nature and culture. Activity zones (Häikiö, 2007) are created, as for instance, a nature atelier combining light tables, magnifying glasses and other optical instruments, where the children can explore images of the woods and animals or their findings from nature walks or what they have found in the preschool yard. In the atelier the children are painting with natural colours and juice from, for example, berries and fruits. In this way the aesthetic activities at the preschool are part of the work with the sustainability goals for preschool, set nationally, by the community, and by the preschool itself in form of a pedagogical profile.

#### **SUSTAINABILITY PROJECT WORK: ART-BASED CONSTRUCTION PROJECT**

An art-based construction project about participation, sustainability and inspiration with 'green' experiences for preschool children took place in 2016 as a part of a Green World event in a city center in Western Sweden (Publication *Jordens hjärtslag*, 2016). Children and preschool teachers worked together in cooperation with an international artist where the children constructed an art installation in a public space. The project aimed at creating art experiences, ecological thinking and meeting places for children from different town areas. The experience was a meeting place for children from two different town areas, and thus became a forum for creating contacts in a segregated town. Tetsunori Kawana, the Japanese international artist, works with three-dimensional art installations in green bamboo all over the world. His artistic work focuses on the Ikebana-tradition which combines sculpture, performance and installation art. The art works symbolizes humans living in harmony with our natural environment and the art works are re-cycled after a year back into nature. In the project, preschool children and educators worked in cooperation with Kawana with the construction of an art installation in a public space (Picture 3) (Publication *Jordens hjärtslag*, 2016). Art-based environmental education (Sørenstuen, 2013) combines art as means to learn about the environment, but also about sustainability, to preserve nature and its manifoldness. In the project the children got

the opportunity to construct *in-situ* creating a site-specific art work (Sørenstuen, 2016) in the town center. This means that the children got their own spot in the center to build the construction of mostly re-cycled materials.

## Conclusion



*Figure3. Construction in the city center in Western Sweden. Photo: Publication Jordens hjärtslag, Kristina Sterba, 2016.*

New materialist and post-human perspectives, with focus on use of materials as active agents, have complemented social constructionist theoretical perspectives on learning, different power relations, gender issues, aspects of ethnicity etc. Children and pupils are from these perspectives considered to be actors and agents, which gives them rights to partake in culture, society and spaces. Children's and pupil's perception of their life-world and learning can be expressed with different means in different educational environments and settings. Use of materials, public places and the setting of learning environments are parts of making art activities essential for creating meaningful learning processes. In the chapter is exemplified how recycled materials, art institutions and different kinds of educational settings can be used as pedagogical means to create reflection on issues on inclusion, sustainability and other broader perspectives on the

world. Here is also given examples of how learning environments, educational situations and cultural conditions are crucial to ensure children's participation in art and culture. Active participation in art-based projects in preschool and compulsory school, as well as outside the institutions, offers different spaces for learning. Through the use of artistic and cultural tools in daily pedagogical and aesthetic practice, cultural inclusion for children, educators and parents can be created. In the examples described above, the use of different cultural tools contributes to the learning processes and meaning-making of preschool and school children through work with art, culture and sustainability. Work with art-based projects and cultural tools can thus highlight learning processes that promote critical thinking, ethical perspectives and civic awareness, but also environmental issues. Inclusive strategies become increasingly urgent and the preschool and compulsory school becomes important arenas for social participation and creation of understanding of sustainability. Working with children in this way indirectly includes work with social and sustainable development from a future-perspective. Work with inclusive strategies and considering preschools and schools as arenas for social participation, becomes important and urgent in an increasingly diversified society.

## References

- Alexandersson, M. (2011). Equivalence and choice in combination: The Swedish dilemma. *Oxford Review of Education*, 37(2), 195–214.
- Barad, K. (2003). Posthuman performativity: Towards an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801–831.
- Bendroth Karlsson, M. (2014). På promenad med kamera – barn bildberättar om en plats [On the walk with cameras – children's photo reports about places]. In S. O. Karlsson (Ed.), *Visuella arenor och motsägelsefulla platser: Tio texter om transformativt lärande, identitet och kulturell förändring* [Visual arenas and contradictory places: Ten texts on transformative learning, identity and cultural change]. Göteborg: Daidalos förlag.
- Bendroth Karlsson, M. (2017). *Barns möte med konst* [Children Meeting Art]. Lund: Studentlitteratur.



- Bendroth Karlsson, M., & Karlsson Häikiö, T. (Eds.). (2014). *Bild, konst och media för yngre barn – kulturella redskap och pedagogiska perspektiv* [Visual images, art and media for younger children – cultural tools and pedagogical perspectives]. Lund: Studentlitteratur.
- Bjervås, L.-L. (2011). *Samtal om barn och pedagogisk dokumentation som bedömningsspraktik i förskolan: En diskursanalys* [Conversation about children and educational documentation as assessment practice in preschool: A discourse analysis]. (Doctoral Thesis). Göteborg: Göteborgs universitet.
- Burt, J., Lotz-Sisitka, H., Rivers, N., Berold, R., Ntshudu, M., Wigley, T., Stanford, M., Jenkin, T., Buzani, M., & Kruger, E. (2013). *The role of knowledge in a democratic society: investigations into mediation and change-oriented learning in water management practices*. WRC Report No. 2074/1/13.
- Carlsen, K. (2015). *Forming i barnehagen i lys av Reggio Emiliäs atelierkultur* [Giving shape in kindergarten in light of Reggio Emilia's studio culture]. (Doctoral dissertation). Åbo: Åbo Akademis förlag.
- Clark, A., Kjørholt, T., & Moss, P. (Eds.). (2005). *Beyond listening: Children's perspectives on early childhood services*. Bristol: Policy Press.
- Colls, R., & Hörschelmann, K. (2009). The geographies of children's and young people's Bodies. *Children's Geographies*, 7(1), 1–6.
- Cunningham, H. (1995). *Children & childhood in western society since 1500*. London: Pearson Education.
- Dahlberg, G., Moss, P., & Pence, A. (1999). *Beyond quality in early childhood education and care: Postmodern perspectives*. London: Falmer Press.
- Dahlberg, G., Moss, P., & Pence, A. (2007). *Beyond quality in early childhood education and care: Languages of evaluation*. London: Routledge.
- Giroux, H. A. (2011). *On critical pedagogy*. New York: Continuum Publishing.
- Ehrlin, A., & Wallerstedt, C. (2014). Preschool teachers' skills in teaching music: two steps forward one step back. *Early Child Development and Care*, 184(12), 1800–1811.
- Elam, K., Hansson Stenhammar, M.-L., Karlsson Häikiö, T., Kupferberg, F., Nejadmehr, R., & Wallin Wictorin, M. (2017). Educating responsible citizens: Intercultural competence and aesthetic education. In G-B. von Carlsburg (Ed.), *Learning scenarios for social and cultural change: "Bildung" through academic teaching* (pp. 61–81). Berlin: Peter Lang.
- Evaldsson, A.-C., & Sparrman, A. (2009). Barns kamratkulturer ♥ Barns visuella kulturer = Sant. Två analyser av barns samtal om reklam [Children's peer cultures ♥ Children's visual cultures = True. Two analyses of children's conversations about advertising]. In A. Sparrman, J. Cromdal, A.-C. Evaldsson, & V. Adelsvärd (Eds.), *Den väsentliga vardagen: Några diskursanalytiska perspektiv på TAL, TEXT och BILD* [The

- essential everyday life: Some discourse analytical perspectives on SPEECH, TEXT and IMAGES] (pp. 92–131). Stockholm: Carlssons förlag.
- Förordning om läroplan för förskolan [Regulation on curriculum for early childhood education]. SKOLFS 2018:50. Statens skolverks författningssamling [The state constitutional collection]. Stockholm: Skolverket [Swedish National Agency for Education].
- Hansson, H. (2018). *Att ge form åt förskolans innehåll* [To give shape to the preschool's content]. Stockholm: Lärarförlaget.
- Heckman, J. J. (2011). The Economics of inequality: The value of early childhood education. *American Educator*, 35(1), 31–47.
- Hohti, R. (2016). Now – and now – and now. Time, space and the material entanglements of the classroom. *Children & Society*, 30(3), 180–191.
- Hujala, E., Fonsén, E. & Elo, J. (2012) Evaluating the quality of the child care in Finland. *Early Child Development and Care*, 182(3–4), 299–314.
- Hultman, K. (2011). *Barn, linjaler och andra aktörer: Posthumanistiska perspektiv på subjektskapande och materialitet i förskola/skola* [Children, rulers and other actors: Post-humanist perspectives on subject creation and materiality in preschool/school]. (Doctoral dissertation). Stockholm: Stockholms universitet.
- Hultman, K., & Lenz Taguchi, H. (2010). Challenging anthropocentric analysis of visual data: A relational materialist methodological approach to educational research. *International Journal of Qualitative Studies in Education*, 23(5), 525–542.
- Häikiö, T. (2007). *Barns estetiska läroprocesser: Atelierista i förskola och skola* [Children's aesthetical learning processes: Atelierista in preschool and elementary school]. (Doctoral dissertation). Göteborg: Göteborgs universitet.
- James, A., Jenks, C., & Prout, A. (1998). *Theorizing childhood*. New York: Teachers College Press.
- Jordens egna hjärtslag – ett projekt med delaktighet, hållbarhet, lust och inspiration med gröna upplevelser* [Earth's own heartbeat – a project of participation, sustainability, lust and inspiration with green experiences] (2016). Publikation, Västra Göteborg, Göteborgs Stad.
- Kallio-Tavin, M. (2015). Becoming culturally diversified. In M. Kallio-Tavin & J. Pullinen (Eds.), *Conversations on Finnish art education* (pp. 20–32). Helsinki: Aalto University.
- Karlsson Häikiö, T. (2016). My culture, my roots – a community art-project with Nordic children. *IMAG, InSEA magazine*, 3(2), 105–114.
- Karlsson Häikiö, T. (2017a). Posthumanismi kasvatustieteessä – esiopetuksen jäljillä. [Posthumanism in educational science – on the trail of pre-school education]. *Tieteessä tapahtuu*, 36(5), 42–46.
- Karlsson Häikiö, T. (2017b). Dokumentation, transformation och intra-modala materialiseringar [Documentation, transformation and intra-modal materialisations]. In

- B. Bergstedt (Eds.). *Posthumanistisk pedagogik – Teori, undervisning och forskningspraktik* [Post-humanist education – Theory, teaching and research Practice]. Lund: Studentlitteratur.
- Karlsson Häikiö, T. (2018). Cultural participation for, with and by children: Enhancing children's agency through art pedagogy, visual knowledge-building and learning. *In-Formation – Nordic Journal of Art and Research*, 7(1), 1–19. <https://doi.org/10.7577/information.v7i1.2630>
- Karlsson Häikiö, T., & Ericson, K. (2017). Kunskapsbildning genom visuella och geografiska markörer i bild- och geografiundervisning [Knowledge formation through visual and geographical markers in visual art and geography education]. In M. Häggström & H. Örtengren (Eds.), *Visuell kunskap för multimodalt lärande* [Visual knowledge for multimodal learning]. Lund: Studentlitteratur.
- Korpi, B. M. (2006). *Förskolan i politiken – Om intentioner och beslut bakom den svenska förskolans framväxt* [Pre-school in politics – About intentions and decisions behind the Swedish preschool's emergence]. Regeringskansliet [Government office]. Utbildningsdepartementet [Education Ministry, Sweden].
- Kumpulainen, K., Lipponen, L., Hilppö, J., & Mikkola, A. (2013). Building on the positive in children's lives: A co-participatory study on the social construction of children's sense of agency. *Early Child Development and Care*, 184(2), 211–229.
- Kurki, L. (2000). *Sosiokulttuurinen innostaminen* [Socio-cultural inspiration]. Tampere: Vastapaino.
- Lahdenperä, P., & Sandström, M. (2011). Klassrummets mångfald som didaktisk utmaning [Classroom diversity as a didactic challenge]. In S.-E. Hansén & L. Forsman (Eds.), *Allmädidaktik – vetenskap för lärare* [General didactics – science for teachers] (pp. 91–114). Lund: Studentlitteratur.
- Lahdenperä, P. (2011). Interkulturell pedagogik – vad, hur, varför? [Intercultural pedagogy – what, how, why?]. In P. Lahdenperä (Ed.), *Interkulturell pedagogik i teori och praktik* [Intercultural pedagogy in theory and practice]. Lund: Studentlitteratur.
- Lenz Taguchi, H. (2012). *Pedagogisk dokumentation som aktiv agent: Introduktion till intra-aktiv pedagogik*. [Educational documentation as an active agent: Introduction to intra-active pedagogy]. Malmö: Gleerups utbildning.
- Lorentz, H. (2016). Interkulturell pedagogisk kompetens: Transformativt akademisk kunskap om integration i dagens skola [Intercultural educational skills; Transformative academic knowledge about integration in today's school]. In H. Lorentz, & B. Bergstedt (Eds.), *Interkulturella perspektiv: Pedagogik i mångkulturella lärmiljöer* [Intercultural perspectives: Pedagogy in multicultural learning environments] (pp. 111–131). Lund: Studentlitteratur.
- Lunneblad, J. (2013). Tid till att bli svensk: En studie av mottagandet av nyanlända barn och familjer i den svenska förskolan [Time to become Swedish: A study of the

- reception of newly arrived children and families in Swedish preschool]. *Nordic Early Childhood Education Research Journal*, 6(8), 1–14.
- Lunneblad, J. (2014). Ett integrationspolitiskt projekt: mottagandet av nyanlända i förskolan [An integration policy project: the reception of newly arrived children in preschool]. In O. Sernhede & I. Tallberg Broman (Eds.), *Segregation, utbildning och ovanliga lärprocesser* [Segregation, education and unusual learning processes] (pp. 112–123). Stockholm: Liber.
- Läroplan för grundskolan, förskoleklassen och fritidshemmet, Lgr11 [Curriculum for elementary school, preschool class and recreation center]. Reviderad 2017. Skolverket. Stockholm: Wolters Kluwers kundservice.
- Magnusson, L. O. (2017). *Treåringar, kameror och förskola: En serie diffraktiva rörelser* [Three-year-olds, cameras and preschools: A series of diffractive movements]. (Doctoral dissertation). Göteborg: ArtMonitor, Göteborgs universitet.
- McDonald, A., & Jónsdóttir, A. B. (2014). Participatory virtues in art education for sustainability. In T. Jokela & G. Coutts (Eds.), *Relate North: Engagement, art and Representation* (pp. 82–104). Rovaniemi: Lapland University Press.
- Mezirow, J. (1997). Transformative learning: Theory to practice. In P. Cranton (Ed.), *Transformative learning in action: insights from practice: New directions for adult and continuing education*, 74 (pp. 5–12). San Francisco: Jossey-Bass.
- Morrow, V. (2008). Ethical dilemmas in research with children and young people about their social environments. *Children's Geographies*, 6(1), 49–61.
- Moss, P. (2014). *Transformative Change and Real Utopias in Early Childhood Education: A story of democracy, experimentation and potentiality*. New York: Routledge.
- Moss, P., & Pence, A. (Eds.). (1994). *Valuing quality on early childhood services*. London: Paul Chapman Publishing.
- Nejadmehr, R. (2012). Multicultural education in Sweden. In J. A. Banks (Ed.), *Encyclopedia of diversity in education* (pp. 2106–2109). Seattle: Sage Publications.
- Nygård, M. (2017). The Norwegian early childhood education and care institution as a learning arena: Autonomy and positioning of the pedagogic recontextualising field with the increase in state control of ECEC content. *Nordic Journal of Studies in Educational Policy*, 3(3), 230–240.
- Ollila, A. K. (2004). Luonto Lapissa, menestys muruina maailmalla: Alueet lappilaisten nuorten tulevaisuuskuuissa [Nature in Lapland, successes of crumbs in the world: Regions in the future of Lappish young people]. In P. Paju (Ed.), *Samaan aikaan toisaalla... Nuoret, alueellisuus ja hyvinvointi*. [At the same time elsewhere ... Young people, regionalism and well-being] Helsinki: Nuorisotutkimusverkosto, Nuorisosaian neuvottelukunta, Sosiaali- ja terveystieteiden tutkimus- ja kehittämiskeskus, STAKES.
- Olsson, L. M. (2012). Eventicizing curriculum: Learning to read and write through

- becoming a citizen of the world. *Journal of Curriculum Theorizing*, 28(1), 88–107.
- Olsson, L. M. (2014). *Rörelse och experimenterande i små barns lärande: Deleuze och Guattari i förskolan* [Movement and experimentation in small children's learning: Deleuze and Guattari in preschool]. Lund: Studentlitteratur.
- Pascal, C., & Bertram, T. (2009). Listening to young citizens: The struggle to make real a participatory paradigm in research with young children. *European Early Childhood Education Research Journal*, 17(2), 249–262.
- Persson, S. (2014). Förskolan och social ojämlikhet [Early childhood education and social inequality]. In O. Sernhede & I. Tallberg Broman (Eds.), *Segregation, utbildning och ovanliga lärprocesser* [Segregation, education and unusual learning processes] (pp. 94–112). Stockholm: Liber.
- Perusopetuksen opetussuunnitelman perusteet, 2014* (2014). [Basics of the elementary education curriculum]. Määräykset ja ohjeet [Regulations and instructions] 2014:96. Opetushallitus Helsinki. Retrieved from: [https://www.oph.fi/download/163777\\_perusopetuksen\\_opetussuunnitelman\\_perusteet\\_2014.pdf](https://www.oph.fi/download/163777_perusopetuksen_opetussuunnitelman_perusteet_2014.pdf)
- Pogodaev, M., & Oskal, A. (2016). Arctic change and world reindeer herders. *Shared Voices, UArctic Magazine, 2016 Special Issue*, 11(1), 49–51.
- Rantala, A. (2016). – *Snälla du! Kan du sätta dig? Om vägledning i förskolan* [Please! Can you sit down? About guidance in preschool]. (Doctoral dissertation). Umeå: Umeå Universitet.
- Rautio, P. (2010). *Writing about everyday beauty in a Northern village: An argument for diversity of habitable places*. (Doctoral dissertation). Oulu: University of Oulu.
- Rautio, P. (2013). Being nature: Interspecies articulation as a species-specific practice of relating to environment. *Environmental Education Research*, 19(4), 445–457.
- Rautio, P. (2014). Children who carry stones in their pockets: On autotelic material practices in everyday life. *Children's Geographies*, 11(4), 394–408.
- Rautio, P. (2014). Mingling and imitating in producing spaces for knowing and being: Insights from a Finnish study of child–matter intra-action. *Childhood*, 21(4), 461–474.
- Rogoff, I. (2003). *From criticism to critique to criticality*. Eipcp – European institute for progressive cultural policies. Retrieved from: <http://eipcp.net/transversal/0806/rogoff1/en>
- Rusanen, S., Kuusela, M., Rintakorpi, K., & Torkki, K. (2014). *Musta tuntuu punaiselta: Kuvataiteellinen toiminta varhaisiässä* [Black feels red: Visual arts in early years]. Helsinki: Lasten keskus, Kirjapaja.
- Rusanen, S. (2007). *Taidekasvatujaksi varhaiskasvatukseen: Kuvataiteen opintojen kehittäminen lastentarhanopettajien koulutuksessa* [Art educator for early childhood education: Developing art studies in the education of kindergarten teachers]. (Doctoral dissertation). Helsinki: Taideteollinen korkeakoulu.

- Rusanen, S., Rifà-Valls, M., Rui, A., Bozzi, G. M., & Karlsson Häikiö, T. (2011). Cultural dialogues in European art education: Strategies for enhancing children's culture and constructing diversity. *The International Journal of Education through Art*, 7(3), 265–285.
- Satyarthi, Kailash (2016). What are we waiting for? Sustainable societies start with children (pp. 86-87). *The state of the world's children 2016. A fair chance for every child*. Unicef report.
- Schmidt, S. (2011). Theorizing space: Students' navigation of space outside the classroom. *Journal of Curriculum Theorizing*, 27(1), 20–35.
- Semetsky, I. (2011). Becoming-other: Developing the ethics of integration. *Policy Futures in Education*, 9(1), 138–144.
- Stakes, Forsknings- och utvecklingscentralen för social- och hälsovården (2005). *Grunderna för planen för småbarnsfostran - En korrigerad upplaga* [Basics of the plan for early childhood education - A corrected edition] (version II). Helsingfors: Stakes.
- Stirling, A. (2014). *Emancipating Transformations: From controlling 'the transition' to culturing plural radical progress*. STEPS, Working Paper, 64. Brighton: STEPS Centre.
- Säljö, R. (2010). *Lärande och kulturella redskap: Om lärprocesser och det kollektiva minnet* [Learning and cultural tools: About learning processes and collective memory]. Stockholm: Norstedts förlag.
- Sørenstuen, J-E. (2013). *Levande spår – att upptäcka naturen genom konst och konsten genom natur* [Live trails – discovering nature through art and art through nature]. Lund: Studentlitteratur.
- Taguma, M., Litjens, I., & Makowiecki, K. (2013). *Quality matters in early childhood education and care*. Paris: OECD.
- Tallberg Broman, I. (2014). Segregering som målsättning eller konsekvens? Om segregation i svensk skola i ett historiskt och nutida perspektiv [Segregation as a goal or consequence? About segregation in Swedish school in an historical and contemporary perspective]. In O. Sernhede & I. Tallberg Broman (Eds.), *Segregation, utbildning och ovanliga lärprocesser* [Segregation, education and unusual learning processes ] (pp. 19–39). Stockholm: Liber.
- Tauriainen, L. (2000). *Kohti yhtenäistä laatua. Henkilökunnan, vanhempien ja lasten laatukasitykset päiväkodin integroidussa lapsiryhmässä* [Towards consistent quality. The quality of staff, parents and children in the day care center integrated children's group]. (Doctoral dissertation). Jyväskylä: University of Jyväskylä.
- Unicef report (2009). *The state of the world's children*.
- United Nations (2018). Transforming our world. *The 2030 Agenda for Sustainable Development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>

*Varhaiskasvatussuunnitelman perusteet, 2016* [Basics of the early childhood education curriculum] (2016). Määräykset ja ohjeet [Regulations and instructions] 2016:17. Opetushallitus. Helsinki. Retrieved from: [https://www.oph.fi/download/179349\\_varhaiskasvatussuunnitelman\\_perusteet\\_2016.pdf](https://www.oph.fi/download/179349_varhaiskasvatussuunnitelman_perusteet_2016.pdf)

Wals, A., Stevenson, M., Brody, D. J., & Stevenson, R. (2014). Convergence between science and environmental education. *Science Education*, 344(5), 583–584.

## Endnotes

<sup>1</sup> *Varhaiskasvatussuunnitelma*, (2016, p. 63). Author's translation. Finnish original: "Varhaiskasvatuksessa arvostetaan ja hyödynnetään suomalaista kulttuuriperintöä ja kansalliskieliä sekä yhteisön ja ympäristön kulttuurista, kielellistä ja katsomuksellista monimuotoisuutta. Tämä edellyttää henkilöstöltä tietoa toisista kulttuureista ja erilaisista katsomuksista sekä taitoa nähdä ja ymmärtää asioita monesta näkökulmasta ja asettua toisen asemaan. Erilaisista ajattelu- ja toimintatavoista keskustellaan rakentavasti ja luodaan myös uusia tapoja toimia yhdessä. Samalla edistetään kulttuurisesti kestävää kehitystä."

<sup>2</sup> *Perusopetuksen opetussuunnitelman perusteet 2014*, p. 21. Author's translation. Finnish original: "Oppilaat kasvavat maailmaan, joka on kulttuurisesti, kielellisesti, uskonnollisesti ja katsomuksellisesti moninainen. Kulttuurisesti kestävä elämäntapa ja monimuotoisessa ympäristössä toimiminen edellyttävät ihmisoikeuksien kunnioittamiselle perustuvaa kulttuurista osaamista, arvostavan vuorovaikutuksen taitoja ja keinoja ilmaista itseään ja näkemyksiään."

<sup>3</sup> SKOLFS 2018:50, pp. 2, 11. Author's translation. Swedish original: "Utbildningen ska genomföras i demokratiska former och lägga grunden till ett växande intresse och ansvar hos barnen för att aktivt delta i samhället och för en hållbar utveckling – såväl ekonomisk och social som miljömässig. Både ett långsiktigt och globalt framtidsperspektiv ska synliggöras i utbildningen." [...] "Utbildningen i förskolan ska lägga grunden för att barnen ska förstå vad demokrati är. Barnens sociala utveckling förutsätter att de alltefter förmåga får ta ansvar för sina egna handlingar och för miljön i förskolan. Barn har rätt till delaktighet och inflytande. De behov och intressen som barnen själva på olika sätt ger uttryck för ska ligga till grund för utformningen av miljön och planeringen av utbildningen."

<sup>4</sup> SKOLFS 2018:50, pp. 2, 11. Author's translation. Swedish original: "Utbildningen ska ge barnen möjlighet att utveckla sin förmåga till empati och omtanke om andra genom att uppmuntra och stärka deras medkänsla och inlevelse i andra människors situation. Utbildningen ska präglas av öppenhet och respekt för skillnader i människors uppfattningar och levnadssätt. Den ska ge barnen möjlighet att på olika sätt få reflektera över och dela sina tankar om livsfrågor"; Lpfö98, Läroplan för förskolan, remiss 2018,

p. 14. Author's translation. Swedish original: "Förskolan ska ge barnen förutsättningar att utveckla: kulturell identitet samt kunskap om och intresse för olika kulturer och förståelse för värdet av att leva i ett samhälle präglad av mångfald."

<sup>4</sup>*Lgr11, Läroplan for grundskolan, förskoleklassen och fritidshemmet, reviderad 2017, p. 10.* Author's translation. Swedish original: "Genom ett miljöperspektiv får de möjligheter både att ta ansvar för den miljö de själva direkt kan påverka och att skaffa sig ett personligt förhållningssätt till övergripande och globala miljöfrågor. Undervisningen ska belysa hur samhällets funktioner och vårt sätt att leva och arbeta kan anpassas för att skapa hållbar utveckling."

<sup>5</sup>The project was financed by the Nordic Cultural fund. The visual artist was Raija Pullinen, also Master student in Sociology at Tampere University.

<sup>6</sup>Returen, Hisings-Backa, Guldgruvan, Töreboda, RE-turen, Göteborg, Remida, Södertälje, Guldgruvan, Töreboda, and ÅterC and Tellus, Härryda, are examples of these Creative Recycle Centers.





*Antti Stöckell*  
University of Lapland, Finland

Making Wooden Spoons  
Around the Campfire:  
Dialogue, Handcraft-based  
Art and Sustainability



**D**uring the years 2016 and 2017 I carried out an art project called *Wooden Spoons*, which consisted of crafting wooden spoons around campfires on ten trips to different places. Participants included loved ones, co-workers and acquaintances. The art installation that was created during the project participated in the international *Interwoven* art exhibition (Huhmarniemi, Jónsdóttir, Guttorm, & Hilde, 2017) in Finland and Iceland in 2017. The idea of the *Interwoven* exhibition was to examine handicraft style methods in contemporary art and to support the networking of the Nordic art university alumni with the *Arctic Sustainable Art and Design* (ASAD) network.

In this chapter, I examine my *Wooden Spoons* project through the following questions: What kind of functional environment did the trips to the forest and campfires offer for handicraft? How did this process encourage pondering of the significance of handicraft together with the participants? What kind of meanings did art practice have at different stages of the project and in the entirety?

Firstly, I examine the trips carried out in my project as nature expeditions, which involve the benefits of physical exercise but also the well-being benefits of spending time in the woods. Interest in the well-being benefits of forests is increasing globally (Williams, 2017). Forest expeditions involve the positive effects of exercise and physical effort for both physical and mental well-being (Arvonen, 2015). A significant part of the effects of hiking on well-being consists of the aesthetically pleasing environment with the close views and more distant landscapes, where visual observation does have a role but which are experienced with multiple senses and bodily functions.

Secondly, during the trips we created handicrafts, which I examine focusing especially on the crafting experiences and the meanings given to the crafts by the creators. While handicraft used to be done locally and for inevitable needs, nowadays they are made mostly as a hobby, networking even globally with other enthusiasts (Luutonen, 2014). Handicraft as a phenomenon is still interesting when thinking about the transfer of cultural heritage from one generation to another.

The perspectives of a natural expedition and handicraft connect together through the participatory practices of contemporary art and finally artistic pres-

entations in exhibitions. Growth of the popularity of handicraft methods seems to be increasing within both independently working artists and community art activities. In community arts, there has been interest in creating conditions for equal discussion (Kester, 2010). The art installations that I created for exhibitions were a way to describe the experiences and events from the trips through contemporary art. In this article I connect these viewpoints, evaluating the contents of my project and its meanings for the participants and myself.

My work method contains elements of artistic and arts-based research. As an artist, I am interested in reflecting on my own work and my artistic expression in order to develop them further. As an art educator I am also motivated to explain the pedagogic dimensions of the participatory practices of art, which lets my point of view open up towards the sociocultural context (Jokela, Hiltunen, & Härkönen, 2015). In this way, artistic research expands into arts-based research, which Leavy (2018) describes as process and solution orientated, interdisciplinary and participatory. In art, Leavy sees potential to open up new dimensions out of examined phenomena, which cannot be reached by other methods. On one hand the direct experience of art, and on the other, its provocativeness can strongly influence communication in the emotional zone of social life. According to Leavy, arts-based research is also applicable for describing the connections between individual lives and broader contexts (Leavy, 2018).

Working in the department of art education at the University of Lapland, I have adopted a research-based approach, which Jokela et al. (2015) named as art-based action research (see also Huhmarniemi, 2016). While developing place-specific and participatory art action, in cycles, within these boundaries, attention has been focused on the socio-cultural environment of the North, also outside cities and cultural centres. Art-based action has been developed to allow the participation of local people by attaching to their everyday experiences and feelings about places. (Jokela et al., 2015.)

In *Wooden Spoons* I examine the possibilities of a method connecting handicraft, art and hiking in order to apply the method later in different situations as an art educator, as an artist and as a researcher. My long-term interest has been to examine the possibilities of using artistic action to support people who expe-

rience injustice in environmental projects that change their living environment dramatically. Therefore, even with the *Wooden Spoons* project, which was carried out in a stable operational environment, I am interested in investigating how a method like this could even be applied in a more unstable situation.

### **The Expedition – Walking, Nature, Enjoyment and Moments Around the Campfire**

In this chapter I describe the essential environment of the *Wooden Spoons* project - the frame created by the campfire trip, which connects the well-being benefits of exercise and the forest with the individual and the mutually creative world of handicraft.

So, take the backpacks and let's go! While proceeding further into the forest, sounds change from the noises of the road into the wind blowing through the trees. The bumpy road, stones and roots can be felt under the feet. The body begins to live in a new way, feeling the natural environment with the sensitized senses. Soon the echoing axe strikes speak about the preparing of firewood, and soon the first flame is born and spreads through the tinder. People enjoy casual conversations around the fireplace and plan the upcoming project.

A thumb-sized piece of glowing red charcoal is picked up from the embers with barbecue tongs, it is held on top of the basis for the wooden spoon and people begin to blow at it until the heat begins burn a bowl for the spoon. Everybody is blowing at their own piece of charcoal. Soon the holes are deep enough for the next step.

It is time to pick up food from the backpacks and relax after all the blowing. The journey back into the world of streets, cars and buildings waits ahead. As a homecoming gift there is either a finished wooden spoon or a yet incomplete basis and the good feeling brought by the walking, encounters and the forest.

This method of using fire in processing and design is not common nowadays. According to Huurre, Hämeen-Anttila and Levanto (1998) wooden boats used to be gouged with axes and other tools, but also by burning. When making dugout boats out of aspen wood, the edges used to be roasted with the heat of

fire, so that the gouged log opened up broad enough. (Huurre, Hämeen-Anttila, & Levanto, 1998). Burning wood to charcoal is still used for making posts moisture-resistant before immersing them into the ground.

Fire has had a significant role in the cultural evolution of the human race (Pyne, 2001). Fire still has same functions as it has had through the ages; during the *Wooden Spoons* project fire gathered the hikers into the shelter of its heat and light. Fire was used to heat up the food and as a tool to burn the spoon shape. Above all, the fire created a cozy and memorable environment for companionship and storytelling.

Hallikainen, Sievänen, Tuulentie and Tyrväinen (2014) mention typical motives for everyday outdoor activities: the need for exercise and relaxation in nature, which also includes the joy of nature experiences for example at satisfying landscapes. Trips into the nature can strengthen social connection, but also the skill to survive alone. Active action seems to create another kind of nature experience than passive viewing. In hikers' stories particularly heavy physical stress also produces deep and memorable experiences. (Hallikainen et al., 2014.)

According to Gros (2015) the miracle is not that we are happy despite the toll of long walks and difficult circumstances, but that we are happy because of them. This kind of happiness is partly a result of postponing the obligations of daily life and switching to an "animal" presence through the long walk (Gros, 2015). According to Hallikainen et al. (2014) nature experiences feel liberating also because in the nature you are not able to control all things, and you don't have to be under control yourself. This liberates you to living in the moment as yourself. These people say that benefits of experience and refreshing in the nature include the strengthening of respect towards nature and yourself and the feeling of freedom and positive loneliness or the strengthening of social cohesion. The benefits also include the feeling of increasing mental and physical abilities, learning a simple lifestyle and awareness about the need of physical effort in order to reach a valuable goal. (Hallikainen et al. 2014; Williams, 2017)

Concern about environmental problems can become an obstacle for feeling the full well-being benefits of forests. Haila (2004) encourages people by saying that during the time of environmental concerns the nature can be

a source of life energy and joy. According to Haila, hiking is settling into the nature in order to understand the conditions and possibilities of our existence during the time of environmental concern. He believes that science is one of the ways to explore the world, while still remembering the original meaning of the word “exploration”. In addition to science, Haila asks all cultural resources to help solve environmental problems. (Haila, 2004)

During the trips of the Wooden Spoon project we did not focus on solving environmental concerns, but while carving wooden spoons our discussions inevitably included the themes of consumption and sustainable lifestyle.

Of the ten trips of my project, I did two by myself and eight with others. The above-mentioned motives for everyday outdoor activities describe most of our trips. My own trips were overnight trips to riverside landscapes, which included fly fishing as another essential content. One special trip was done with our work community at the time of our regular weekly meeting. Many of the



*Figure 1. Participants are burning a bowl for the spoon.  
Photos: Antti Stöckell, 2016.*

trips were very close, such as with my sons or my 80-year-old father. According to my experience, even a campfire at the edge of our backyard created a corresponding experience of the transformation of time and space into a special place of action and dialogue, just like on the longer trips.

Above I have described the frame where the creation of the spoons took place and the functional space where participants pondered about the experience and meaning of handicraft.

### **Handicraft – Skills, experiences and cultural heritage**

Generations still live among us, for whom creating wooden utensils was necessary and familiar. While moving in the woods, suitably curved pieces of wood - such as sleigh skids, scythe handles, and boat keels - were marked and later picked up at the right time of the year, so that the piece behaved the right way while drying, being shaped and being used. Knowledge about materials was related to local information about different forest habitats and lore about the correct time to cut trees for different needs. Wooden utensils were created in the courtyard and in the winter even inside the dwelling house. The younger generation learnt knowledge and skills by participating to these works through year cycle. Nowadays handicraft is not a necessary living condition like it used to be. According to Linko (1997) the nature of handicraft has changed from an everyday chore to the enjoyment of enthusiasts and a form of self-expression (Linko, 1997).

In handicraft science, according to Luutonen (2014), handicraft means the immaterial skill of creation (the process) and the material product created through work. Handicraft as action means the tradition of know-how and work – the opportunity to modify the material world by producing humane environments that consider the social, cultural and psychic dimensions. (Luutonen, 2014)

The use of self-made objects includes an empowering dimension. The significance of a working utensil to its owner may be the experience of controlling material, tools and techniques and some kind of self-sufficiency in the modern times, when everything industrially produced is for sale and available for everybody. This kind of experience of self-sufficiency creates a bond with



past generations, for whom self-made utensils were a living condition – we can feel even a little bit of continuing tradition.

Tradition always includes thoughts about conservation. Conservation includes the viewpoints of sustainable development – on one hand conservation aims for cherishing the past, but on the other hand it aims for securing the future. Luutonen (2014) states, that conservation does not mean preserving objects as they are, but the continuation of handicraft skills and at best the enrichment of tradition through our newly-developed skills. In addition to skills, he thinks that tradition also means the transfer of values from one person to another. If we break the tradition of thousands of years, it is impossible to return it. (Luutonen, 2014.)

Handicraft can be examined as a message (Luutonen, 1997; Ihatsu, 2004). Extensively handicraft itself is a message, that is always mentioned separately with the words “handmade” or “local handicraft” in order to distinct the product from industrial products made far away. Handicraft also often includes expression, which is not essential for the usability or the actual use purpose.

In my project, the spoon opens up an interesting viewpoint for this. The spoon must feel good in both mouth and hand. The mouthpiece of the spoon does not really offer any possibilities for expression other than the use purpose, while the handle of the spoon has acted and acts as a platform for delivering messages.

The primary purpose of wooden utensils was to work the best possible way in use. For example the shaft of an axe had to be curved like the stomach of a pike and the handle had to be curve like a fish tail, so that you could get a good grip. There are many more similar lifeworld related illustrative descriptions, and they reflect everyday aesthetics, where practicality and functionality are primary. This kind of practicality with metaphors was strongly connected to time and place related needs. Luutonen says that nowadays with the Internet, locality has been replaced by global groups with mutual interests (Luutonen, 2014). The significance of locality does not necessarily disappear or decrease, but interaction at best may enrich and increase appreciation for different cultures. On the trips of my project, places had a significant role by creating a practical and a dialogical space for handicraft and discussion.

After the trips, I asked participants about their previous handicraft experiences, and what creating handicraft feels like, what kind of feelings and experiences they get from the work, tools and materials, what it is like to use or look at self-made objects and what significances they associate with self-made objects. I did not ask any questions about the creation of wooden spoons, because my aim was to get answers about the experiences of handicraft and significances about their previous experiences. At that time, my aim was to pick citations from the answers for my spoon art installation in an art exhibition.

*It is so multisensual action and presence.*

*I created things by myself! And the happiness is so sincere.*

*During the process, I dream about the finished product, that I later get to use.*

*In addition to the use, self-made things also include the feelings and memories about the creation process. (Participant).*

An important motive for handicraft for the respondents was the satisfaction related to physicality and multi-sensuality. People report feeling intensive presence and joy due to the improvement of skills as the project goes forward. Skills are related to knowledge about materials and the use of tools. Handicraft is done with flexible plans, trying and looking for new ways, and reacting to surprises on the conditions of material. The joy of handicraft seems to consist of adequate familiarity and the control of actions, but also especially of challenging yourself and of the unpredictability of the finished product. Most of the respondents had previous experience of creating utensils with the usage purpose already in mind during the project. Finishing the projects felt rewarding, and self-made products made people proud. When using self-made products, it is easy to remember things, events and places from the time of the creation.

*Dad once taught me scoop carving, pulling wood shingles and creating baskets. And much more. (Participant).*

The significance of tradition and its continuation is also visible in the answers. One of the participants was an artisan, who mentioned learning traditional skills from their father. There were also people, who were searching for their place in handicraft in their generations, and people who respect tradition but do not feel being part of it. Still, even the smallest things done with their own skills produced satisfaction and a feeling of independence.

One participant liked the burning technique so much, that she has been working on a large burl with the burning method. She also said that she uses the spoon that was created during the trip as a porridge ladle at home. The ergonomics of the ladle according to her is not the best, but the satisfying significances are more important than the usability.

*The creation was so empowering and using the spoon makes me go back to those memories!*

Handicraft enthusiasts feel that the most important factors in handicraft are the experience and the enjoyment of the project and the results. While creating handicraft together it is natural to discuss the knowledge and skills of doing things yourself. These discussions can also wander into other subjects. Functionality and dialogue are still one of my centres of attention when I examine handicraft in the context of contemporary art.

### **The Participatory Practices, Dialogical Aesthetics and Place-Specificity of Contemporary Art**

The purpose of the *Interwoven* exhibitions was to examine the relationship between handicraft and contemporary art. During the last decades, handicraft methods have been on the increase in contemporary art. Especially soft material sewing, crocheting and embroidery methods seem to be very popular. For example, Kaija Papu from Finland crochets natural sized characters and objects, of which perhaps the most known is a police car which accurately mimics the model.

Handicraft or art, or both? The conceptual border between handicraft and art has been pondered by both creators and researchers (see for example Ihatsu, 2004). Instead of differences and borders, I am interested in the ways that the handicraft style method, which is often obedient and utilizes traditional techniques, shapes the artistic process and the piece of art. It is also interesting to inspire those who create handicraft to try artistic expressions which are more free than traditional handicraft methods.

Familiarity of production methods and recognizability of subjects bring art close to the public. In community art this is essential for participation. At its best, art may act as a catalyst for cooperation, and as it's form and as visible results. According to my experiences, community art projects can be actively participated by people from very different backgrounds, who do not necessarily have any special relationship with art, let alone contemporary art (Stöckell, 2016). A place and situation where it is easy to take practical action is needed. Practicality is an essential requirement for the birth of dialogue. Practicality can be examined through the concept of performativity. Performativity in art means an unique situation, where space for interaction and participation is born (Hiltunen, 2009). The "permission" to create handicraft instead of art may lower the threshold for participation. Creators can still see their projects as handicraft, while as an entirety the situation can be seen as community art, where handicraft acts as a method for creating an interactive situation.

The original essential goal of my project was to produce a piece of art for an exhibition, and to get enough spoons and also views of handicraft I asked others to help me. Therefore, it is not sensible to examine my project as community art, where it is essential to define goals and methods together (Kester, 2010; Kantonen, 2010; Hiltunen, 2009). However, my project included some characteristics of the community art process because of the participatory methods and the effort to create dialogue.

Walking in the forest and typical chores around the campfire led us to the stage of creating the spoons. These stages as an entirety created the space of performative events and the situations where dialogue was born naturally. Kester uses the phrase "dialogical aesthetics" to describe action where an artist

makes their partners participate in the process of giving significance without pre-defining the end result (Kester, 2010). In the spoon project, I think of dialogue as discussion between people, but also as inner speech with your own memories, thoughts, environment and your current actions during walks and handicraft.

Walking and handicraft are slow processes. Both are characterized by repetition and continuation, until the goal is reached. The path cannot be entirely completed at once, and the shape of the spoon does not appear from the wooden basis after a couple of axe strikes and knife carvings. The path and the wood create a reasonable opposition to the walker and carver. The reasonability of the opposition comes when individual movements do not require full effort anymore and the mind becomes free to wander to other matters - and back again. This liberty opens up space for many kinds of conversations. In dialogue between people, material and location are important, but also the ability to give others time and listen to them. Thoughts build up themselves during breaks, and the material and location may speak during silence. This is what I included in the dialogical aesthetics of the *Wooden Spoons* project.

A dialogue like this also opens up views for the examination of place-specificity. Foremostly, the relaxed processing of wood that I described above made people calm down into presence, creating a sensation of becoming one with the place. To simplify, place-specificity in art has meant that “the place creates the art”. The artist has found the reason and basis for creating the art and a place in the objective and textual dimension for its essence (Jokela, 2008). A piece of art like this is not possible to move elsewhere (see for example Purhonen, 2010). For the spoons I have turned this way of thinking upside down; while carrying a spoon with me during the trips, I carry memories and significances of its birth place with me.

Three of the spoons that I created (by their size they are more like ladles) got their shape by some element related to the place they were made at. I have called these spoons place-specific spoons. The borders of handicraft, utensils and art is indistinct in them. The further away the spoon shapes moved from their original usage purpose towards artistic expression, the easier I can remember the origin of the spoon. The place-specific quality of these spoons

has similarities with the traditional way handicraft relates to places. The traditional dimension is present through the materials collected from the working places and the events that happened there. The shapes of the shafts are related to geographical properties of places and especially to utilization of natural products while moving in nature. The grayling dorsal fin refers to fishing culture, taking my memories to the river where I return over and over again. The shaft that got its shape from a spring refers to the importance of water sources for people walking in the woods. The “boulder” in the shaft of the third spoon was inspired by the rocky grounds of Ounasvaara, but it also refers to the original wooden basis for the spoon of which the spoon has been carved from. This way the spoons bring up place-specificity multidimensionally through the shaft shapes the fact that they are spoons – tools that we use for eating – emphasizes the crucial significance of places for the continuity of our existence. The spoons got their shapes through slow dialogue with place, material and other participants. I did not demand other participants to ponder the significance of places while making the spoons.



*Figure 2. The three “place-specific spoons” and draft of installation on sketch book page. Photo: Antti Stöckell, 2016.*

### **From the Campfire into an Installation in a Gallery**

The first exhibition of the *Interwoven* project took place in Rovaniemi during February–March 2017 and the second one took place in Iceland in April 2017.

The aim for a meeting and networking of Nordic art university alumni also came true while building the exhibitions. Participants have been keeping in touch after the exhibitions. There were also some workshops, including a spoon workshop that I held in Reykjavik. About ten local artists and teachers participated in it.

Art in the context of art-based research is mainly process orientated. The careful finishing of the products born through the process into an artistic form also highlights and strengthens the significance of a good process for both organizers and participants (Hiltunen, 2009). While examining installation arts within the context of art-based research, Lapum (2018) describes that its diversity and relationship with the space requires active bodily participation from viewers. As a multi-sensual experience, installation art awakens the viewer to reflect their own experience and to build significance (Lapum, 2018). Installation art makes it possible to multidimensionally show the process as diverse and adventurous and makes it provoke thoughts about significance. The transition from the campfire to the gallery brings the project to a larger audience.

At the exhibition in Rovaniemi I built a small forest in the gallery with tree trunks from the floor up to the ceiling, from which the spoons were suspended. The strongly spatial installation brought a breeze of the forests and the moments we spent there into the gallery. People could walk within the trees like in a forest and see the spoons in every direction - looking for their own ones if they participated in the project. At the tree roots there were sentences written by the participants about the significances of handcraft. A video attached to the trees showed the different stages of creating a spoon, and other chores from the trips and atmospheres with sounds. In the Iceland exhibition spoons created a free formation against the light coloured wall with shadows and a video was projected on the next wall on a large scale.

The purpose of these installations naturally was to disclose experiences of events from the trips. Before the trips I had already emphasized my thankfulness for all kinds of spoons, even unfinished ones and unprocessed pieces of wood. Exposed spoons expressed different stages of the process and different abilities and styles. Different species of trees were also shown. Participants were allowed to polish the spoon bowls or leave them charcoal black. Almost all spoons were

shown with a black and charred bowl, which highlighted the method that we used and the stages that we had experienced together on the trips.



*Figures 3–4. Two different solutions in the exhibitions in Finland and Reykjavik. Photos: Antti Stöckell, 2017.*

## Planning New Trips

With the help of the well-being benefits of the forest and the practical environment brought by handicraft, situations for encounters and interaction were born around the campfire. The success of the kind of action and people's will to participate requires interest in hiking and handicraft. The artistic dimension in the trips was a community arts related thought about creating participatory art through the use of space and situations. The way the installations showed spoons from different viewpoints in one polyphonic collection was also a typical characteristic of community art.

The *Wooden Spoons* project was a combination of individual and community art work. Significances have been built alone and together, with everybody still doing their individual part. My thought about the significance of the project for the participants was that the significance of handicraft regardless of tools, techniques and materials would become clear to them, motivating them to continue and broaden their views. Personally, a significant find for me was the possibilities that I found from place-specific spoons, which I plan to apply into the context of changing living habitats.



An important part of handicraft is gathering up cultural tradition especially through the distribution of skills and values from one generation to another. This perspective was emphasized in the thoughts of some participants too. Simple but adventurous chores around the campfire creates a strong contrast against our modern lifestyle - also creating a great situation for the sharing of skills, lifestyle, values, and the cultural heritage that we care about. I believe that this method – varying types of hiking and handicraft – could hold onto many kinds of mutually chosen themes.



*Figures 5–6. Together and alone. When I was working alone, the stories of fire and wind were my companions. Photos: Antti Stöckell, 2016.*

## References

- Arvonen, S. (2015). *Kehon ja mielen kuntosali* [The gym of body and mind]. Helsinki: Metsäkustannus.
- Gros, F. (2015). *Kävelyn filosofiaa* [A philosophy of walking]. Helsinki: Basam Books.
- Haila, Y. (2004). *Retkeilyn rikkaus. Luonto ympäristöhuolen aikakaudella* [The wealth of hiking. Nature in the era of environmental concern]. Helsinki: Kustannus Taide.
- Hallikainen, V., Sievänen, T., Tuulentie, S., & Tyrväinen, L. (2014). Luonto kokemusten ja elämysten lähteenä [Nature as a source of experience]. In L. Tyrväinen, M. Kurttila, T. Sievänen, S. Tuulentie (Eds.), *Hyvinvointia metsästä* (pp. 36–47). Helsinki: Suomalaisen Kirjallisuuden Seura.

- Hiltunen, M. (2009). *Yhteisöllinen taidekasvatus: Performatiivisesti pohjoisen sosiokulttuurisissa ympäristöissä* [Community-based art education: Through performativity in Northern sociocultural environments] (Doctoral dissertation). Rovaniemi: University of Lapland.
- Huhmarniemi, M. (2016). *Marjamatkoilla ja kotipalkisilla: Keskustelua Lapin ympäristökonflikteista nykyaikaisen taiteen keinoin* [Artists in the landscape of berry wars and reindeer husbandry: Contemporary art as a forum for environmental politics] (Doctoral dissertation). Rovaniemi: University of Lapland.
- Huhmarniemi, M., Jónsdóttir, Á., Guttorm, G., & Hauen, H. (2017). *Interwoven Exhibition*. Rovaniemi: University of Lapland.
- Huurre, M., Hämeen-Anttila, V., & Levanto, J. (1998). *Kivikauden Suomi: Sakari Pälsin, Aarne Äyräpään ja Ville Luhon muistolle* [The Stone Age of Finland. To the memory of Sakari Pälsi, Aarne Äyräpää and Ville Luho]. Helsinki: Otava.
- Ihatsu, A.-M. (2004). Käsityön monet ulottuvuudet [Many dimensions of handicraft]. In T. Kupiainen (Ed.), *Käsillä tehty* [Handmade] (pp. 41–53). Helsinki: Edita.
- Jokela, T. (2008). A wanderer in the landscape. In G. Coutts & T. Jokela (Eds.), *Art, community and environment: Educational perspectives* (pp. 3–27). Bristol: Intellect.
- Jokela, T., Hiltunen, M. & Härkönen, E. (2015). Art-based action research – participatory art for the North. *International Journal of Education through Art*, 11(3), 433–448.
- Kanttonen, L. (2010). Yhteisötaiteen estetiikka ja menetelmiä [Aesthetics and methods of community art]. In L. Kanttonen Lea (Ed.), *Ankaraa ja myötätuntoista kuuntelua: Keskustelevaa kirjoitusta paikkasidonnaisesta taiteesta* [Strict and sympathetic listening: Conversational writing about place-specific art] (pp. 74–84). Helsinki: Kuvataideakatemia.
- Kester, G. (2010). Dialoginen estetiikka [Dialogical Aesthetics]. In L. Kanttonen (ed.) *Ankaraa ja myötätuntoista kuuntelua. Keskustelevaa kirjoitusta paikkasidonnaisesta taiteesta* [Strict and Sympathetic Listening. Conversational Writing about Place-specific Art] (pp. 39–71). Helsinki: Kuvataideakatemia.
- Lapum, J. (2018). Installation art: The voyage never ends. In P. Leavy (Ed.), *Handbook of arts-based research* (pp. 377–395). New York: The Guilford Press.
- Leavy, P. (2018). *Handbook of arts-based research*. New York: The Guilford Press.
- Linko, M. (1997). Naisten käsityöelämykset ja muistot [Women's handicraft experiences and memories]. In L. Svinhufvud (Ed.), *Käsityö viestinä* [Craft as a message] (pp. 47–59). Jyväskylä: Suomen käsityö museo.
- Luutonen, M. (1997). Villapaidan viesti [A message of a sweater]. In L. Svinhufvud (Ed.), *Käsityö viestinä* [Craft as a message] (pp. 41–46). Jyväskylä: Suomen käsityö museo.
- Luutonen, M. (2014). Tekemisen taito – käsityön kulttuuriperintö [Skill of making – the cultural heritage of craftsmanship]. In T. Steel, A. Turunen, S. Lillbröanda-Annala, &

- M. Santikko (Eds.), *Muuttuva kulttuuriperintö* [The changing cultural heritage] (pp. 94–119). Helsinki, Finland: Ethnos.
- Purhonen, T. (2010). Sitten, silloin, tässä, nyt [Then, here, now] In L. Kantonen (Ed.), *Ankaraa ja myötätuntoista kuuntelua. Keskustelevaa kirjoitusta paikkasidonnaisesta taiteesta* [Strict and sympathetic listening, conversational writing about place-specific art] (pp. 25–38). Helsinki: Kuvataideakatemia.
- Pyne, S. (2001). *Fire. A brief history*. London: British Museum Press.
- Stöckell, A. (2016). Taidetta ympäristökonfliktiin [Art to environmental conflict]. In A. Suominen (Ed.), *Taidekasvatus ympäristöhuolen aikakaudella – avauksia, suuntia, mahdollisuuksia* [Art education in the era of environmental concern – openings, directions, opportunities] (pp. 240–250). Helsinki: Aalto ARTS Books.
- Williams, F. (2017). *Metsän parantava voima* [The nature fix] (Jere Saarainen Transl.). Helsinki: Minervakustannus.

*Timo Jokela & Glen Coutts*  
University of Lapland, Finland

The North and the Arctic:  
A Laboratory of Art and  
Design Education for  
Sustainability



In this introductory chapter, we explore the notion of the North<sup>1</sup> and the Arctic as a ‘laboratory’ of art and design education for sustainability. The chapter is organised in three sections, the first is a discussion of the idea of northern conditions as an environment for testing and developing new art and design methodologies. In particular, we are interested in how art might address the effects of rapid changes in the social, cultural and economic setting and post-colonial situation of the area. Today, the Arctic is developing into an important hub of the twenty-first century; industrially, socially and politically. We believe that the economic potential of the region should be harnessed in a way that brings prosperity and guarantees the livelihood and social-cultural progress of, Arctic inhabitants and communities.

The second section deals with the potential of art and design education for sustainability. The goals of the 2030 *Agenda for Sustainable Development*, adopted by UNESCO (2015), are global in scope and, following these, the *Arctic Council* (AC, 2018) focuses on issues of sustainable development and environmental protection in the Arctic. The *Arctic Council’s Sustainable Development Working Group* (SDWG, 2018) was established to propose and adopt steps to be taken by the Arctic States to advance sustainable development in the Arctic. The SDWG seeks opportunities to protect and enhance the environment, economies, culture and health of indigenous peoples and Arctic communities, as well as to improve the environmental, economic and social conditions of Arctic communities as a whole. Until today art, design, culture and education have not been well represented among the experts working in SDWG.

In setting out priorities for the *Finland Chairmanship Programme of Arctic Council 2017-2019* (FCAC, 2018), Finland proposes to explore how the 2030 *Agenda for Sustainability Development Goals* framework can be used in the Arctic cooperation to apply to Education:

The Arctic region is characterized by sparsely populated communities, cultural diversity, a wealth of minority languages, differing socio-economic conditions, and long distances. Fair educational opportunities in remote areas are key for creating sustainable development and building resilience in Arctic communities. (FCAC, 2018)

According to Finland's agenda (FCAC, 2018), teachers - especially those who work in Arctic and northern communities who are committed to and inspired by, the Arctic are the key to providing good basic education. Based on that premise, Finland proposes to strengthen the network of education specialists in cooperation with the University of the Arctic. Since its establishment in 2012, The *Arctic Sustainable Arts and Design* (ASAD) thematic network of University of the Arctic has actively engaged with the UNESCO Sustainability Development Goals and Arctic Council SDWG goals as they apply to the challenges and changes taking place in the Arctic in the field of art and design education (ASAD, 2018; UArctic, 2018). One of our key aims is to raise the profile of art and design education in the for a of decision makers at, for example, UNSECO and the SDWG.

The third and final section posits the idea of a new genre of art and design education, drawing on our experience of developing and testing new masters level degree programmes. What, we ask, should art and design education look like given the challenges facing Northern and Arctic communities? The chapter concludes with a critical reflection on our *Arctic Art and Design Master's* programme and offers some lines for future art and design education research.

### **The Changing Arctic: A Laboratory for Dialogue and Creativity**

Rapid environmental and sociocultural change is affecting the wellbeing and cultures of people living in the region. Researchers in several disciplines have noted these shifting circumstances. Studies conducted by the Nordic Council of Ministers (2011) identify certain 'megatrends' that are taking place in the Arctic and Northern regions. In the Arctic, the pace of global warming is faster than in any other place on the planet, with profound consequences for the inhabitants. Globalization, in particular the extractive industries and more general exploitation of natural resources such as forests and ecosystem services for the tourist industry. All this activity has significant impact on Arctic communities and their cultures. One trend closely linked with globalisation is 'urbanisation' in which communities increasingly migrate from rural environments to urban settings. This drift leads to a concentration of the population in larger towns and cities. A

complex set of factors are at play concerning not just where people live, but also issues of cultural identity: who they are and how they live in terms of economic well-being and socio-political dimensions (Nordic Council of Ministers, 2011).

A further identifiable effect of globalization is that young people from northern areas increasingly move south to seek a wider range of educational opportunity, normally to larger towns and cities. This has consequences for the smaller towns and villages, a clear demographic trend towards an older population, unemployment amongst young people and a paucity of leisure and cultural activity. There can also be health and wellbeing issues related to loss of cultural identity (Corbett, 2007; Karlsdóttir & Junsberg, 2015). According to Chartier (2017) to understand the circumpolar world well, it is necessary to take into consideration the urban and non-urban problems that characterize it.

Following Chartier (2017), the North can be thought of as an 'intercultural laboratory' – a place where indigenous and non-indigenous peoples meet. It is estimated that there are around 4 million people living in the Arctic. That includes more than 40 indigenous groups and languages. Indigenous people account for 10% of the entire population of the Arctic (AHDR, 2007). The melding of cultures and lifestyles is common across the circumpolar region and this situation creates sociocultural challenges that can become politically charged in the postcolonial context of the area, including the northern parts of Scandinavia (Valkonen, 2009).

There has been growing interest, in recent years, in revisiting the forgotten cultural history of Northern Finland (Lähteenmäki, 2005; Tuominen, 2011) a similar situation exists in Canada (Grace, 2001). The role that the arts might play in representations of the North is also being explored by researchers (Marsching & Polli, 2011). In addition, contemporary indigenous artists have also taken a lead in this complex area of forgotten history and cultural identity. Using techniques normally associated with contemporary art (installations, photography and video) they have set about analyzing their heritage, culture, traditions and worldviews (Hautala-Hirvioja, 2014; Lehtola, 1997). They use their multi-ethnic backgrounds and environmental knowledge as a basis for art (Aamold, 2014). This fusion of traditional methods with conceptual art has made many contemporary indigenous artists very well known (Horsberg Hansen, 2016).

In the academic world also, indigenous voices are becoming more prominent. Kuokkanen (2000) suggested the idea of an 'indigenous paradigm', that would refocus, or 're-center' research on concerns and worldviews and cultural practices from an indigenous perspective. A key objective being to challenge the Western Eurocentric mindset. Smith (1999) also questions the Western ways of knowing and researching calling for the 'decolonization' of the methodologies of indigenous research. Many scholars have argued that the indigenous knowledge system has much to offer as a basis for indigenous research in the areas of art, design and culture (Guttorm, 2014). Guttorm's concept is very relevant to the debate about a 'northern knowledge system' (Jokela, 2018) in the multi-cultural and multi-ethnic North. According to Aamold (2014), many artists in the Scandinavian North, base their art on their multi-ethnic background and environmental knowledge, arguing that a blend of indigenous and critical methodologies essential to research and contemporary art in the North. Keskitalo (2010) stressed the importance of paradigm change and decolonization in Sámi schools and education to counteract colonialization. Keskitalo followed Smith's (1999) vision of decolonization as a long-term process that requires dismantling the power of administrative, cultural, linguistic and psychological colonialism.

In addition, scholars of northern cultures have stressed the need for decolonization and revitalization among other multiethnic communities, for example, Lähteenmäki (2005) in mixed Sámi-Finnish societies in Lapland Finland and Corbett (2007) in Nova Scotia coastal fishery communities in Canada. Härkönen, Huhmarniemi and Jokela (2018) introduced concept of crafted sustainability which means dialogue formed through handcraft and method of contemporary art as a shared cultural heritage between indigenous and non-indigenous people. This shared dialogic heritage is in line with the term northern knowledge system (Jokela, 2018) derived from the indigenous knowledge system that consists of shared traditions, a historic understanding of nature and the use of natural materials.

These paradigm changes have led to a re-evaluation of how art and design is taught in schools and universities and have also highlighted the aims of culturally sensitive approach in art education (Manifold, Willis, & Zimmerman, 2015) and cultural sustainability guided by UNESCO. When ASAD network



established in 2012 it was clear that studying traditional studio- and workshop-centered techniques and expression was not the appropriate way in which to deal with the complex issues of sustainability in art and design education in the North and the Arctic.

### **Art and Design Education for Sustainability in the North and the Arctic**

Guidelines for education for sustainability are set up in global scope by the 17 goals of the United Nations 2030 Agenda for Sustainable Development (UNESCO, 2015). The Arctic Council's Sustainable Development Working Group (SDWG, 2018) was established to propose and adopt steps to be taken by the Arctic States to advance sustainable development in the Arctic. SDWG seeks opportunities to protect and enhance the environment and the economies, culture and health of Indigenous Peoples and Arctic communities, as well as to improve the environmental, economic and social conditions of Arctic communities as a whole. In accordance with directions from the Arctic Council, the SDWG continues to integrate traditional and local knowledge into all its projects and activities, where appropriate. It is easy to think the objectives of UNESCO and SDWG for ecologically, socially, culturally, and economically sustainable development are now foregrounded just to follow. But how art and design educators can follow these guidelines if teaching painting, graphic printing, ceramic or other traditional for of artistic expression?

Concurrent with the rapid changes taking place in the North and Arctic regions, a paradigm shift is taking place in contemporary art, from artist's self-expression and individualism to a more community focused and dialogical approach. Writing on relational art, Bourriaud (2002) viewed artistic practice as a process that always involves making connections and dialogue between people. In art education, contemporary art is often used as a reference and starting point, marked as it is, by a contextual, process-based and dialogical stance, rather than the training in technical skills and self-expression that characterized the modernist era. Individualism has been supplanted by dialogue and community

engagement. Environmental and community art, for example, emphasise the situated and dialogical dimensions of art. Links to everyday life, events and places as opposed to the universal aspects stressed in modernism. New genre international relational and dialogical art (Kester, 2004; Lacy, 1995; Lippard, 1997) has underpinned doctoral and postdoctoral level study in art education at the University of Lapland (Hiltunen, 2009; Huhmarniemi, 2016; Jónsdóttir, 2017; Joy, 2018).

In these studies and other art-based action research projects, for example, long-term winter art development (Jokela, 2008a, 2008b, 2014, 2018) communality and dialogue means a new method of examining and understanding people's connections, spontaneous networks and common pursuits as a counterbalance to extreme individuality and consumption. The communal approach of much contemporary art offers new perspectives to examine the connection of contemporary art, indigenous art and craft, decolonization and revitalization in the North.

We argue that, when adopting the models of relational and dialogical contemporary art, art education has moved away from the modernist assumption that art education conveys the same worldwide cultural values and that the best methods for implementing education are the same everywhere. Bringing the methods and processes of contemporary art into northern contexts and merging



*Figure 1. The MA level winter art course Muohtagi – lumen kanssa – with snow was organised as a collaboration between the University of Lapland and Sami University of Applied Sciences in Kautokeino in the yard of the Thon Hotel Kautokeino. The implementation of the course sought ethically sustainable artistic-pedagogical ways to combine the principles of the Sami handicrafts (duodji) and community-based working methods in environmental art. Photo: Timo Jokela. 2018.*

them with the aims of sustainable education and questions of decolonization and revitalization may require a re-think of art teacher training.

If we are to address the role that art and design education might play in the sustainability agenda, the notion of cultural sustainability is important. Cultural sustainability is examined through cultural continuation, reconstruction and locality in the context of the North and the Arctic and these aspects are linked to others we have mentioned, strengthening cultural identity, revitalization and decolonization of the small northern communities through place-specific approaches (Jokela, Hiltunen, & Härkönen, 2015b). As one of the goals of education for sustainability includes the survival of regional cultures combined with the inhabitants' self-determination of their own culture while securing social and economic stability for all communities the place-specific and culturally sensitive approach (Manifold, Willis, & Zimmerman, 2015) are crucial. Dessein, Soini, Fairclough and Horlings, (2015) discuss eco-culture that is related to social learning by working with place-conscious and place-responsive teaching, sharing and learning that aim for a sustainable way of living for the future. Sustainability lies in community-based thinking where culture represents both problem and possibility, form and process.

Auclair and Fairclough (2015) determine cultural heritage - one of the key elements of cultural sustainability - as a continual process of remaking that is rooted in social construction. They emphasise its vitality over the interpretations of heritage as static, whose purpose is only to protect the past. When issues of renewing or protecting cultural heritage are discussed, the inevitable question of power and ownership arises: Who determines what heritages should be protected and what should be renewed? Council of Europe (2005) based on the value of cultural heritage encourages local communities to assume the key role in determining their heritage values. This approach is believed to increase the local actors' commitment to work for a culturally sustainable future.

New sustainable and place-specific approaches to learning and teaching, designed to address Arctic challenges embrace the participatory and dialogical methods of contemporary art and design, but also pedagogical reform towards project-based (Jokela, 2013, 2018) and situated learning (Lave, 1997; Lave &

Wenger, 1991). Situated learning theory suggests that knowledge and skills need to be assimilated in authentic contexts; situations that would normally involve the same knowledge and practical skills. Social interaction, communal participation and collaboration are essential constituents of this paradigm. In this model, learners are involved in a 'community of practice' (Lave & Wenger, 1991), become more actively engaged in the culture and eventually take on the mantle of an expert of Arctic art and design. This is a challenge for the arrangements of education activities: where, what and how should students learn about sustainability for the future?

Even when Shubert and Joubert (2016) point out that the youth in indigenous communities tend to view the cultural survival of traditions, customs and identities as more valuable than the youth in Western societies. A place-specific approach in education should take into account the fact that young people in the Arctic and Northern regions are adjusting with new multi-locational lifestyles, dividing their time between home, work and studies in different locations. At the same time, intergenerational relationships are proven to be crucial for cultural sustainability. Shubert and Joubert (2016) discuss intergenerational relationships from the perspective of intercultural dialogue. Cultural perceptions and interpretations differ between generations and cause tensions when they collide. Hence, the skills in maintaining constructive and reconstructive dialogue between generations require intercultural competence. We argue a culturally sensitive education supported by distance learning and mixed with situated- and project-based learning might open new possibilities for sustainable education in the field of art and design.

Material heritage of the Arctic is often connected to handicraft and the skilful use of natural materials. But we should remember that primary industries exploiting natural resources have traditionally been the foundation of the Nordic Arctic economy. According Olsen et al (2016) and Karlsdottir et al. (2017) new study of Future Regional Development Policy for the Nordic Arctic this is changing now. New studies show that Arctic areas hold several economic opportunities especially for young people in less traditional industries. Sustainable natural resource extraction forms the basis for more recent business oppor-

tunities, like the bio-economy and more knowledge-intensive activities such as research, development and innovation. Growing industries like responsible tourism and creative industries, also show promise – for example cultural events, locally produced food, handicrafts, art and film production. Also, according to the Nordic Councils of Ministers (2018), the region of Northern Scandinavia has the potential to become internationally established as a forerunner for sustainable creative business development, innovation and research: “*The Nordic Arctic creative and cultural industries of film, tourism, and indigenous cultural businesses are becoming increasingly important platforms through which the Nordic Arctic countries can create value and growth – economically, socially, and culturally*”. (Nordic Councils of Ministers, 2018.)

According to Karlsdottir et al. (2017), there is already evidence of the positive impact of education. Access to vocational and higher education opportunities, as well as lifelong learning, is fundamental for individual development and for the competitiveness of companies in the Arctic regions. The towns of Rovaniemi in Finland and Tromsø in Norway shine brightly as locations where the population is increasing and that does not happen through traditional industries. This is largely thanks to universities which are attracting more students every year. We believe that education for sustainability in the art and design field will play an important role in the future of the North and the Arctic.

### **A New Genre of Art and Design Education?**

New approaches to learning and teaching, designed to address challenges facing northern and Arctic regions and that embrace the participatory and dialogical methods of contemporary art and design are being developed at the University of Lapland. Rigorous training in art and design skills at the university coupled with the requirement to design, deliver and evaluate art-based projects with partners in business or tourism sectors is a hallmark of the model we have been developing and testing. This aspect of student training, known as ‘project studies’ (Härkönen & Vuontisjärvi, 2018) merges the two, normally separate, disciplines of art and design and seeks to train graduates that can work identify and use the most



*Figure 2. Tatiana Kravtsov's master thesis 'Building ten towers – weaving ten stories: Environmental art as a tool in development of cultural and creative tourism in Finnish Lapland' was made in collaboration with the large-scale development project, 'Environmental Art for Tourism (2016–2018)'. The project aimed to increase the use of environmental art by tourism companies in Finnish Lapland. Tatiana Kravtsov combined methods of visual applied art and service design in her work in the 'Experience Village Tonttula'. Photos: Tatiana Kravtsov. 2018.*

*Figure 3. Kalomoira Douranou's master thesis 'Embracing multiculturalism through arts-based workshops: Qualitative evaluation using visual representations' was made in collaboration with the 'ArtGear – Two-Way Integration of Young People 2016-2019' project that addresses the challenges of increased immigration in Lapland. Douranou was a member of the subproject 'My stage / Mun stage' that was a participatory theatre workshop supporting two-way social integration of women in Finnish Lapland. Photos: Kalomoira Douranou*



appropriate techniques for a particular business enterprise, or sociocultural issue. Typical examples of projects include students working with healthcare professionals, social workers or small-scale tourist enterprises with the aim of trialling and testing new ways that art-based techniques might increase efficacy. In order to work in this way, students need to nurture their own skills as artists and designers in addition to developing new skills as socially engaged creatives; facili-

tators who can work almost anywhere with almost anyone. However, because of the location of the institution and a network of partners the real focus is on the particular problems of northern places and peoples. These include, for example, climate change, pollution, long distances between places, isolated communities, ageing populations, the lingering after effects of colonialization, unemployment and population drift (usually of youth moving north to south). Of course, other countries and regions face many of these problems too, but in Lapland, we have a concentration of these factors, that present a rich array of challenges.

The process of developing a 'new genre' in art education can be traced to the 1990s at the University of Lapland, when the department of art education was seeking alternatives to the traditional 'Bauhaus' model of training in art (Jokela, 2013). Some fundamental questions were being asked by the staff in the University, artist-teachers, concerned to provide the most appropriate training for students in the late 20<sup>th</sup> and early 21<sup>st</sup> centuries. Just what kind of art and design education is needed to address the challenges facing Northern and Arctic communities? At roughly the same time another university, the University of Strathclyde, in Scotland, was developing community-based art education training (Austin, 2008; Coutts, 2008). Through staff and student exchange over a period of years, some teaching and research projects were developed and although there were very clear differences between the sociocultural and geographical contexts, there were equally clear similarities in pedagogical and philosophical stance.

The leading partner in the developing the new genre has been the University of Lapland, together with partners in Scotland and other Northern and Arctic countries. The ideals of partnership; shared learning, critical investigation and collaboration have been at the heart of our thinking from the early days of our work to work towards an art and design training that is fit for purpose in a Northern and Arctic context. During the late 2000s, developments in Scotland and Lapland progressed separately but in parallel. While recognising the differences, the similarities and opportunities to work together (for staff and students) became increasingly obvious to us and we examined the potential of closer collaboration.

From the modest beginnings of elective study classes in subjects such as, for example, 'art, community and environment' or 'time, space and place' a new



degree programme was developed. Feedback and evaluations of elective classes indicated, not only that the classes were popular, but also that classes were viewed as important by the students as they linked the insider world of the academy with the outside world of the environment, business and 'real' projects. Further findings from the evaluations included that students wanted more time for them and liked the idea that design, art and international exchange students were working together on tasks. Having developed and tested these shorter courses. The next challenge was to try to build on the strengths and design a complete programme, a degree that addressed issues and concerns facing northern and Arctic communities using art-based strategies.

The origins of the *Arctic Art and Design master's* degree programme (AAD, 2018) stretch back almost 10 years to the changes initiated by the department of art education, the interest in community-based art and collaboration with the University of Strathclyde, but the real progress has taken place over the past six years or so. This trajectory, we argue, makes the University of Lapland, a Northern and Arctic educational institution, an ideal 'laboratory of art and design education.' The traditional model of fine art training in many art schools in a lot of countries (at least in Europe) has not changed much since the industrial revolution and this at a period of massive social, political and technological change. The design disciplines on the other hand, have been developing and diversifying rapidly. At the root of our thinking and underpinning all of our prototype programmes is the notion of integration, of melding art and design methods and processes with a tight fit to sociocultural contexts. Over the past decade or so, we have investigated how art and design methods, when combined with sound pedagogical practice, might bring benefit to the student and those that s/he works with. Our studies suggest that knowledge and skills are best assimilated in authentic, or 'real world' contexts (Coutts, 2013); situations that would normally involve the same level of knowledge and practical skills. Instilling and refining first-rate people skills, community involvement opportunities and team working are key aspects of this type of training.

A powerful combination of place-based education and art-based action research (Jokela et al, 2015a) has led to the development of new models of

socially engaged art practice that result in art work, events or performances that are firmly located in time and place. This sort of art and design practice is outward looking and tied up with issues of people and place, whether temporary in nature or more permanent, there are often two dimensions to the educational benefits; for the artist and for the community or participants. In addition, networking and an open approach involving many partners has been very useful to the evolution of the Arctic Art and Design master's programme, particularly the dimension known as applied visual arts (Jokela, 2013). In order to maximise the opportunity for networking and collaboration across the north and Arctic, we founded the *Arctic Sustainable Arts and Design group* (UArctic, 2018) one of the thematic networks of the university of the Arctic. Established in 2011, partly in response to the paucity of representation for the North in the UNESCO agenda the group, at the time of writing (November 2018), is very active, having hosted six events (academic symposia with related exhibitions) that focus on northern and Arctic issues, each one held in a different member country. Through our research and publications (Jokela & Coutts, 2014, 2015, 2016, 2017) we know that many researchers are addressing the question of what art and design education for sustainability might look like (Guttorm, 2015; MacDonald & Jonsdottir, 2014; Gårdvik, Stoll, & Sörmo, 2014). Our students have been very closely involved in the organisation of many of the events, often hosting workshops on issues related to the theme of the symposium, information about the events is made public through our web pages (ASAD, 2018).

## **Conclusion**

The challenges facing Northern and Arctic communities, particularly climate change, globalisation, urbanisation, unemployment and shifting demographics demand sustainable solutions and a paradigm shift in the way that art and design education is conducted in order to meet such challenges. The master's degree in Arctic Art and Design is one proactive response to those challenges and many of our concerns, we know from our research collaborations, are shared by our colleagues; artists, designers, creative facilitators, academics and students.

Our research in the North and the Arctic suggests that the environments and sociocultural settings of the region could work as a ‘laboratory’ for innovative research in art and design education. We believe that the special circumstances of the region can act as an effective arena in which to develop context-sensitive and practice-based methods in contemporary art and art education. Further, methods that have been developed and tested in the North may be of interest to a wider constituency, for example researchers that share similar concerns.

We are encouraged by the developments that have taken place and the tenacity and creativity of our colleagues and students, but do not underestimate the extent of the challenges facing Northern and Arctic communities with regard to harnessing the power of art and design to help address sustainability issues. We suggest that the developments taking place at the University of Lapland and in the ASAD network may amount to a new genre of art and design education worthy of further research, development and testing in the field.

## References

- AAD. (2018). *Arctic art and design master's programme at the University of Lapland*. Retrieved from <https://www.ulapland.fi/EN/Admissions/Masters-Studies/Masters-Degree-Programmes/Arctic-Art-and-Design>
- Aamold, S. (2014). The role of the scholar in research into indigenous art. In G. Gutorm, & S. Somby (Eds.), *International conference on duodji and indigenous craft and design. Proceedings of the Duodji 2012* (pp. 69–94). Kautokeino: Sámi allaskuvla/Sámi University College.
- AC. (2018). *Arctic Council*. <https://arctic-council.org/index.php/en/>
- AHDR. (2007). *Arktisen alueen inhimillisen kehityksen raportti*. [Arctic Human Development Report]. Helsinki: Ympäristöministeriö. <http://hdl.handle.net/10138/153454>
- ASAD. (2018). *Arctic Sustainable Arts and Design Thematic Network*. Retrieved from <http://www.asadnetwork.org/>
- Auclair, E., & Fairclough, G. (2015). Living between past and future: An introduction to heritage and cultural sustainability. In E. Auclair, & G. Fairclough (Eds.), *Theory and practice in heritage and sustainability. Between past and future* (pp. 1–22). Oxon: Routledge.
- Austin, J. (2008). Training community artists in Scotland. In G. Coutts & T. Jokela, (Eds.), *Art, community and environment: Educational perspectives* (pp. 175–192). Bristol: Intellect.

- Bourriaud, N. (2002) *Relational aesthetics*. Dijon: Les Presse du Réel.
- Chartier, D. (2017). *What is the “Imagined North”? Ethical principles*. Quebec: Presses de l’université du Québec.
- Corbett, M. (2007). *Learning to leave: The irony of schooling in a coastal community*. Nova Scotia: Fernwood Publishing.
- Council of Europe (2005). *Convention on the Value of Cultural Heritage for Society*. Retrieved from <https://www.coe.int/en/web/conventions/full-list/-/conventions/rms/0900001680083746>
- Coutts, G. (2008). Community art: What’s the use? In G. Coutts G. & T. Jokela (Eds.), *Art, community and environment: Educational perspectives* (pp. 193–216). Bristol: Intellect.
- Coutts, G. (2013). Learning for the real world? In T. Jokela, G. Coutts, M. Huhmarniemi, & E. Härkönen (Eds.), *Cool: Applied visual arts in the North* (pp. 22–31). Rovaniemi: University of Lapland.
- Dessein, J., Soini, K., Fairclough, G., & Horlings, L. (Eds.). (2015). *Culture in, for and as sustainable development. Conclusions from the COST Action IS1007 Investigating Cultural Sustainability*. Jyväskylä: University of Jyväskylä.
- FCAC. (2018). *Finland’s chairmanship Arctic Council. Finland’s chairmanship program for the Arctic Council 2017–2019. Exploring common solutions*. Retrieved from [http://arctic-council.org/images/PDF\\_attachments/FIN\\_Chairmanship/Finnish\\_Chairmanship\\_Program\\_Arctic\\_Council\\_2017-2019.pdf](http://arctic-council.org/images/PDF_attachments/FIN_Chairmanship/Finnish_Chairmanship_Program_Arctic_Council_2017-2019.pdf)
- Gårdvik, M., Stoll, K., & Sörmo, W. (2014). Birch Bark – Sustainable material in an authentic outdoor classroom. In T. Jokela & G. Coutts (Eds.), *Relate North 2014 Engagement, art and representation* (pp. 146 – 168). Rovaniemi: Lapland University Press.
- Grace, S. E. (2001). *Canada and the idea of North*. Quebec: McGill-Queen’s University Press.
- Guttorm, G. (2015). Contemporary Duodji – a personal experience in understanding traditions. In T. Jokela & G. Coutts (Eds.), *Relate North: Art, heritage & identity* (pp. 60–76). Rovaniemi: Lapland University Press.
- Guttorm, G. (2014). Sami duodji methodologies. In G. Gunvor, & S. Somby (Eds.), *Duodji 2012. International Conference on Duodji and Indigenous Craft and Design* (pp. 51–68). Kautokeino: Sami University College.
- Härkönen, E., Huhmarniemi, M., & Jokela, T. (2018). Crafting sustainability: Handcraft in contemporary art and cultural sustainability in the Finnish Lapland. *Sustainability*, 10(6), 1907. <https://doi.org/10.3390/su10061907>
- Härkönen, E. & Vuontisjärvi, H. (2018). Arctic art & design education and cultural sustainability in Finnish Lapland. In T. Jokela & G. Coutts (Eds.), *Relate North: Practising place, heritage, art & design for creative communities* (pp. 86–105). Rovaniemi: Lapland University Press

- Hautala-Hirvioja, T. (2014). Saamelaisen nykyaiteen moninaisuus. [Diverse Contemporary Sámi Art]. *Agon. Pohjoinen tiede- ja kulttuurilehti*, 2014(3). Retrieved from <http://agon.fi/article/saamelaisen-nykyaiteen-moninaisuus/#fn36>
- Hiltunen, M. (2009). *Yhteisöllinen taidekasvatus: Performatiivisesti pohjoisen sosiokulttuurisissa ympäristöissä* [Community-based art education: Performativity in the northern socio-cultural environment.] (Doctoral dissertation). Rovaniemi: University of Lapland.
- Horsberg Hansen, H. (2016). Constructing Sami national heritage: Encounters between tradition and modernity in Sami art. *Konsthistorisk tidskrift/Journal of Art History*, 85(3), 240–255. <https://doi.org/10.1080/00233609.2016.1207701>
- Huhmarniemi, M. (2016). *Marjamatkoilla ja kotipalkisilla: Keskustelua Lapin ympäristökonflikteista nykyaiteen keinoin* [Artists in the landscape of berry wars and reindeer husbandry: Contemporary art as a forum for environmental politics]. Rovaniemi: University of Lapland.
- Jokela, T. (2008a). A wanderer in the landscape. In G. Coutts & T. Jokela, (Eds.), *Art, community and environment: Educational perspectives* (pp. 3–27). Bristol: Intellect.
- Jokela, T. (2008b). The northern schoolyard as a forum for community-based art education and psychosocial well-being. In A. Ahonen, E. Alerby, O. Johansen, R. Rajala, I. Ryzhkova, E. Sohlman, & H. Villanen (Eds.), *Crystals of schoolchildren's well-being: Cross-border training material for promoting psychosocial well-being through school education* (pp. 161–174). Rovaniemi: University of Lapland.
- Jokela, T. (2013). Engaged art in the North: Aims, methods, contexts. In T. Jokela, G. Coutts, M. Huhmarniemi, & E. Härkönen (Eds.), *Cool: Applied visual arts in the North* (pp. 10–21). Rovaniemi: University of Lapland.
- Jokela, T. (2014). Snow and ice design innovation in Lapland. In E. Härkönen, T. Jokela, & A.-J. Yliharju (Eds.), *Snow design in Lapland: Initiating cooperation* (pp. 180–181). Rovaniemi: University of Lapland.
- Jokela, T. (2018) Suhteessa talveen. [In relationship to winter] In P. Granö, M. Hiltunen, & T. Jokela (Eds.), *Suhteessa maailmaan* [In relationship to the world] (pp. 53–81). Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2014). *Relate North 2014: Engagement, art and representation*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2015). *Relate North: Art, heritage & identity*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2016). *Relate North: Culture, community and communication*. Rovaniemi: Lapland University Press.
- Jokela, T., & Coutts, G. (Eds.). (2017). *Relate North: Practising place, heritage, art & design for creative communities*. Rovaniemi: Lapland University Press.

- Jokela, T., Hiltunen, M., & Härkönen, E. (2015a). Art-based action research – participatory art for the North. *International Journal of Education through Art*, 11(3), 433–448.
- Jokela, T., Hiltunen, M., & Härkönen, E. (2015b). Contemporary art education meets the international North. In M. Kallio-Tavin, & J. Pullinen, (Eds.), *Conversations on Finnish art education* (pp. 260–279). Helsinki: Aalto University.
- Jónsdóttir, Á. B. (2017). *Artistic Actions for Sustainability: Potential of art in education for sustainability* (Doctoral dissertation). Rovaniemi: University of Lapland.
- Joy, F. (2018). *Sámi shamanism, cosmology and art: As systems of embedded knowledge* (Doctoral dissertation). Rovaniemi: University of Lapland.
- Karlsdóttir, A., & Junsberg, L. (Eds.). (2015). *Nordic arctic youth future perspectives*. Stockholm: Nordregio. URN: urn:nbn:se:norden.org:diva-4950
- Karlsdottir, A., Olsen, L. Harbo, L., Jungsberg L., & Rasmussen, O. (2017). Future regional development policy for the Nordic Arctic: Foresight analysis 2013–2016. Nordregio report, 2017:1. Stockholm: Nordregio.
- Keskitalo, P. (2010). Saamelaiskoulun kulttuurisensitiivisyyttä etsimässä kasvatusantropologian keinoin. *Dieđut, 1*. Kautokeino: Sámi University College.
- Kester, G. (2004). *Conversation pieces: Community + communication in modern art*. Berkeley: University of California Press.
- Kuokkanen, R. (2000). Towards an indigenous paradigm from a Sami perspective. *The Canadian Journal of Native Studies*, 20(2), 411–436.
- Lacy, S. (1995). Debated territory: Towards a critical language for public art. In S. Lacy (Ed.), *Mapping the terrain: New genre public art* (pp. 171–185). Seattle: Bay Press.
- Lähteenmäki, M. (2005). The white man's burden? Settlers in Finnish Lapland in nineteenth century. In M. Lähteenmäki, & P. Pihlaja (Eds.), *The North Calotte: Perspectives on the history and cultures of Northernmost Europe* (pp. 70–82). Helsinki: University of Helsinki.
- Lave J. (1997). The culture of acquisition and practice of understanding. In D. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic and psychological perspectives* (pp. 17–35). Mahwal: Erlbaum.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lehtola, V.-P. (1997). Saamelaistaide uuden ja vanhan rajoilla [Sámi Art at the intersection of new and old]. In *Saamelaiset – historia, yhteiskunta, taide* [Sámi People – history, society, art], (2<sup>nd</sup> ed.) (pp. 95–129). Inari: Kustannus-Puntsi.
- Lippard, L. (1997). *The lure of the local: Senses of place in a multicentered society*. New York: New Press.

- Macdonald, A. & Jonsdottir, A. (2014). Participatory virtues in art education for sustainability. In T. Jokela & G. Coutts (Eds.), *Relate North 2014: Engagement, art and representation* (pp. 82–103). Rovaniemi: Lapland University Press.
- Manifold, M., Willis, S., & Zimmerman, E. (Eds.). (2015). *Cultural sensitivity in a global world: A handbook for teachers*. Alexandria: National Art Education Association.
- Marsching, J., & Polli, A. (Eds.). (2011). *Far field, digital culture, climate change and the poles*. Bristol: Intellect.
- Nordic Council of Ministers. (2011). Megatrends. *TemaNord*, 2011:527. Retrieved from <http://norden.diva-portal.org/smash/get/diva2:702166/FULLTEXT01.pdf>
- Nordic Councils of Ministers. (2018). *Arctic business analysis. Creative and cultural industries*. <http://dx.doi.org/10.6027/ANP2018-708>
- Olsen, L., Berlina, A., Jungsberg, L, Mikkola, N., Johanna Roto J., Rasmussen, R., & Karlsdottir A. (2016). *Sustainable business development in the Nordic Arctic. Nordregio working paper*, 2016:1. Stockholm: Nordregio.
- SDWG. (2018). *Arctic Council's Sustainable Development Working Group*. <https://arctic-council.org/index.php/en/about-us/working-groups/sdwg>
- Shubert, V. & Joubert, L. (2016). Mutuality, individuality and interculturality. In P. Burnard, E. Mackinlay, & K. Powell, (Eds.). *The Routledge international handbook of intercultural arts research* (pp. 333–343). London: Routledge.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. London: Zed Books.
- Tuominen, M. (2011). Where the world ends? The places and challenges of northern cultural history. In B. Johnson & H. Kiiskinen (Eds.), *They do things differently there: Essays on cultural history* (pp. 43–80). Turku: University of Turku.
- UArctic. (2018). *University of Arctic thematic networks*. <http://www.uarctic.org/organization/thematic-networks/>
- UNESCO. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- Valkonen, S. (2009). *Poliittinen saamelaisuus [Political Sámi]*. Tampere: Vastapaino.

## Endnote

<sup>1</sup>When we refer to the North we mean the northern part of the world on the northern hemisphere or northern parts of specific countries, for example northern Canada, Scandinavian and Nordic countries and countries around the Circumpolar North and regions rather than simply the direction in which a compass normally points.

*Jessica Hein*  
University of Toronto, Canada

A Geography of Earth  
and Sky: Parallel  
Practices of Walking  
and Drawing





**T**his visual essay discusses a body of work that began with walking and the possibility of becoming lost. Without maps or a destination, and drawing on knowledge gained from interviews with skilled navigators of Canadian northern wilderness, I immersed myself in my environment. In cities and northern forests, I found myself in unexpected moments where the places I know suddenly became unfamiliar. In losing myself, both the internal and the external became expansive. A thundering front, a disappearing cloud, the rise of breath, and the fall of feet – all were sensed and understood through the movement of my body. I found these spaces once more as I made pours of water and worked with powdered graphite and minerals on paper. Through movement and the reactions between the materials, vast and shifting topographies emerged, evoking the ephemeral and the physical.



*The Colour of There from  
Here E’N  
Graphite on paper  
52x52”  
2013.*

With an interest in embodied knowledge, sensorial perception, and navigation, I began a series of walks in August 2012 with the intent of gathering experiences.<sup>1</sup> Seeking a method, or way of walking, I began to use cloud patterns as navigational cues. Both the movement overhead and the terrain beneath my feet determined my path; a reciprocal relationship between earth and sky developed through the act of walking. As I continually sought openings to the sky, my awareness of the edges of my horizons was heightened, as was my sense of direction. With the intent of awakening my senses and developing a memory of experience that is rooted in the body, I was intensely present as I walked. Time became slow and focused, yet also fleeting. Through walking I focused my senses on my surroundings and developed a heightened awareness of the ephemerality of experience. Each walk left me with a body of impressions, an accumulation of memory, a gathering of transient moments.



*The Colour of There from Here ENE*

*Graphite on paper*

*52x120"*

*2013.*

We experience the world through active and passive senses, responding to an internal interplay of sensation, perception, and conception (Tuan, 1977, p. 8). Philosopher and theorist Michel Foucault describes the relationship between the internal space of our minds and the external space of our lives. He writes that the interior mind is the space of perception and dreams. It is defined by

light, ethereal, transparent space, or a dark, rough, encumbered space: a space from above, of summits, or on the contrary a space from below, of mud, or again space that can be flowing like sparkling water or a space that is fixed, congealed, like stone or crystal. (Foucault, 1986, p. 23)

He notes that the exterior space of life is where time and history unfold, where we are drawn out, and where our lives erode (Foucault, 1986). From experience, we construct a reality out of a process of thought and feeling, both of which are ways of knowing. Through our senses we seek to “enlarge and comprehend the world. (Foucault, 1986.) Yet our experiences of our surroundings are layered, influenced by memory, story, culture, time. Overlaid onto the physical world is an interior space – the space of our imaginations, our dreams, our reflections. Our perceptions of place, and our locations within it, are always shifting, like the world around us.

Our experience of space involves a complex and ever-changing set of relations between various sites. We can describe many of these sites, their limits and boundaries, how they push and pull against one another, and against us. The realms of the urban, the natural, and the industrial, the private and the public, the interior mind and the external self – all of these are sites that are contained, yet which intersect and are interwoven. I am particularly interested in two of these interconnected sites, *earth* and *world*, which were differentiated by Heidegger. Complementary to Foucault’s interest in an internalized conception of space, Heidegger was particularly concerned with conceptions of the physical world. He considered the earth to be continually unfolding, simultaneously revealing and concealing dimensions of itself. It is ultimately unknowable and indefinable in its entirety (Murrany, 2010, p. 271.) Theorist Amanda

Boetzkes (2010, pp. 102–103) expands on the idea of earth through the term *elementals*, which she describes as natural phenomena that are without bounds, that shape the environment yet refuse to be defined by a closed system. In her (2010, pp. 102–103) view, elementals are all encompassing and simultaneously uncontainable.<sup>2</sup> In contrast with the concepts of earth and elementals, the idea of the world is framed within human culture and human time – it is laid bare and open to understanding (Murrany, 2010, p. 271). The very root of the word “world” (*wer*) is Old English for “man.” The concept of world comprises and also conjoins humans with our environment (Tuan, 1977, p. 34.).

The interrelationships between these realms – earth and world, internal self and external life – produces a continually evolving perception of place, space, and experience. Humans both interact with and order the environment. Our conception of the world is a human one, rooted in the body. Geographer Yi-Fu Tuan writes, the “body is ‘lived body’ and space is humanly construed space.” (Tuan, 1977, pp. 35–36). We perceive our surroundings and construct our realities not only by processing our senses, but also by aligning the reference points in space with the cardinal points of our bodies. We physically orient our bodies within our environments in order to provide structure to space.<sup>3</sup> This ordering (through senses, kinesthesia, and the mind) extends from our daily experiences to our understanding of places beyond our realm of experience, even to our knowledge of the universe.

Shortly after beginning the walks, I began a series of interviews with people who are familiar with using their senses as navigational tools. Through my walks in both urban and natural environments I had been introduced to the experience of relying solely on my senses to determine a route; I wanted to understand how skilled navigators open themselves sensorially, perceptually, and mentally to their environments. I interviewed five people with varied navigational experiences, all of whom have a nuanced understanding of their relationships with their environments.<sup>4</sup> We discussed how they read the land and the elements, how they use their senses as a guide, and the significance of memory and story in relation to their experiences of the wilderness.<sup>5</sup> Often finding the words to describe these experiences was difficult for them. It seemed that sometimes

they were finding words for the first time to articulate ways of being that are intimately *of* the body; ways that are clearly learned from *doing* rather than from spoken or written language.

One young man I interviewed, who is a hunter and outdoor educator, described to me how he allows the terrain to guide him, all the while keeping his senses open. He said,

I let the land set my path and sometimes it may lead me to a place completely different from where I thought I would go. I take three steps and stop and listen, listen, listen. Then I take three more steps and wait and listen. So I'm very in tune with everything that's going on around me. I may hear a squirrel running across dry leaves and think it's much larger than it is because I'm listening so intently.<sup>6</sup>

As he walks, he pays attention to the feel of the wind on his face, the lay of the land ahead, the sounds he hears, the types of trees he sees, the temperature of the air, sensations of moisture or dryness, and the time that is passing. He checks all the information his senses are taking in against the compass pinned to his chest and the image of the topographical map that he carries in his mind. And he does so without thinking. These are behaviours that are learned from practice and which become a part of his body awareness. Another person I interviewed who is an experienced hunter, trapper, and sailor, spoke similarly about using his senses.

I'm using all my senses. I keep that wind in my face so it keeps my direction; I know how my terrain's changing, or which way the water's flowing. I'm not just looking here, I'm looking as far as I can see. It's a whole combination of things. Everything. I read it on the ground.<sup>7</sup>

This intense mode of sensory engagement with the environment, whether in the wilderness or in the city, requires a heightened sense of awareness. It also requires a certain slowness and focus. The young hunter/outdoor educator spoke about losing himself in the act of navigating the environment. Becoming “lost”

in one's surroundings and gaining a sense of immensity is to let "one's thoughts wander freely over space" without being pulled back into the mental distractions of daily life (Tuan, 1977, p. 59). It requires a sense of solitude, a clearness of mind, and an expansion outwards from both internal and external awareness. For that young man, there is simply no space to think about other elements of his life when every one of his senses is engaged in perceiving his surroundings. When we focus on sensing our environments, we not only become fully present in our minds but also completely immersed in our own physicality.



*The Light That Gets Lost E'NE*  
*Mineral pigments on paper*  
52x72"  
2013.

Our constantly shifting bodily experience provides us with a complex understanding of the world and the earth (Boetzkes, 2010, p. 30). It is not a stretch then to suggest that our memories and experiences are not only located in our minds, but also in our bodies. For instance, researchers have found that we can recount stories and events more easily and quickly when we reenact physical movements such as hand gestures or body postures (Wilson & Foglia, 2011).

There is a reciprocal relationship within our bodily experience of our environments. We order, structure, and understand space through our physicality; in turn, our bodies also process our experiences through physical motion. The space of our minds and the movements of our bodies are inextricably linked with the external world.

*The Colour of There from  
Here ENE'E  
Graphite on paper  
52x72"  
2013.*



There is a visceral quality to the moments I have gathered along the walks I took for this project. Experience has the potential to become more than an accumulation of perceived data, such as sights, sounds, or emotions. Rather, it can become a part of our bodily awareness. It can acquire a sense of physicality and become a part of our rhythms, our breath, the movement in our fingertips. We can know, understand, and remember *through* sensation and the motion of our bodies. As an act that requires motion, concentration, and introspection, drawing can be a deeply embodied experience. Just as memory can be height-

ened by bodily motion, when I am drawing I can access an awareness of a place or experience through focused movement. Moments are not just recalled; they are *felt* and *sensed*.

This body of work has developed directly from my experiences of walking, my research on navigating with one's senses, and my investigations into embodied memory. While walking I focused on openings to the sky and the edges of the horizons. I became interested in the relationships between our views out from this world and also the inverse – the remote views of our planet from space. One vista offers a sense of impermanence and expansiveness, the other, formations of landmasses, bedrock, and topography. By considering these two perspectives as I worked with water and powdered pigments in my studio, I began to explore a shifting between micro and macro, ephemerality and physicality, and the edges of a form versus an opening into atmospheric space.<sup>8</sup> I have approached drawing as a way to understand the physical properties of and interactions between my chosen materials. I have also engaged with drawing in order to make sense of my experiences of walking.



*The Light That Gets Lost S'W*  
*Mineral pigments on paper*  
22x30"  
2013.



In my studio, I made large pours of water on heavy water colour paper and dropped in powdered pigments. Using a process-based approach, I engaged with the fast-moving flow of water and the slow-moving state of powdered pigments on the surface of the paper in order to find the edges of a space or form. As the water, pigments, gravity, and my body movements interact, spaces both ephemeral and physical emerge within the drawing. At times the pigment and water take on an atmospheric quality, and at others, they solidify to form topographies that reference earth, rock, riverbeds, or perhaps an industrial site.

I am interested in working with processes that straddle the bounds of the controllable and the uncontrollable and that investigate a process of formation. Drawing with water is a process that relies upon embodied memory as I engage the movements of my body with the properties of water – its currents and flow, surface tension, evaporation, and response to gravity. The resulting drawings are a record or trace of a sort of becoming – a state that is in the process of being formed and that is mapped over time.



*The Light That Gets Lost W'N*  
*Mineral pigments on paper*  
22x30"  
2013.

## References

- Boetzkes, A. (2010). *The Ethics of Earth Art*. Minneapolis: University of Minnesota Press.
- Foucault, M. (1986). Of other spaces. *Diacritics*, 16(1), 22–27.
- Murrani, S. (2010). Third way architecture: Between cybernetics and phenomenology. *Technoetic Arts: A Journal of Speculative Research*, 8(3), 267–281.
- Tuan, Y.-F. (1997). *Space and place: The perspective of experience*. London, UK: University of Minnesota Press.
- Wilson, R. A. & Foglia, L. (2011). Embodied Cognition. In E.N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Fall 2011 Edition). Retrieved from <http://plato.stanford.edu/archives/fall2011/entries/embodied-cognition/>.

## Endnotes

- <sup>1</sup> These walks took place over a three-month period, from August to October of 2012. The walks began in the bush in Northern Ontario, but many of them took place in downtown Toronto. I carried a GPS to trace my route, though I did not look at it while I was walking or use it for navigation; it was merely a tool to record the path of my walk. I took photographs along the way and after each walk I made field notes on my impressions, perceptions, and sensations. Some walks were short, lasting only 30 minutes, but most were approximately two hours in length. The longest walk lasted from sunrise to sunset.
- <sup>2</sup> An example of elementals is the way the sky may colour the atmosphere of a valley before a storm or the meeting of violent waves at a cliff edge. (Boetzkes, 2010, pp. 102–103.)
- <sup>3</sup> For instance, in complete darkness direction is arbitrary until an external reference point, such as a light, sound, or sensation, provides structure to the space. When a point of orientation becomes evident, front and back or left and right have meaning and purpose within the environment once more. (Tuan, 1977, p. 35.)
- <sup>4</sup> I conducted two interviews with women and three with men. One woman was in her early forties and the other in her early sixties. The men ranged in age from late twenties to late-seventies. All were Caucasian (one Francophone, two of Finnish descent, and two of mixed European descent) and all were born and raised in Northern Ontario. Each person is a skilled navigator through experiences with varied outdoor activities. All but one was experienced in hunting and trapping; additionally they were skilled in activities such as canoeing, hiking, sailing, scuba diving, and teaching outdoor education.

<sup>5</sup> To begin our conversations I asked questions such as, do you use multiple senses when you are navigating? What aspects of the environment influence your route? What is the relationship between memory and landscape, particularly with respect to navigation? Are stories and narratives important or relevant to navigating the wilderness?

<sup>6</sup> Bradley, interview by Jessica Hein, Lively, Ontario, September 26, 2012.

<sup>7</sup> Michael, interview by Jessica Hein, Lake Penage, Ontario. September 28, 2012.

<sup>8</sup> I have worked with a range of powdered pigments in this body of work – most often powdered graphite, but also powdered metals, mineral pigments, and iron oxides. I will refer to them with the general term ‘pigments.’

# Contributor Details

**Lindsay Blair** teaches Art History and Cultural Theory at The University of the Highlands and Islands, Scotland (lindsay.blair.moray@uhi.ac.uk). Research interests include Surrealism in America, contemporary visual culture of the Scottish Highlands and the interface between art and literature. A recent book section is 'Paradigms of Transmission: Aesthetic Affinities and Intertextualities in the Art of Will Maclean'; and earlier scholarly outputs include Joseph Cornell's Vision of Spiritual Order and a BBC Omnibus documentary Joseph Cornell: Worlds in a Box. Contact: lindsay.blair.moray@uhi.ac.uk

**Glen Coutts** is Professor of Applied Visual Arts Education and a Docent at the University of Lapland. A practising artist, he writes regularly about issues in art education. In 2018, he is President-Elect of the International Society of Education through Art and Past Principal Editor of the International Journal of Education through Art (2010–2016). In 2016, He was awarded the United States Society of Education through Art Ziegfeld award for outstanding international leadership in art education. Contact: glen.coutts@ulapland.fi

**Jessica Hein** studied visual art at NSCAD University in Halifax and received her Master of Visual Studies at the University of Toronto in 2013. She has exhibited her work across Canada at venues including the Khyber Institute of Contemporary Art, Halifax; Musée des beaux-arts de Mont-Saint-Hilaire, Mont-Saint-Hilaire, Québec; Latcham Gallery, Stouffville, Ontario; the Art Museum at the University of Toronto; and the MacLaren Art Centre, Barrie, Ontario. Jessica teaches drawing in the department of Arts, Culture and Media at the University of Toronto Scarborough. Originally from Northern Ontario, she currently lives in Toronto, Canada. Contact: jessica.hein@mail.utoronto.ca

**Tarja Karlsson Häikiö**, PhD in Art History and Visual Studies, and Associate Professor in Visual and Material Culture, Academy of Design and Crafts at the University of Gothenburg. Her research areas are visual art education, child and youth culture, aesthetic learning, art pedagogy, documentation and assessment as well as different kinds of artistic practices related to teaching and learning. She has published scientific articles and been co-author of several anthologies in the field of early childhood and visual art education in preschool and compulsory school. Contact: tarja.haikio@hdk.gu.se

**Jonna Häkkinen** is professor for Industrial Design at University of Lapland, Finland (2014-). In 2012–2014 she was Director of User Experience (UX) at Center for Internet Excellence, University of Oulu, Finland. Prior to this, she worked as a research leader at Nokia Research Center, where she ramped up and led two user experience research teams in 2007-2011. Her current research interests lie in unobtrusive interaction with technology, aesthetic and tangible interaction design, and in utilizing design methods for creating and assessing future technology visions. Contact: [jonna.hakkila@ulapland.fi](mailto:jonna.hakkila@ulapland.fi)

**Milla Johansson** is University Teacher for Industrial Design at the University of Lapland. Johansson teaches BA and MA level students at the Faculty of Art and Design and also enjoys teaching courses for exchange students. Her area of specialization is around user-centered design with main interests and enthusiasm revolving around product design. She is supervising students participating in the main furniture and interior design events in Finland, Milan and New York. Her research interests are in arctic design and culture related design preferences. Contact: [milla.johansson@ulapland.fi](mailto:milla.johansson@ulapland.fi)

**Timo Jokela** is as a professor of Art Education at the University of Lapland and a head of Northern Culture Institution of Lapland University Consortium. He is also a lead of University of Arctic's thematic network on Arctic sustainable Art and Design (ASAD). His theoretical studies and artistic projects focus on relationship between northern cultures, art and nature. He has been responsible for several international, national and regional art-based action research projects, where art education, community art and environmental art has been studied in the contexts of decolonization, revitalization and cultural, social and economic sustainability. Contact: [timo.jokela@ulapland.fi](mailto:timo.jokela@ulapland.fi)

**Antti Stöckell** is an artist and art educator in Rovaniemi, Finland. He has been a university teacher in art education at the University of Lapland, faculty of Art and Design, since 2008. As a postgraduate students he is making doctoral theses about using art as a tool for processing experiences of environmental changing. As an artist he focuses on working in nature and in the field of environmental art. Contact: [antti.stockell@ulapland.fi](mailto:antti.stockell@ulapland.fi)



LAPIN YLIOPISTO  
UNIVERSITY OF LAPLAND



ASAD  
Arctic School of Arctic  
Diplomacy  
UNIVERSITY OF UTAH



UArctic



This book brings together the work of researchers, scholars and artists whose professional activity centres on the fields of contemporary arts, design, art education and sustainability. In general, the *Relate North* series helps advance our understanding of art and design education, particularly among people living in Northern and Arctic areas. This particular volume, the fifth in the series, focuses on the inter-relationship of art, design and education for sustainability. Contributing authors provide fascinating accounts of current research and praxis in several northern countries including Canada, Finnish Lapland, Scotland and Sweden.

*Art and Design Education for Sustainability* will be of interest to a cross section of the art and design education research community which may include, for example, art and cultural historians, sociologists, artists, designers, art educators and practice-based researchers. In addition, the book will be of use to undergraduate art and art education students, postgraduate students in the arts and policy makers concerned with northern issues relating to art, design, education and sustainability.

[www.ulapland.fi/LUP](http://www.ulapland.fi/LUP)