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Oslofjord Ecologies Artistic Research on Environmental and Social Sustainability

Edited by Kristin Bergaust, Rasa Smite and Daina Silina

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Renewable Futures, Issue 3 / Acoustic Space, Volume 18 Peer-reviewed journal & book series on art-science research

http://acousticspacejournal.com

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RIXC Center for New Media Culture (Riga, Latvia) and OsloMet - Oslo Metropolitan University (Oslo, Norway)

Support









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Editing and proofreading Robert Buckmaster

Design Mārtinš Ratniks, SIA Re-Lab

Layout and printing SIA Re-Lab, Print Group

Paper Maestro Print 80, 120, 300 g

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Lenču iela 2-60

http://rixc.org

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Cover photo Blue mussels (Mytilus edulis). Photo coturtesy of Tore Strohmeier, Institute of Marine Research in Norway

Oslofjord Ecologies

ISSN 1407-2858 ISBN 978-9934-8434-8-8

RIXC, OsloMet, 2020

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Acknowledgments

I first and foremost want to thank all the contributing authors, artists and other participants for their collaboration and enthusiasm. I am overwhelmed by your work and hope this publication will support your endeavours further. You are all presented or listed elsewhere in the book. Not visible in the book are the contributors who helped with the different stages of the making of Oslofjord Ecologies who I would like to thank and name.

Thanks for the inspiration, dear colleagues Arild Berg, Leif Hernes, Trond Lossius and Ellen Røed. You will recognize traces of our conversations and your contributions to the *Ecotones* pre-project in 2015. Ellen Røed's photographs from Listening to the Fjord are also highly appreciated.

Other photographers I wish to thank for their contributions are friends who offered their photos from the Oslofjord Ecologies events: Kjersti Gürgens Gjærum and Nami Sah. I am also grateful for the use of Pavel Ahkarov's photos from Aalto University. Thanks to Andrew Patterson of the Pixelache festival, and PAO-Performance Art Oslo presented by Fernanda Branco, and to Andrea Sunder-Plassman for your documentation the Cuban-German artistic research project SENSE-Lab. You have contributed interesting documentation and been inspirational as always.

Thanks to artist and curator Christel Sverre, my long time friend and colleague, a competent producer of everything from fresh flowers to bio-art chemicals, and all kinds of necessary infrastructure and documentation for the Oslofjord Ecologies workshop.

Thanks for your hospitality: former colleague and artistic director Ivar Smedstad of ANX- Atelier Nord for offering Oslofjord Ecologies the wonderful venue in Grünerløkka in central Oslo for workshops and activities in 2016. A big hug to Anne Beate Hovind, project leader of public art in Bjørvika. and Vibeke Hermanrud for receiving us at the Flatbread Society Bakehouse in Losætra. Not to forget the inspiration from artist Amy Franseschini and the other Futurefarmers who created this special oasis of an alternative Oslo on the outskirts of Fjordbyen. Thanks to curator Madeleine Park of RAM Galleri, who enthusiastically insisted on housing an exhibition and an intense activity program based on the Oslofjord Ecologies in August 2017. Thank you, Lily Kommonen-Diaz for inviting Oslofjord Ecologies to exhibit on the Espoo campus of Aalto University on the spur of a moment after being fascinated by a rock with Pacific Oysters attached to it. And thanks to you, Juhani Tenhunen of Aalto Media Factory, and to the Aalto Department of Scenography and I suspect a couple of other guys for making the Oslofjord Ecologies Extended exhibition happen in 2018 in the event of the Renewable Futures conference and HybridLab Symposium. Thanks to all of you who shared your research and knowledge in seminars and workshop. Eli Rinde, marine biologist and senior research scientist, Ph.D. at the Norwegian Institute for Water Research, has played a special part, both as our guide in the field trip Listening to the Fjord, and in collaborations with the projects of Elin T. Sørensen and Sabine Popp.

Without the financing and creative environments from the Creative Europe project Renewable Futures led by Rasa Smite, RIXC and the Nordplus Horizontal project Hybrid Labs led by Lily Kommonen-Diaz at Aalto University there would have been no Oslofjord Ecologies. Thank you both!

Thanks to OsloMet – Oslo Metropolitan University (formerly HiOA) for financing this book and for the possibility of spending research time, both of which have been invaluable. Thanks to the Faculty of Technology, Art and Design at OsloMet and the heads of the Department of Art, Design and Drama, Åshild Vethal and Eirin Sæther (from 2018) for trust and freedom. A special thanks to Rut Skadal Kvåle, who helped me keep the budget together.

Finally, I want to thank my closest colleagues for their support and inspiration in a unique transdisciplinary environment combining theory, artistic practice and technology: Venke Aure, Boel Christensen-Scheel, Rikke Gürgens Gjærum, Camilla Eeg-Tverrbak, Stefano Nichele, Oddrun Sæter and everyone in the Art in Society research group.

KRISTIN BERGAUST Nesodden, Oslofjord, May 2020

Foreword by the Series Editors

This Oslofjord Ecologies book marks the tenth anniversary of the Renewable Network – a Baltic-Nordic collaboration focusing on artistic practices that offer new ideas to overcome the crises of the past and present, working with science and 'techno-ecologies', and developing new models for more sustainable and imaginative ways of life. This cooperation has resulted in a series of projects and events which have taken place throughout the Baltic-Nordic region and Europe. The Acoustic Space publications, of which this is one, have served as a platform for discussion and reflection on novel fields in artistic research in this region and beyond. Acoustic Space is a peer-reviewed periodical book & journal series on art, science, technologies and society which has been published by the Riga-based RIXC centre since 2007.

The first "Renewable Futures" issue in the "Acoustic Space" series came out in 2017, on the occasion of the inauguration of a new conference series which, with the same title of Renewable Futures, was inaugurated in Riga, has travelled to Eindhoven and Helsinki, and finally is scheduled to take place in Oslo in 2021. Renewable Futures, the publications and conference series, are shaping new contact zones between traditionally separated domains, bringing together art and science, digital technologies and sustainability, and the culture and social engagement of the 21st century.

"Oslofjord Ecologies" is the third issue of the "Renewable Futures" series. In this issue, our guest editor is Kristin Bergaust, a professor from Oslo Metropolitan University, who is a co-founder of the Renewable Network, and the curator and organizer of the Oslofjord Ecologies symposium and exhibition. Taking place in 2017, Oslofjord Ecologies was one of the most remarkable Renewable Network events and we are delighted to be able to give you a deeper insight into this project.

The "Oslofjord Ecologies" book contains a collection of articles on artistic research in Oslofjord, and an exhibition overview in the album section. 'Dislocated' in the Oslofjord, an inlet of the Skagerrak sea, stretching south from the city of Oslo, the contributors in this issue reflect on diverse topics about the fjord, the social life on its coasts, and economic and ecological issues above and below the water level. None of the entities – be they the oil industry or mussels – are on their own – they have an impact on each other; and artistic research was used here to reveal this complex web of connections.

We thank all the authors, artists and other contributors, who this time are mainly female, as well as our reviewers and the editorial team. It was a delight to work together with Kristin Bergaust on the Oslofjord Ecologies issue. Some of the urgent issues discussed in this book today may correspond to the issues brought by the current pandemic crisis which urges to change structural and economic patterns in our society as well as ways and behaviours and mindsets. With this book we invite you to join us 'sailing' in and around the Oslofjord, experiencing the potential of artistic research which is capable of making new connections, pushing the boundaries and offering more resilient visions of the future.

RASA SMITE and DAINA SILIŅA acousticspacejournal.com

Introduction. Oslofjord Ecologies: From Experience to Extension

KRISTIN BERGAUST

OsloMet - Oslo Metropolitan University

Oslofjord Ecologies is an artistic research project fed by interdisciplinary impulses and aspects. Oslofjord Ecologies started as a ten-day intense workshop program, and was eventually extended to exhibitions, performances and activity programs on artistic, cultural and environmental sustainability. At the outset, we were intentionally without a fixed definition of what ecology would mean in the project. Keeping questions manifold and the term ecology open inspired a wider communication encompassing an extensive range of interests and sensibilities, as well as an openness to critical questioning and discussion. Combining art and ecology often draws criticism and objections to art as an effective tool in a societal context. Why not devote our engagement directly to politics or activism?

Without answering this provocation clearly, discussions in Oslofjord Ecologies drew inspiration from the uncomfortable implications of this question and reformulated it to: What can art do? A specific question was posed on the invitations to the first workshop: How can new concepts of knowledge, artistic methods and interdisciplinary engagement contribute to formulating sustainable relationships to the environment? This was followed by a vague description of what we would aim for: Together we will focus on ideas and possible strategies for future developments and productions. From this starting point, Oslofjord Ecologies developed.

Thinking of ecology as a shared, entangled and complex existence, or just something more of an exchange, encompassing our subjectivities and the social and political environment as well as the natural ecosystem, connects us to Felix Guattari's concept of Ecosophy from his essay The Three Ecologies first published in 1989. Guattari points to an ethico-political articulation, which he calls the three ecological registers, comprised of the environment, social relations and human subjectivity (Guattari, 2000, p. 28). This inspired a curatorial attention to works and practices of the social and mental as well as the direct engagement with the environment. However, each author and artist in this volume is unbound by common formulations of ecology or art. These texts and images are attempts to communicate experiences and develop questions and concerns following our engagement with Oslofjord Ecologies. Some contributors to the Oslofjord Ecologies volume are artists who presented ideas, developed and contributed works presented in exhibitions, performance programs and activities. Some authors were engaged in transdisciplinary discussions on art and ecology. Some artists and the art works described in this introduction are represented in the Oslofjord Ecologies Album and not necessarily through academic texts. Since the Oslofjord is not unique as an environment of nature-cultures bordering on the urban, we hope our experiences and reflections can mirror and resemble many others. Oslofjord Ecologies was made possible through collaborations within the 'Renewable Futures' Creative Europe project, of five international partners led by RIXC, which was later connected to the Hybrid Labs Nordplus Horizontal collaboration. This made Oslofjord Ecologies come together as a mixture of research, artistic endeavours and projects, exhibitions, and now this publication. Oslofjord Ecologies is hosted by the Art in Society Research Group at the Faculty of Technology Art and Design of the OsloMet-Oslo Metropolitan University. In the first article of this book, "ECO-Art and Awareness: Sustainability Through Artistic Research", the leader of the research group, professor in Aesthetics and Art Theory at OsloMet Boel Christensen-Scheel, discusses ecosophical, aesthetic and artistic concepts and practices with a view to the potential of art to investigate and produce sensory perceptions.

(Over)Looking the Oslofjord

A fjord is a geographical freak, a topography that contains and harvests the ocean and forces the sea to coexist with the inland, the agricultural, the industrial, the cultural, to become infrastructure and enter human perception. The fjord receives and contains all the rivers, pollution, melting waters from mountains and glaciers. The fjord meets mountains and abundant agricultural production, natural landscapes more typical of the inland than the ocean coast, and becomes a spectacle, an attraction. The Oslofjord is the Norwegian fjord that is overlooked when tourists prepare to enjoy the scenic Norwegian western fjords from cruise liners. Some cruise ships will find their way through the almost too narrow straits and too shallow waters to reach



Figure 1. The contour of the Oslofjord

the capital of Oslo and spend a few hours close to the City Hall and the fortress of Akershus Castle. Rather than admiring the natural environment of the fjord, the passengers visiting Norway's capital tend to visit a couple of photogenic cultural sights: the Viking Ships museum and the Vigeland park of vitalistic sculptures. Large passenger ferries regularly pass through the fjord to reach Copenhagen or Fredrikshavn in Denmark or Kiel in Germany along with immense container freighters bound for everywhere in the world. In the remaining space, the fjord is filled with smaller vessels, be it ferries for local passenger transport in the fjord, tugboats, fishing boats, barges carrying machines or materials, sleek sailing boats, roaring speed boats, the odd classic yacht becoming visible among all kinds of leisure crafts in every imaginable condition: - INTRODUCTION -

kayaks, canoes, waterboards. Swimmers trying to defend their spaces contained by chains of yellow buoys, kids are playing off the coast. We are all here. The Oslofjord is nature, economy, infrastructure, biology, materiality, culture and history as well as future plans and challenges.

Exactly when we leave the area of the Oslofjord is unclear. Some say the fjord ends around Færder Lighthouse, 120 km from Oslo, some others will say the fjord does not really end: it goes to the sea which feeds into the oceans that cover the blue planet. The principle "everything is connected with everything else" (a citation from Lenin, also used by Gro Harlem Brundtland, the Norwegian prime minister who headed the first UN report on sustainability Our Common Future), somehow fits our image of life in the sea (United Nations, 1987). The shoals of cod that are born and bred here in the Oslofjord, count all of Skagerak, the sea expanse across to Denmark, as their home. The coastal waters west of the fjord all belong to the Oslofjord shoals of cod as well. When a total ban on fishing for cod was issued by the Norwegian Directorate of Fisheries in the summer of 2019, it came as a shock to the general public (2019). The ban reaches all the way to the Southern tip of Norway in awareness of the interconnections of cod shoals. The tradition of fishing for cod for family consumption or commercial use had to be stopped abruptly.

The Oslofjord: Look Under the Surface

Maps usually represent the sea as empty, blue expanses. Symptomatic of our visual attention economy, what is under the surface and invisible, evades public awareness and consideration. In 2016 the Norwegian Coastal Administration removed 24 underwater reefs from the inner Oslofjord with explosives. In doing so, the Coastal Administration broke the laws regarding pollution according to the Norwegian Environmental Agency, a governmental entity. However, they did not see this as grave enough to follow up with a formal accusation. Even so, the police found it sufficiently serious to issue a fine of 200 000 NOK. By this change of underwater topography, some of the most important spawning grounds for the cod shoals between Oslo and Skagerak were removed. The explosive removal of the reefs was done to increase the channel depth from 11 to 14 metres on the ship's route into Oslo to allow larger cruise liners to enter (Løken & Kielland Jensen, 2016).

My video animation CRUISE was made right after this happened in 2016, and investigates and fantasizes over the situation and its consequences. This work became part of the Oslofjord Ecologies exhibitions. I live on a peninsula in the fjord and was unprepared for the sight of barges filled with masses from the reefs, which appeared along my daily commuter ferry route into the city. The sparse public information only came to my attention when I made some research to understand what I had seen. Frequent encounters with the Oslofjord as a commuting passenger is part of my daily routine and were part of the motivations to initiate Oslofjord Ecologies. To share and expand on this enjoyable experience, the artist and musician Siri Austeen helped organize a boat trip, entitled Listening to the Fjord. Oslofjord Ecologies workshop participants joined in a journey to experience the sounds from the fjord by hydrophones. Being

on the fjord in November, being a part of the traffic and sensing the weather and the movements of the sea influences all senses and forms a relationship to the environment. Eli Rinde from the NIVA - Norwegian Institute of Water Resarch, a biologist and senior researcher specializing in the Oslofjord area, helped us understand our impressions (NIVA, 2019). During the voyage, I listened to some of the exploded sites, which produced rustling, non-distinct sounds. However, the inaudible presence of destruction contributed to my wish to make these happenings visible. Underground rocks, reefs and the cod beneath the surface are not seen or considered, what else is there that we cannot see? We know there is a lot of garbage, pollution and harmful substances, micro-plastics and heavy metal. A recent governmental report confirms the situation (Norwegian Environment Agency, 2019, p. 8). In the event of the National Coastal Clean Up Day, in 2014, artist and landscape architect Elin T. Sørensen collaborated with divers and activists to clean the seabed outside Nesodden in the Oslofiord and harvested an amazing variety of garbage, plastics and household goods. The findings were shown as an installation in Stenersenmuseet, Oslo. Her documentary video Kaurene – The Gyres shows the action: divers and their findings at the location. In contrast, or possibly as a complementary perspective, Sørensen produced a double video projection Fluid Border, presented in Oslofjord Ecologies, as a result of the field trip Listening to the Fjord, where we see the reflection of the cranes in the industrial harbour on a sleek, undulating surface hiding everything beneath it (Figure 2).

Sørensen contributes to this volume with a text based on her doctoral study: The Blue Mussel's Voice. Here, the creatures of the ocean, living unseen lives below the surface are introduced. Seeing the multispecies city from a planning perspective, she points to the often bleak, lifeless liminal sphere where the city meets the sea, the tidalscape.



Figure 2. Still from Fluid Border, double projection by Elin T. Sørensen

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Connecting to the blue mussel as an organism to engage with, she asks how to care for it. This care is philosophically grounded in a deep wish to ethically reposition the human interaction with other species, followed by an effort to concretely rebuild and rethink the space between land and sea. Consequently, she develops proposals for diversity-enhancing marine landscape design by combining artistic vision, skills of design and planning with marine biology and other fields of interests and expertise.

There are other threats to the population of blue mussels. Crassostrea Gigas, the Pacific oyster is an invasive species in the Oslofjord (Bodvin, Rinde & Mortensen, 2004). This creature embodies the ambiguous feelings and conditions we often face when we navigate our behaviour in the climate crisis. We might find the oysters tasty and delicious, and they may trigger our desire for a delicacy, simultaneously they are an invasive species, deadly to our local blue mussels. A lack of blue mussels affects the range of sea birds that feed on them. The oyster grows to destroy our local beaches by constituting sharp surfaces that hurt bare feet when we step on them. Three Pacific oysters attached to a loose stone in the fjord were found by Siri Austeen. The stone became a vessel to present her compositions based on sub-marine recordings from the before mentioned field trip, combined with a response to the poem Drinking by Abraham Cowley (1618–1667). This light-headed text describes the water cycle as a drinking exchange shared between the elements of nature (Poet's Corner):

THE thirsty earth soaks up the rain, And drinks, and gapes for drink again. The plants suck in the earth, and are With constant drinking fresh and fair. The sea itself, which one would think Should have but little need of drink, Drinks ten thousand rivers up.

Humans have imagined the oceans as immense and mysterious, a limitless recipient of human waste, an endless carrier of global and local transport vessels. Under the surface grows an abundance of life forms we are often not familiar with. Kelp, algae, sea weed: growth that is not exactly plants, nor fungus or animals. Sabine Popp, an artist and research fellow at the University of Bergen, investigated this life form as material and a phenomena, but also as a subject and instigator of different discourses: be it scientific, social, historical or the accounts of multiple uses as food, medicine and material. Popp developed different strategies of employing a visual material to construct a material for the audience to engage with. The first was a giant floor pattern where images and words could be moved and interchanged. In the next version, the audience would be given the images as cards while seated at a table in pairs, they could listen to spoken text, make notes and see documentation of other uses of the same material. Popp also presented her work in the Kelp Congress at the Lofoten International Art Festival in 2019 (LIAF2019), which brought together many perspectives on a generally overlooked, but historically well-explored life form with a fascinating potential. In her contribution to this volume, Popp has written a text, titled provocations (for a not yet fully articulated time) where she develops her ideas of giving speech to things by bringing them into public discourse. The images and text are fragments from work with the project Agential Matter (Invisible Landscapes), part of Popp's PhD project in artistic research at the University of Bergen.

Yet another life form was part of the Oslofjord Ecologies dialogues and exhibition presentations: bacteria. Rasa Smite and Raitis Smits have for years developed their work on bacteria and their production of electricity. In Oslofjord Ecologies the work Biotricity. Fluctuations of Micro-Worlds was presented in a version using sonic expressions, real-time visualization and data interpretations from experiments with mud batteries, fueled by bacteria living in the bottom of a pond, lake, swamp or sea. By making visible or audible the otherwise imperceptible processes, the artists invite us to share sensuous and emotional experiences of a natural energy production, letting the processes of nature guide and govern the work. Such aesthetic strategies are prominently visible within bio-art and art that seeks new relationships with representation – to be rather than represent.

A simple and well-known forerunner of this artistic thinking or aesthetics, could be early versions of the photograph: The technologies to harvest light's play on whatever is before the lens. Or as Alexis Parra's experiments *Energy Catcher* from his garden by the fjord brings forward: utilizing light and light sensitive screens to capture a plant image without any other apparatus. While following a tradition of the avantgarde photogram, this is still different as the direct contact between plant and light sensitive screen is less direct and therefore more difficult to calculate (Tate Modern, w.d.). The plants retained their initial size, movement and visual impact. The resulting screens were displayed directly as architectural elements, not printed or copied.

The Oslofjord as a Social Venue

What is buried in the deep is often talked about among the Oslofjord population. It is well known how the municipality of Oslo utilized the waters between two islands as a dumping ground for industrial waste and household garbage for fifty years until after the Second World War. In 1948 the dump was covered up as a landfill. This became the wide, grass-clad expanse of green connecting the two islands that since has comprised the Langøyene free-camping area. The popular cultural trope of friluftsliv, which literarily translates as "free air life", the Norwegian version of outdoor living, was paradoxically given space in this area with a legacy of historical garbage handling. Langøyene became a free camp site from April to October, popular with colourful people from many strands of life, making do without local drinking water sources or sufficient hygiene facilities. A diverse community ensued an international mix of healthy nature lovers, subcultural ideologists, artists and inventive people who developed a culture of neighbourly exchange, social collaboration and conflict. Cathrine Constanse Gjelsnes in 2017 did a lecture-performance titled The tragedy of the commons, to tell the story about Langøyene as an island community at Oslofjord Ecologies Experience. The tragedy of the commons was first coined as a concept by Garrett Hardin, Professor in Human Ecology, in 1968, and is used in economics and environmental science to describe how people who act independently and rationally according to the individual self-interest behave contrary to the best interests of the whole group by depleting common resources. In 2018, Gjelsnes's lecture was developed into a performance walk across the island, presented in the exhibition as a video work Charging the Batteries (camera and editing by Frode Sten Jacobsen). Gjelsnes leads us from her hammock hung among the trees with a view to the fjord, on a path across the island where we meet diverse neighbours along the way to end up at the toilet where the only electric socket for charging mobile phones was available, a glimpse of what it means to share scarce resources in a diverse, social community.

In 2019 the island was closed for public use as toxic waste and pollution constituted a health risk and the facilities were considered insufficient. According to plan, the island will be renovated and the facilities will be upgraded and the public will be able to access the island in three years' time (Oslo Kommune, 2017). However, the era of experimental free campers community that was once developing might be over.

The first post-industrial waterfront development in Oslo, was Aker Brygge, a former ship wharf transformed in the 1980s into a generic mixture of shopping mall, conference venue, restaurants, bars, and a board walk to attract tourists in the summertime, and expensive housing to justify the investments. The artist and professor Gunhild Vatn discovered that the first Norwegian oil platform Ocean Viking was built right here in the Aker wharf, now known as Aker Brygge. This was unexpected, as most industrial oil activities have taken place in West Norway since then. Vatn found press photographs documenting the proud event of launching the platform and started reflecting on the representations and aesthetics of the Norwegian oil industry, the source of immense riches for the state-owned oil company from the 1970s until today. For Vatn, the relationship to the oil economy is a political matter and an ethical dilemma. In her article, The Ambivalence of Oil Aesthetics Vatn discusses how representations of the Norwegian oil industry create an aesthetic expression of optimistic enthusiasm related to Norwegian oil extraction. In today's more complex contemporary reading, this topic of fossil energy generates a more dystopic and negatively charged image, an ambiguity resulting from a wider public awareness of climate change. In a series of ceramic plates mounted on the wall as a series, Vatn reuses the images she found and displays them without any additional ornamentation. The plates are reminiscent of commemorative plates, a tradition in Scandinavian porcelain production. This works as an aesthetic "verfremdung", we become aware of looking at the documentation of the early oil industry, seeing it in an unusual format in an unexpected place: the Oslofjord. The realization that a major portion of the Norwegian economy is dependent on oil industry is driven home. Surprisingly few Norwegian artists have looked at the national oil industry as a theme. The state oil company (formerly named Statoil, now Equinor) collects art and their buildings and platforms have commissioned art by contemporary Norwegian artists over the years. The dilemmas of the oil industry have been debated mostly when the state oil company issued direct stipends to sponsor art and culture directly. Vatn's contribution adds to what seems to be a under-discussed subject.

Across from Aker Brygge, the square constituting the sea front of the City Hall, is bordered by the green surroundings of the Akershus Castle and Fortress, overlooking Rådhuskaiene, the City hall piers. Here we find a large, white amorphous shape resting on a green hill, the sculpture Be Extended by Tona Gulpinar and Anneke von der Fehr, transformed from pliable textile into shaped and polished white concrete. In their article, Be Extended: Oslo they describe the development of the sculpture from research and reflections on consumerism connected to play and enjoyment for children through relational experiments with flexible textile sculptures for small children and others. In both of the Oslofjord Ecologies exhibitions a version of the Be Extended sculpture has offered itself to audiences for play, rest or communication. It was never necessary to inform audiences that the sculptures were for their use and comfort. Although aesthetically pleasing as a white, soft presence, the sculpture by its shifting, pliable shape and surface somehow invited direct, bodily interaction. This answered in a low key manner the relationships with objects as well as constituting a social hub in the exhibition for kids or youngsters. Becoming a public, concrete sculpture overlooking the Oslofjord, changed the material from soft to hard, and the surface from textile to polished concrete. However the invitation is still in a shape reminiscent of bodies of unknown organisms similar to shapes inside our own bodies.

The connection to a place as a social catalyst as well as to a geographical site, appears in Nina Vestby's project Eutopia. Recalling Guattari's insistence on the "imperative to confront capitalism's effects in the domain of mental ecology in everyday life: individual, domestic, material, neighbourly, creative or one's personal ethics" (Guattari, 2000, p. 50). EUTOPIA originates from a research project to map conditions for young people in the socially fraught areas in Oslo's inner east, a direct consequence of urban changes following Fjordbyen. Fjordbyen is the largest urban development undertaken in Norwegian history. It was decided in 2002 and will continue to be developed until at least 2030–2035 (Oslo Kommune, 2020).

By asking the question: where do you feel good? Vestby's participatory embroidery project has reached many youngsters and engaged unlikely contributors in conversations and exchange. Starting in Oslo's inner city, continuing to Moss, a post-industrial town along the fjord, later moving on to New York's hoods, the method of employing a simple, amorphous figure "the splot", needle craft and conversation has developed into a social tool. Vestby shares her experiences in the article Eutopia – Where the Heart Matters.

Throughout the Oslofjord Ecologies activities, interest in the experiential has been recurring. Humans connect to space and situations, the concept of the experiential is manifold and rich, be it on a boat in the fjord, in the workshop hub in an old municipality building in the inner eastern part of the city or walking through the largest urban development to take place in Norway, in the fjord area Bjørvika.

Following the experiential and highlighting the sense of listening, Merete Røstad, artist and professor at the master's program in Art and Public Space, National Academy of the Arts in Oslo, relates her cognitive and environmental accounts of radical listening as a conducive method of working with sound art in the public sphere. In her article Embodied Sound Libraries, she relates her own experiences of developing and researching her public sound works, Chamber and Hearing. Røstad argues for what she calls the embodied sound library as a way of thinking about sound art in the public space to encourage radical listening and shared listening experiences. She expands on how listening connects to memory and the concept of being an "earwitness". Transdisciplinary collaborations have been a recurring feature in Oslofjord Ecologies. Some of this is reflected through the angle Venke Aure, Professor of Art Didactics at OsloMet, chooses in her article A Sketch of Eco-social Art Strategies to Expand Onto-epistemological and Methodological Positions in Qualitative Research. Here she looks at different aspects of an art and research discourse that links art practices to qualitative research in order to understand how art can bring forth characteristics to produce an onto-epistemological and methodological analysis. In doing so, she engages with three different examples, rooted in eco art. Her examples spans from David Rothenberg's famous whale sound works reference, through Cathy Fitzgerald's slow eco-social art practice through the Hollywood Forest story to a project that is not yet realized but part of the author's own research work. In a sense, Aure points to art as a performative model for daily life, rather than art as a container for quality measures to satisfy a market or a knowledge or attention economy.

Helene Illeris, Professor of Art Education at the University of Agder in Kristiansand, Norway, looks at how ecological awareness can ensue within the school subject arts and crafts education in her article Intimacy, Solidarity, Fragility. Everyday Objects and Ecological Awareness in Arts and Crafts Education.

Connecting humans to non-human objects, she employs Timothy Morton's writings to understand an art project by the Norwegian arts and crafts teacher Kristine Næss: Everyday object. A translation in porcelain. Illeris suggests an understanding of sustainability that opposes the human control promoted by neo-liberal discourses on sustainable development and opens the school subject to possibilities of ecological awareness, tuning into new relationships in inhabiting the world. The art project is interrogated, following three modes of connection between humans and non-human objects: intimacy, solidarity, and fragility. According to Illeris, these modes are examples of relations to the environment that should be explored in education. By enacting aesthetic, sensuous relationships with non-humans we can connect to our surroundings in new ways and thus start to perceive the world differently.

The Oslofjord Ecologies projects and texts referred to here, cover diverse perspectives on artistic methods and aesthetics, several art forms and various approaches and modes of tuning to the environment. In the last article of this volume, How to Set the Table for Collaborations: Artistic Sensibilities and Methods, I will discuss more closely these artistic sensibilities and ways of working, building on curatorial and theoretical encounters in Oslofjord Ecologies and in the Renewable Futures network.

What can art do? Keep asking the question! The process of Oslofjord Ecologies from its start as an open workshop project has developed through two exhibitions: Oslofjord Ecologies Experience and Oslofjord Ecologies Extended, and numerous presentations, exchanges and discussions. It was a process comprised of dialogues, research, production, experience on many levels, exchanges with humans, non-humans and new perspectives on the three ecologies, the social, the mental and the environmental, recalling Guattari (2000). I am very grateful to all contributors to the project; many artists and other professionals have shared their time, knowledge and deep-felt engagement with and within Oslofjord Ecologies.

Oslofjord Ecologies started as a ten-day workshop during which we had ample opportunities to try out embodied experiences, sounding and voicing, field trips, walks, testing DIY biology and more. Later several performances and activities were developed in connection with the exhibitions. These works are presented and commented on in the Oslofjord Ecologies Album (pp. 176–207), along with the documentation of the works that are presented in this introduction.

Author's Biography

Kristin Bergaust is an artist, researcher, educator and curator, and a professor at the Faculty of Technology, Art and Design at Oslo Metropolitan University. Kristin is a pioneer of early media art in Norway and she is represented in the collection of the Norwegian National Museum among others. In the Oslofjord Ecologies project, she engaged in artistic research to develop a platform of ecology, art, technology, and cultural and urban sustainability as a means to achieve a more balanced existence. Currently, she is developing the transdisciplinary artistic research project FeLT (Futures of Living Technologies) and is the Norwegian project leader of GREEN, a Creative Europe project led by RIXC.

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Figure 3. 11-year old Kristin enjoying the Oslofjord. Photo: Sidsel Holst

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RESEARCH PAPERS

ECO-Art and Awareness: Sustainability Through Artistic Research

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ABSTRACT

Sustainability has been a key issue in contemporary art since at least the nuclear catastrophes in the late 1970s and early 80s. However, since then development has been rather slow and discussions on climate and sustainability have often stagnated in fear of the charge of moralization and a lack of courage in taking unpopular decisions. But in the last ten years it has not been possible to avoid the climate problem anymore, and we now see massive theory development, innovation strategies, and citizen driven initiatives, as well as clearer political goals.

In the art field, a solid basis of contemporary artists have developed a series of complex projects addressing sustainability following ecosophical reflections and posthuman theories, and we see art as a possible driver in eco-awareness and cross-disciplinary research on the topic. In the following article an overview of some of the ecosophical, aesthetic and artistic developments in relation to sustainability is presented. In particular, the epistemological potential of art to investigate and produce sensory perceptions is discussed. Although sustainability may be a problematic concept to carry out, the practices related to it strive for increased ethical considerations.

Aesthetic theory that expands our notions of sensory experience beyond the Kantian understanding is used to underpin an ecosophical relationality, and show the interconnectedness between art and innovation through new ways of sensing the world. Several of the projects referred to use artistic research methodologies as approaches to sustainability, thereby reaching beyond art as a form of representation, engaging in cross-disciplinary dialogues and practice-based knowledge production. New roles for the artists are emerging in the wake of sustainability discourse.

KEYWORDS: art and ecology, aesthetics, innovation through art and culture, eco-awareness, eco-visualization

The connection between art and ecology is as obvious as the connection between culture and ecology, or culture and sustainability. Art and culture can promote eco-awareness and sustainable solutions, however, the understanding of what sustainability is and in relation to what, remains a complex and situationally defined question. The understanding of sustainability as something that expands beyond nature and the environment is well established in the UN sustainable development goals. Here, amongst others, the fight against poverty and the promotion of education are tied to sustainable development, as the relation between the different social, cultural, economical and environmental dimensions of sustainability is acknowledged.



Figure 1. Flatbread Society Mobile Bakeoven, 2013. Photo: Max McClure

This, however, also makes it very difficult to raise one aspect of sustainability above another, and though the characteristics of ecological thinking are relationality and circularity, sometimes the different aspects of sustainability may create tensions or conflicts. Can you prioritize one species over another? Is the social welfare in one country more important than the wildlife preservation in another? As the Brundtland Report Our common future stated already in 1987: "Yet in the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs." (World Commission on Environment and Development, 1987, p. 17)

Also, more recently, so called post-human theories further decentralize the perspective from the anthropocentric world view to a more principally equal and 'object-oriented ontology' or philosophy, where objects and environments are seen as being for themselves, not only 'for us' (Harman, 2018).

In this text I will raise the question of contemporary art as a sustainability driver, tying the ethical dimension to environmental and social as well as individual issues and as part of a political context. I will discuss these dimensions in a selection of art projects that address these different aspects of sustainability as part of ethical and human strategies, aware, however, of the Anthropocene perspective (Morton, 2018), which can in fact be seen as part of ecosophical thinking (Næss, 1989; Guattari, 1989). Finally, I will see artistic methodology and research as an entry into eco-awareness and eco-visualizations, implementing sustainability thinking in social and cultural

innovation as an artistic research strategy and as part of ethic-aesthetic knowledge production (Christensen-Scheel, 2013a).

Aesthetic and Epistemological Frameworks for Sustainability

Entering sustainability discourse through an aesthetic and artistic lens, gives one the possibility to isolate certain objectives. From a narrow, mainly environmental and nature-focused ecological perspective, sustainability discourse today encompasses social and mental perspectives (Christensen-Scheel, 2013a) and a broad range of societal challenges related to societal infrastructure and consumption. This is apparent in the UN goals for sustainable development, where important issues on urban and social development in diverse parts of the world are connected with economic and cultural structures. The UN takes an anthropocentric perspective, as human welfare is their primary concern, and one could say that the 'social sustainability'/social innovation perspective that is now highlighted in public documents and research strategies, represents a re-arranging of the anthropocentric to include more environmental and relational dimensions of existence.

Philosopher Arne Næss with his deep ecological shift (1974) already pointed the way towards societal and economic constructions in order to address sustainability he called this an 'ecosophical perspective'. In The Three Ecologies (1989) Félix Guattari further incorporated the mental aspects of ecosophy, talking about a 'mental ecology', hinting that human beings also are part of the ecosystem and that their mental health and adaptability concerns social and environmental systems as well. Multi-scientist Gregory Bateson is another important voice in this direction of co-thinking social, physical and mental structures, and his seminal work Steps to an Ecology of Mind (1972) is still much referred to. Not only does Bateson show how the human mind is connected to and receptive towards its environment, he also shows how the mind – as well as culture and fantasy – is part of physical and chemical processes like other environmental phenomena. This is reminiscent of the theories of the more recent and 'dark ecological' theories of Timothy Morton (2018). However vast and incomprehensible these connections might be, they are made concrete by the actual challenges we face when addressing sustainable living and production: what can challenge the logic of consumption? Or alter the lines of production or habits of consumption? What does our immediate environment contain in terms of resources and challenges? How much do we know about the nature and materials that surround us?

Here, ecosophy also brings on an epistemological turn. Following Næss and Bateson, the way we interact with our environment is related to the way we see the world. Or, in other words, what we know is related to what we see and what we see can alter the way we think about something. Jacques Ranciére is one of those contemporary philosophers that have presented such a take on the relation between perception and conceptualization – we have concepts that pre-structure our sensory experiences, and likewise, the perception of new landscapes and other sensuous phenomena can produce new understandings and new concepts for deciphering the world.

Science theorist Lorraine Daston has described this in relation to the history of scientific observation, where she uses the observation of cloud structures as an example (Daston, 2008). In short, she elaborates on the necessity of observation and perceptual skill in order to be able to make scientific and conceptual structures. That is, you must somehow be experienced in your observations in order to recognize differences. Art theoretician Charlotte B. Myrvold transfers this epistemological conception of 'skilled perception' to the contemporary artist and art scene in order to show how these have a particular relevance in the development of new city environments. In relation to the public art program in Oslo harbour, she suggests that: "The notion of skilled perception is a tool for investigating how mediated images in Bjørvika form the basis of perceptual habits and 'collectives of seeing', but might also be of use in grasping the 'politics' of artistic interventions within the larger constructed image." (Myrvold, 2013, p. 124).

Following this, there is a politics of aesthetics as Rancière describes it (2004). This means that there is precisely such a relation between our physical surroundings, our awareness of them and what we sense. In The Politics of Aesthetics (2004) he says:

I call the distribution of the sensible system of self-evident facts of sense perception that simultaneously discloses the existence of something in common and the delimitations that define the respective parts and positions within it. A distribution of the sensible therefore establishes at one and the same time something common that is shared and exclusive parts. This apportionment of parts and positions is based on a distribution of spaces, times, and forms of activity that determines the very manner in which something in common lends itself to participation and in what way various individuals have a part in this distribution. (Rancière, 2004, p. 12)

What Ranciére discusses here, is the connection between social, mental and sensuous structures. In some way we 'build' or distribute our sensuous environment together by the way we perceive it, and likewise, the way we perceive it is influenced by our common and individual denominators. These 'collectives of seeing' are also thematized by Daston – in her scientific historical research she finds precisely the interconnection between groups/cultures and findings, as well as attitudes of *discov*ery as much as warranting and testing (Daston, 2008). Our relations to science and to ecology are thus not only a matter of understanding realities, they are just as much about seeing our environment in new ways and creating relations to it.

Art and Ecology - Some Projects

These complex interconnections makes sense in an ecological or biological scientific paradigm as well. Ecological research focuses on three main areas: individual organisms, species interactions and communities/eco-systems (Begon, Townsend & Harper, 2006). This includes relations between organisms, since organisms influence the life, distribution and abundance of other organisms. Ecology, stemming from oikos meaning household in Greek, having life and different relations between life and its

environment as its objective, seeks to find out what enables or hinders certain life forms under certain conditions at certain times (Christensen-Scheel, 2013a).

When artists engage with ecology, they have done so by addressing natural, social and psychological processes and phenomena in widely different ways. A classical point of reference is Robert Smithson's Spiral Jetty from 1970 and the land art movement connected to it. Smithson, as we know, worked the landmasses nearby the coast of Great Salt Lake in Utah into a giant spiral of earth and stones, forming the sculptural structure of a jetty in the water. The spiral is monumental and underlines the power of nature, however it could also be seen to work with the formal and more romantic sides of environmental thinking. Land art artists moved out of galleries, used only natural materials and formed landscapes, but the ecosophical interconnectedness with social structures was yet to come.

Looking further back in history, we see artists and designers engaging in environmental issues from the beginning of industrialism. The Arts and Crafts Movement in the mid/late 1800s in England was fronted by author and art critic John Ruskin, and author, activist and textile designer William Morris. They promoted the value of craft in a time of the dawning of mass production, and used aesthetic and sensory qualities as an argument for a more hand led production. The craftsman was particularly valued and their thoughts also included social perspectives, where the line of production was smaller and the worker more valued. As romantic as these ideas were, one of the central dimensions in contemporary production and consumption was already addressed. Mass production and machine production creates a distance between producer and consumer, also to the materials and means of production that are applied (Christensen-Scheel, 2013a; 2013b). In The Craftsman (2011) cultural sociologist Richard Sennett revives the discussions from the Arts and Crafts Movement what responsibility and ethical reflections do we place at the centre of our societal production? Sennett traces different historical lines of production development and asks who the craftsmen of our days are - the nurses? The car producers? A central point for him is nevertheless the connection between 'hand and head', opting for individual ownership of the carrying out of tasks, as this develops skills as well as encourages ethical reflections and responsibility to the process at hand.

More recently, from the late 1990s and early 2000s, we have seen the development of several contemporary art projects that use ecological perspectives in a collective and complex manner (Christensen-Scheel, 2009; 2013a). Many artists have reflected upon their own production system: Who is the producer, of material or of meaning? Where is the site of production or experience? And what is the central context for meaning production? Moving out of galleries and museums, into local settings and social structures, the different 'site specific' projects started using and contextualizing environments in different ways. In One Place After Another (2004), Miwon Kwon traces the art history of site-oriented projects, showing precisely this development from a more narrow place and material-oriented strategy, to a more complex social and contextual interference between place, space and situation.

This echoes the thoughts of Næss and Guattari, where sustainability is seen in relation not only with natural resources, but where resources and nature are placed in larger societal and individual contexts of use and meaning. Næss may, in this concern, be seen as a forefather of the 'Anthropocene', as he states an 'equality in principle' between humans and environments, however, he also underlines the anthropological side of ethics and equality – for example, you are more likely to save a baby human rather than a baby wolf if you had to choose. Similarly, in nature, the wolf must prioritize to live and thus will kill another animal, even if the worth of the animals in principle is equal.

In contemporary Thai artists Rirkrit Tiravanija and Kamin Lertchaiprasert's project The Land Foundation, we find the connection between place/sites and space for use/production. Having acquired two pieces of land, one in a city near a meeting/ production arena and one a more remote rice field and sculpture park, the artists work with a social and educational structure of events, discussions, meditation and yoga classes, cooking and more. At the core of their project lies a sustainability perspective and they continuously carry out discussions on the ethics of their project. The environmental turn in contemporary art in this way represents a confrontation of the 'autonomy paradigm', that has long been central to the contemporary art discourse (Christensen-Scheel, 2013b). Ecosophical ambitions necessarily mean a weighing of purposes, use and intentions in the art project, considering unintended or non-sustainable propositions.

Curator and theoretician Claire Doherty had the commission for the public art program in Bjørvika, the newly rebuilt harbour area in Oslo. Here, a slow philosophy was fore-fronted at the beginning of the project and several of the art projects that were selected had a clear ecological profile, among them the Flatbread Society Bakehouse by the artist group Futurefarmers and Future Library by Katie Patterson. Doherty prepared a curatorial strategy for the area based on the relation between temporary and lasting public art projects and ideas around their different possible impact. One of the terms she uses is 'duration' or 'durational art' – where the public art commissioned is not thought of as a classical ornament or sculpture placed at each building, however, she also wants to avoid the fleeing character of public art with an event approach, creating a short live show, and then disappearing without trace (Doherty, 2009). Doherty's idea of duration created an artistic research frame for the commissioned artists, who were encouraged to work over several years with their projects, involving both material and immaterial aspects (Doherty & O'Neill, 2012).

But even if duration was emphasized, physical structures were not the main strategy. The American Art collective Futurefarmers, headed by Amy Franceschini collaborated with local artists, farmers and others in a project focused on local and historical bread baking traditions and cultures. The collective both researched local baking history, but also current bread cultures among inner city citizens, showing how bread and fresh bread have a central place in many and widely different cultures. The collective also researched ways of baking in different ovens, building a semi-permanent brick oven for public use in Sørenga. Aiming to address precisely lasting structures through cultural practice and traditions, they saw food and material food culture as a way of working with both the material and immaterial sides of a place, showing something of value to the people living there, but also creating possibilities for future development and collaboration. Throughout the project they also had performance events like baking stunts in a wading canoe (see Figure 1), and marches or pilgrimages in order to acquire 'medieval wheat' from central Norway, bringing back medieval crop species to be sowed in the later established 'city farm' in Bjørvika, Losætra.



Figure 2. Futurefarmer's Flatbread Society Bakehouse, 2017. Photo: Monica Løvdahl

Some of the results of these 'slow' and research based public art strategies have been the Losætra city farm, local allotments and small fields for cultivation in the inner city harbour area, as well as the promotion of a common bread culture and positive connections between different groups of citizens. Sustainability can be said to be one of the main drivers in this project, but sustainability is constantly being cothought as relations between nature, humans and practices.

The artistic research focus of the Flatbread Society Bakehouse is being continued by professor and artist Kristin Bergaust in Oslofjord Ecologies. Here the investigative potential of art as a sort of 'skilled perception' (Daston, 2008), is being further developed. Bergaust invited a series of artists to explore fjord or 'seaside' cultures around Oslo, from an ecological perspective. Art as a form of alternative knowledge production emerges, and the eco-politics of aesthetics are evoked. Oslofjord Ecologies has had a central focus on cross-disciplinary meetings in relevant areas, with actors, artists, scientists, other professionals and students contributing in seminars and exhibitions on topics such as resource development from seaside waste, relations between industry development and natural resources, algal flour, bacteria batteries, and not least, the communication and visualization of these perspectives and strategies. Collecting seaside material and resources, and showing how ecological systems are influenced and altered through human interference in different ways, is a way of observing, educating and evaluating at the same time.

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Eco-awareness: Sustainable Innovation Through Artistic Research Methodologies

Moving from a narrow ecological perspective that only addresses natural phenomena without incorporating practices of use and meaning production, to a more deep or dark ecological perspective that combines nature with societal, social and mental structures (Næss 1989; Guattari 1989; Morton 2018), we see the emergence of not only new art practices with an ecological concern, but of new methodologies, creating epistemological frameworks as well as cross-disciplinary collaborations. An important part of this development has been the developments in conceptual paradigms and aesthetic theory that negotiate between physical and immaterial structures, pragmatist and ideal scientific traditions. Philosopher Gernot Böhme wrote on the Kantian omission of sensory material in his 'aesthetics', that ended up as a sort of philosophy of the work of art (Böhme, 2001). However, these aesthetics also defined the work of art as specific formal structures and traditions, such as paintings, sculptures, compositions and plays, etc. More recent aesthetic philosophy has returned to Alexander Baumgarten's definition of aesthetics as tied to sensory experience and perception more widely. When Böhme addresses this, he notes that sensory experiences can occur in nature, in relation to design, or even when entering a room of people. The sensory material is constituted by our sensory conceptions of our environment, and can create a sort of atmosphere, where our non-verbal conceptions and sensuous perceptions are mixed.

This can be tied to a phenomenological epistemological tradition, and we find many similar ideas in the theories of, for example, John Dewey (1980). Jacques Rancière, cited earlier, translates these phenomenological perspectives into an idealist and conceptual thinking, also showing how our conceptual frameworks and social predispositions influence what we actually see and hear (Rancière, 2004). This new weight given to wider sensory material as a part of aesthetics, can be seen in a renewed focus on sensing in itself and in the work of artists such as Olafur Eliasson and Pippilotti Rist. They create immersive sensory environments that often work with perception itself and perception as a sort of material. In an ecological context this has a particular relevance in not only our perceiving structures and phenomena around us that we usually do not see, but also in our reflecting on the different realities they constitute, when they are in our awareness and when they are not.

Artists use sensory material and conceptions in order to create different landscapes of the sensory (Rancière, 2004). This can raise awareness of a wider world with several co-existing realities, and it also reminds us of the relation between sensations and awareness (Bateson, 2000; Merleau-Ponty, 2003), which can be seen as a basis for the notion of Eco-visualizations (Holmes, 2007). Stating the need for artists, but also their competence, to take a more direct stand in relation to environmental issues and resource challenges, Tiffany Holmes promotes cross-disciplinary collaborations between artists, designers and technologists in order to develop more efficient climate communication. Visualizing energy use, she says, has a very poignant effect. Creating digital interfaces that show the energy use of a household or a business in numbers, and also create visual connections to natural resources that are used, directly or indirectly by the household or business, can have a significant awareness creating effect. In a similar way, Kristin Bergaust visualized the patterns of reproduction for cod in the Oslofjord, showing through figures and diagrams how their spawning grounds have been diminished by human interference (Oslofjord Ecologies in 2018).

Summing up, the relation between art and ecology has a longer history than recent climate activism, and the history of aesthetics has contributed to a narrowed perception of artists' working field, which has been opened up when freed from the constraint of specific formal objects (Böhme, 2001). Art, thus, has become perceptual investigations with reflexive and scientific epistemological relevance. This combination of sensory investigation and a means of communication, opens up a key role in coming Eco-research practice (Dieleman, 2008). Art theoretician Sacha Kagan has given an important overview of ecological oriented art practices in Art and Sustainability (2011), where he also discusses precisely this narrowed aesthetical tradition as something that must be rethought into something more systemic and relational, in terms of both sensuousness and awareness. Our ability to be perceptive towards other realities and a 'more-than-human-world' depends on both our ways of seeing as well as our capacity to imagine and empathize with something or someone else (Kagan, 2011).

When artist Pierre Huyghe presented his undefined project Untilled at Documenta 13 in 2012, many of us had a hard time defining what was his work and what was nature's work. In a clearing in the woods of the Karlsruhe Park in Kassel, he made a cross between an installation and an event, where both he and nature became 'authors'. In places structured, organized with piles of stones and a sculpture with a bee hive head, while other places were indefinable and messy, overgrown with plants or just remnants from garden works. In the middle of this 'more-than-human-world' sat a man with a note pad, watching one, sometimes two dogs running around – one of the dogs had a pink leg. There was no explanation to the scene.

Created within the institutional art context of the Documenta exhibitions, Huyghe's project manages to open extra-institutional rooms of reflection. The scene he co-creates can be seen almost as a 'test bed' for ecological epistemologies. What we expect to be culture can be seen as nature, and the other way around. The bee hive as a natural phenomenon is made cultivated, so is the dog through the pink leg and the accentuated relation to an 'owner', however, both bees and dog are also distinctly non-human. Further, the plants we see appear non-structured and wild, but looking more closely, we find that many of the plants are grown as part of human cultures and represent both intrusive species and drugs (marihuana?). Our 'collectives of seeing' are challenged (Daston, 2008), as we cannot precisely define what we are looking at and why. Still, our search for meaning makes us develop new connections between the nature-culture elements and through the sensuous experience we produce new conceptualizations of the relation to our environment.

This art project can be seen to represent an advanced ecosophical practice where the artistic methodology contributes to both sensory and conceptual regimes of creating,



Figures 3, 4, 5, 6. Pierre Huyghe, Untilled, Documenta 13, Karlsruhe park/Kassel, 2012. Photos: Boel Christensen-Scheel

communicating and reflecting Eco-awareness at the same time. Innovation through art and culture then is not primarily about new products or technologies, but about new ways of sensing and thinking. This is an under-used resource in our current climate war, where sensory reality must go hand in hand with renewed understandings of human practices. The different ecosophical frameworks presented here refer to the relational capacity of our practices. Through more than the last two centuries, art practices and movements have been investigating relations between human production and environments, many with an explicitly critical perspective towards the human over-use of resources and disrespect for the environment. But the environment as we think of it today is not only nature, it is also our social and mental structures and our contexts of interaction. It may also be the world entirely without humans. What sustainability means in each instance is therefore a matter of research, and speculation, but the sensory investigative mode of art can give insights that cannot be obtained through other modes of research, and it can possibly alter the logic of perception as we know it.

Author's Biography

Boel Christensen-Scheel (1978) is a professor in aesthetics and art theory at the Department of Art, Design and Drama at Oslo Metropolitan University. She holds a PhD in contemporary art and performance theory, and her main field of research concerns art's relational and communicational capacities. She has also worked with art's more explicit political content and ecological projects in an art educational context.

Christensen-Scheel coordinates and teaches the MA study specialization Art in Society at OsloMet and worked as an educational advisor for The National Museum of Art, Architecture and Design in Oslo from 2016–2018. She has translated Nicolas Bourriaud's "Relational Aesthetics" to Norwegian (Pax Forlag, Artes, 2007) and worked as an art critic.

Christensen-Scheel leads the research group Art in Society Research, and is currently concerned with artbased education and audience development in a museum context, as well as the role of art in social, cultural and technological innovation. Recently she edited the book "Education for a New Museum" (Nasjonalmuseet, 2019), where she also wrote the introductory chapter.

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The Blue Mussel's Voice

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ABSTRACT

Globally, marine ecosystems are under pressure, losing species and ecosystem functions. On land – along the world's renewed waterfronts, humans have removed themselves from belonging to the sea. So far, the tendency in Norway is a development based on human interests. An alternative approach is to embrace the interests of other species, including the marine beings in multispecies cities.

Building multispecies cities demands a questioning of the relationships between nonhuman others and urbanscapes; Such as, what does it mean to include other-than-humans as participants in shared social worlds? Yet, is it worthwhile reaching out to organisms we cannot communicate with, and that most likely do not need our presence? How can we listen to critters other than us, and how can this make sense within urban development? In seeking answers to these questions, this essay is dedicated to one small and challenged creature – the blue mussel.

To reach an understanding of the urban tidalscapes, we must go beyond earthbound senses. Possible interaction and care for blue mussels and other sea creatures, are explored through close one-on-one encounters with marine life, inspired by Rachel Carson's ethic of wonder. Moreover, in order to physically make space for life below water, a diversity-enhancing marine landscape architecture is proposed; a concept arising from artistic visions in exchange with marine biology, the tidal landscape and the sea creatures themselves.

KEYWORDS: multispecies urbanism, ethic of wonder, nature as mentor, a diversity-enhancing marine landscape architecture

The sea washes the coasts – with the tides rising and falling from the gravitational interactions between the Sun, Moon, and Earth. Since the dawn of time, the tidal landscape has been a preferred place for human settlement and habitation – where the foundation for worldwide urban growth was laid. The World Ocean is an ecological zone of the greatest significance for all life on earth. Nothing less applies to the intertidal zone, where even fossil material shows us that the closer to the shore, the richer fossilized life¹.

The Ocean can also be fierce to humans and our built world. In the autumn of 2019, Hurricane Dorian led to severe coastal damage caused by strong winds, heavy rainfall and a storm surge. Thousands of homes in the Bahamas were demolished at an estimated cost of \$7 billion.² As stated in the Washington Post: "Schools disappeared. Businesses floated away". On Abaco Island, journalists talked to a father who had

⁽Nystuen, professional dialogue, November 22, 2018)

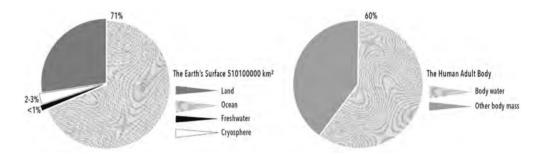
^{2 (}Fitz-Gibbon, 2019)



Blue mussels (*Mytilus edulis*) actively filtering seawater in Lysefjorden Norway, June 2007. Reprinted, by permission, from Tore Strohmeier, Institute of Marine Research in Norway.

sought refuge on a roof with his five-year-old son: "Then, the father said, came the unthinkable: a powerful gust of wind sent his son tumbling across the roof and into the murky water, where he watched him disappear amid floating debris".³ This is one of many stories from deadly natural disasters. And for those of us who haven't had to endure such events it is incomprehensible. This image strongly contrasts with the soothing influence I long for and seek in the landscape I love most of all – the tid-alscape. Still to me, the vast ocean space is obscure and mysterious, and the powers of nature are frightfully immense. The world's coasts are becoming increasingly urbanized, and in about a decade it is expected that 50 percent of the global population will live within 100 km of the coast, compared to today's 40 percent.⁴

Humans must find ways to resolve the global challenges in the populated urban blue.



Water is an inorganic, transparent, tasteless, odourless, and nearly colourless chemical substance. The brain and heart contain 73 percent of water, and the lungs about 83 percent. The skin contains only 64 percent, whilst muscles and kidneys 79 percent. Even the bones are watery, with 31 percent of their weight being water. The liquid surrounding human cells has about the same salt content as seawater (0.9%). Outside us, the World Ocean covers 71 percent of the Earth's surface, and contains 97 percent of the Earth's water and 99 percent of the living space on the planet. This space is fundamental to life on Earth in a multitude of ways, for example as a source of oxygen and food, and as a driver of our climate. Yet, to most of us, this watery world is as unknown as an alien planet. Diagram by Elin T. Sørensen © BONO 2020, based on information from the Hawaii Pacific University Oceanic Institute; the U.S. Geological Survey's (USGS) Water Science School; Store Medisinske Leksikon.

The Urban Blue

Along today's developed waterfronts, humans have removed themselves from belonging to the sea. Shoreline hardening is a term expressing the division between the marine environment and a human-centred urbanisation. When we create our functional and rational harbour and housing areas, the effect is that the natural shore is hardened and straightened. Hence, the qualities and ecological functions of the natural rocky shore are erased.

The latest Global Assessment on Biodiversity and Ecosystem Services tells us that we are rapidly losing species and ecosystem functions. Sixty-six percent of the marine environment is "severely altered", and seventy-five percent of the land. By human actions the very foundations of our economies, livelihoods, food security, health and

^{3 (}Horton & Ward, 2019)

^{4 (}Small & Nicholls, 2003)

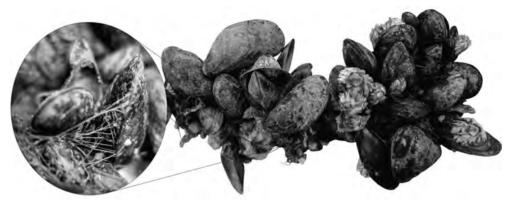
quality of life is being eroded. Some of the threatened marine habitats are formed by kelp, rockweed and seagrasses, which create underwater forests and meadows; ecosystems of the same importance as the Amazon rainforest. Due to an overload of nutrients which causes ocean darkening, and ocean warming and overfishing, these are increasingly being overgrown and replaced by non-native species. Global warming and the artificial substrates that we put into the sea are some of the factors that increase the risk of invasions by alien species. As a result, native marine species become climate refugees.⁵

Like many of the world's harbours, the former industrial Port of Oslo has been transformed into residential neighbourhoods and recreational facilities. With the first redevelopment having started in the 1980s, the project entitled Fjord City is the biggest urban development in Norwegian history and one of the largest waterfront renewals in Europe. Nevertheless, within the Fjord City improvement-actions the urban blue has been forgotten. Divers and marine biologists tend to liken the hardened shore and altered seafloor to a desert - describing the urbanised marine environment as a harsh and stressed habitat; a condition classified in European natural resource management terms as a highly modified and disturbed water body.⁶ By entering this hidden and neglected landscape, I myself have experienced the marine landscape as a void – as if there is nothing underneath. Nothing but a dim no-man's land. The condition raises several questions. Can this landscape possibly be amended - can anything at all be done? Do we have a responsibility to return the disturbed seafloor and shore land to a habitable place? If so, how to battle climate change driven by human activities, the overload of nutrients and invasive species choking the local undersea creatures? How can we build up a willingness to invest in an invisible world? In seeking answers and awareness concerning the urban blue, I dedicate this text to one small, common, yet challenged creature – the blue mussel.

Why should we care for and listen to a mussel? Of the sea dwellers, neither the blue mussel, toothed wrack or bladder wrack for that sake, is included in the official reports of threatened species in Norway. Like their human co-habitants, they are commoners along the coast. Nonetheless, the blue mussel is a key species in coastal ecosystems, contributing several important functions to the sea, and during the last few years, there has been concern about the decreasing abundance of the blue mussel in the coastal waters of southern Norway and western Sweden. The Institute of Marine Research is frequently contacted by concerned people who no longer find mussels in places where they used to. Furthermore, the Norwegian Institute for Water Research has problems gathering blue mussels in southern Norway for the purpose of monitoring contaminants in Norwegian waters. The declining stocks of mussels have raised concerns amongst the marine science community in Sweden too. Indeed, all over Europe, researchers observe that mussels have changed their life and settlement habits, and this is a process that has probably been going on for decades. One of the factors responsible for these changes could be warmer summer sea surface temperatures. Another, and often related factor, is that other organisms take

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over areas where the mussels were formerly settled. Yet, there are no clear answers.⁷ Therefore, researchers have started to secure the future of the blue mussel and their efforts to re-create and restore mussel reefs show that it is possible to strengthen the stocks by technical solutions and human intervention.⁸



Mussels forming a mussel bed, tied together with strong silky threads. maybe digital collage by Elin T. Sørensen © BONO 2019.

A Transformative Change

"In the Earth's wheel of life, the oceans provide the balance"." The Ocean is a common; waters connect the earth's populations, and humans depend on the ocean space as much as the kaleidoscope of life with which it churns.

Changes in the proportion of hard versus soft coastal habitats – as the natural, often sedimentary and more complex landscape features are replaced – has substantially altered the living conditions for marine species attached to coastal headlands. The biotic homogenization in the ocean space is comparable to the conspicuous deterioration of biological diversity because of urbanization on land. Regarding this, the term ocean sprawl addresses the proliferation of artificial structures in the sea: for example, offshore oil-rigs, wind power parks, harbours and coastal defences, aquaculture, artificial reefs, down to small buoys.¹⁰ Shoreline hardening together with ocean sprawl are key concepts in understanding how human actions influence the blue commons. The message is that when we build something in the ocean or cover its surface, we change the environment and we take the place of somebody else.

Oslo's inner harbour has been subjected to gradual changes since people started settling the area. The extensive alterations of the shore and seafloor mainly result from the industrial development at the beginning of the 19th century and afterwards.¹¹ Today, the trend is to renew the industrial environments built into the sea.

^{5 (}Horton & Ward, 2019)

^{6 (}Small & Nicholls, 2003)

^{7 (}Mortensen, 2018)

^{8 (}Liljenström, 2019)

^{9 (}World Commission on Environment and Development, 1987)\

^{10 (}Firth et al., 2016, p. 189)

^{11 (}Oslo Havn, 2011, p. 36)

However, in most masterplans the sea is visualized as an opaque and concealing cover. Likewise, in the subsequent residential adverts, the sea appears as a glimmering surface accompanied by seductive wordings, as shown in the image below. Field surveys along the urban sea areas of Fjord City and Oslo leave me with the impression that we have forgotten to re-scale the environment to fit human proportions and have disregarded marine creatures even more so. Often the seafloor has been excavated to make space for large cargo ships and become a landscape too deep to support photosynthesis dependent blue forests and seagrass meadows. Despite the longing and desire to live close to water, there is a knowledge gap and lack of awareness of the area between the land and sea.



The main attractions or hooks in the residential adverts tempting people to buy a property in the Fjord City are: "Do you love life by the fjord? Where the *smell* of the sea contributes to peace of mind in a busy, *everyday-life*". Photo by Elin T. Sørensen © BONO 2017.

The production of knowledge within this liminal realm clearly takes place in two separate worlds, where architects, landscape architects, gardeners and the building industry seem to be ocean illiterates. Compared to the long history of architecture and urban design examples of integrated practices where marine interests stand in the forefront are few. Even marine scientists show a lack of interest in the urban blue. As the urban ecosystem is so profoundly disturbed, this environment represents a lost cause. The tendency is not to account for the marine organisms, and the need for restoration of these habitats has so far been overlooked. Hence, the awakening of urban nature has not yet reached the sea.

As a hopeful 'bright-spot', the Global Assessment expert panel shares the optimistic view that nature can still be restored and used sustainably by means of a transformative change – that is also a key to meeting most other global goals. By this they suggest a "fundamental, system-wide reorganization across technological, economic and social factors".¹² This is a wake-up call for the need to cross professional borders and join forces for a sustainable transformation of the urban blue. Urban planners, designers and marine scientists share the responsibility of restoring the marine landscape to a liveable place. Together we should take a fresh look upon this transitional space; envisioning a regaining of some of its richness.¹³

The above considerations are central to my doctoral study addressing Oslo's urban sea areas. Coastalscapes are evidently under pressure on a local and global scale, with biodiversity and human well-being at stake. Through the lens of landscape architecture, current practices for developing and treating the urban shore are explored. With the Inner Oslofjord as a fieldwork area, the study's overarching ambition is to re-establish the relationships between the land and the sea.

Multispecies Urbanism

Thom van Dooren and Deborah Bird Rose's consideration of the multispecies city supports the above reflections. Exploring the relationship between nonhuman others and urbanscapes, the two draw on the case of a small colony of little penguins (Eudyptula minor). These are small flightless seabirds inhabiting the headland of one of Sydney's busiest harbours - between the calm waters of the port and the waves of the Pacific Ocean. As part of the story we are told that these penguins connect to their hatching-spot with a high degree of "site fidelity". Another word for this is philopatric, literarily meaning "love of one's home". In biological terms, the phenomenon relates to how little penguins always return to their birthplace to lay eggs. The seabirds are inherently attached to a space which has been gradually altered by urbanization. Subsequently, some of the obstacles they must face in a fast-changing world are habitat loss due to development, disturbance by people such as noise, light and littering, as well as wild and domestic predators such as foxes and cats. This case is one example of the many species that must fit into human plans and spaces: Having to live in cities "on our terms, or not at all".¹⁴ Through this, the authors present a critical view of the notion of inclusiveness, a debate that in their eyes mainly accounts for human diversity. Thus, Van Dooren & Rose call for a genuinely inclusive city – emerging from "the flourishing of as many different forms of life as possible"15. The concepts of the multispecies city and site fidelity changed the way I perceive a site. Suddenly, I became aware of other user groups - like the birds frequenting one of the places – again opening up new landscaping-approaches. We generally learn and know so little of nonhuman others. So, what is required to let as many different forms of life as possible flourish in the city? Looking at coexistence from a practical angle, the question I seek to find an answer to is what it really means to share space with other living beings - and how can we possibly treat them as active participants in shared social worlds?

^{12 (}Díaz et al., 2019)

^{13 (}Rinde & Sørensen, 2019)

^{14 (}Van Dooren & Rose, 2012, pp. 5-10, 16)

^{15 (}Van Dooren & Rose, 2012, p. 17)

The Community of Learners

The urbanised coastal ecosystem can probably not be restored completely to a natural state. Questions remain about how to change the current conditions to arrive at marine life friendly urbanscapes that allow the fullest potential for marine life. Changes that would benefit humans too. To break the ocean's glimmering surface, and go beyond idealising architectural narratives, the urban tidalscape is investigated by means of *explorative action research*. This is a method explained as cyclic by nature, revolving around planning, doing, seeking, and gathering. By reflection in action throughout the different phases, the researcher eventually develops a personal theory; arriving at instances of developing new knowledge as well as an emerging community of learners.¹⁶

To familiarise myself with marine life, the act of discovery started with knocking on the doors of marine biologists at the Norwegian Institute for Water Research. In order to find out how ideas such as caring for the Fjord and the possible reach for a multispecies city would be received by the planning community, I had to knock on the doors of property developers, contractors and municipality caseworkers as well. I even had to challenge my earth-bound senses by immersing myself below the surface of the sea. Over time a core learning-community has developed, consisting of me as the landscape researcher working ever more closely with a marine researcher, a project director for art and urban development, and a creative technologist. Moreover, in one of our sub-projects nearly twenty free divers took part a crowdsourced, observation and registration of the marine life in Oslo's inner harbour. Subsequently, new knowledge emerged from the responses and interactions with the landscape and people along two main trajectories.

The first trajectory is making space for the blue common by raising awareness. This is a seeding activity, aimed at opening people's minds on perspectives towards the unseen urban blue. This invisibility influences the way urban marine landscapes are treated. Henceforth, we need to go beneath the surface and include this world of the waters in our considerations. The linking of the marine and the planning communities is motivated from the desire to develop productive ways of co-creation and coexistence between urban forms and natural systems. This demands a shift from traditional human-centred urbanisation, and towards learning-by-doing across professional boundaries. To succeed, it is essential to establish a platform for shared understanding as well as a common language.

The second is to physically make space for life below the surface by articulating a marine landscape architecture; a concept arising from artistic visions in exchange with marine biology, the tidalscape and the sea creatures themselves. In seeking understanding of the architectural features of the tidalscape and for marine life, the research builds on 1:1 observation, microscope photography, and digital fabrication such as photogrammetry, 3D-visualisation and printing. The anticipated outcome is a way of building into the sea that is fundamentally different to the vertical sea walls and the monotonous environments that typically form the urban edge; aimed at making shared housing with liveable structures connecting land dwellers with marine life.

To Sense the World of Waters

Obviously, this realm can only be fully grasped by going beyond earth-bound senses. One-on-one encounters with the tidalscape, at different times and seasons, has been essential to the understanding of this forgotten place. Through snorkelling, I have come to know a new world of life forms and colours. Like the yellows, greens and brown hues of sea wrack and the floating motion of the clear green leaves of the eelgrass. Beside miniature rock pools on the shore, I can linger for a long time to study their wonders: Housing the tiniest of crabs less than 5 millimetres in body size yet perfectly developed – moving sideways along the rocky walls encountering transparent shrimps along the way. Even more fascinating are the miniscule barnacles using their super thin fan-like feet, sweeping plankton and detritus from the water into their mouths. All together performing a mesmerising spectacle.

My desire to see the fjord from a nonhuman perspective arose after reading Rachel Carson's (1907–1964) Undersea essay from 1937. Her writings took my breath away, as I was literary submerged: "To sense this world of waters known to the creatures of the sea we must shed our human perceptions of length and breadth and time and place and enter vicariously into a universe of all-pervading water".¹⁷ This quote exemplifies Carson's excellence in bridging poetic speech with biological facts. Not surprisingly, Undersea is acknowledged as a pioneer-work in how, in this case, a marine biologist invites the reader to explore the World Ocean from the position of the many creatures with which we share this environment. Much in the same way Silent Spring (1962) voiced a roaring silence: An observed silence in nature, resulting from the use of modern pesticides - not only affected the targeted species, but biodiversity at large. Carson made people see nature from new viewpoints, and, thus, is one of the originators of ecological concerns in the 20th century.¹⁸ In honouring her communicative skills, Margaret Atwood highlights her ability to explain science to ordinary readers in a straightforward way. Carson's love of the natural world "shines through everything she wrote", and "if you don't love a thing you won't save it" Atwood continues, pointing to empathy as an agent in developing a desire to safeguard and protect.¹⁹ This is right in line with Carson's ethic of wonder that formed the basis of her ecological philosophy that she began articulating a couple of years after writing Undersea; an ethic which pushes our awareness towards what lies beyond ourselves, and encourages us to become receptive to the idea that we all are "linked to a vast ecological community inherently worth preserving and protecting from depletion".20

Undoubtedly, it is hard to grasp how, for instance, a blue mussel may be included in our world. Would it be worthwhile reaching out to an organism that we cannot

^{16 (}Øgrim & Johannesen, 2014)

^{17 (}Carson, 1937, p. 322)

^{18 (}McKie, 2012)

^{19 (}Atwood, 2012)

^{20 (}Stitt, 2019)

talk to - and that most likely does not need our presence. With wonder and engaged interest we may learn to share the environment despite our differences. And to get a bit closer, it is time to familiarise ourselves with the blue mussel.

A Common Blue Mussel Spurring Imagination

One key source of inspiration for my artistic and landscape practices is delving into the realm of biology. There each specimen or phenomenon has its own astonishing story. From a myriad of possibilities, I have chosen one important inhabitant of the urban blue – the blue mussel. Blue mussels are locals in the Oslofjord, amongst others, cleaning the water to the benefit of humans and other marine neighbours. So, I will start sharing my fascination by revealing some mussel facts. Mytilus edulis, from Linnaeus 1758, is the common blue mussel's binomial name. In Latin mytilus means a sea mussel, and edulis commonly refers to edible plants and animals.

The Blue Mussel's Life

Blue mussels usually permanently attach themselves on rocky shores, where they can live for 18–24 years in depths varying from one to twenty meters. The animal is extraordinarily adaptable, and may withstand wide environmental fluctuations in salinity, thermal conditions, dry conditions and more.

Blue mussels have their most mobile phase during the drifting larval stage, and this time between becoming a free-swimmer and an adult lasts nearly two months. From the moment the fertilized egg metamorphoses to a free-swimming larva, it develops fan-like protrusions lining its skin – and with these the mussel filter-feeds.²¹ We can only imagine the beauty of these minute hair-like organs beating rhythmically to the waves. Yet, living freely in the water column implies a risky journey, and they suffer the highest mortality rates in this period.

As a youngster, less than two centimetres in length, the mussel starts spinning its elastic silky filaments or byssus threads, shown in the illustration. These threads help the shell to stay on the floor, thus affording an effective mooring which also yields to wave energy. For example, in a situation of wave-stress, mussels may orient and re-arrange the position of their byssus in compliance to tension and load to where the most pull is experienced. These strands may stretch to 160 percent of the shell length yet retain five times the strength of the human Achilles' tendon. It is even more fascinating to learn that when the youngsters get an impulse to move, they use their byssus' as climbing ropes – extending, attaching and pulling forward across a surface.²²

A blue mussel 'teenage-crib' is often found in small rock cavities, within threadlike, filamentous nets or among other aquatic invertebrate animals such as the Bryozoans. Presumably, due to competition, the young tend to place themselves away from

adults. The juveniles stay in one place for three weeks, and double in size, before setting themselves adrift to seek a permanent home. From the moment of settling, the mussel grows to full body-size, ranging from two to twenty centimetres, with an average of about seven. If there is a lack of firm ground, the mussels join together to form mussel beds. If knocked out of position, they can always regenerate new mooring-threads and reattach themselves. Besides, the threads function as a defence-mechanism to capture attacking molluscs. Other enemies to the mussels are starfish, crabs and snails, which limit their inhabitation of the low intertidal zone. Likewise, they are popular amongst larger marine species and seabirds - not forgetting humans. As ecological function areas, mussel-colonies bear a likeness to inclusive neighbourhoods as they are attractive to other organisms; Their shells are the building ground for encrusting algae, and the gap between the valves gives shelter to many other miniscule creatures. Mussel beds function as natural erosion control by trapping sediments and accelerating sedimentation. What is more, their irregular, flexible structure acts as a natural wave attenuator and slows down water flow. In some areas, a colony may house several thousand mussels per square meter. Blue mussel reefs are comparable to rainforests on land, and kelp forests and eelgrass meadows in the sea with respect to production rate, and all are recognized amongst the most productive natural systems on the planet.²³

Mussels are grazers, like cows and sheep on land, and feed on the greenery of the ocean, living on a diet composed of phytoplankton, dinoflagellates, small diatoms, zoospores, various unicellular algae, bacteria and dead organic matter. When feeding, the mussel opens its protective shells to let its gills collect nutrients from the water column with small, moving hairs passing particles to its mouth. The greater the angle a shell gapes, the larger amount of water flows through the mussel, and a higher quantity of matter is extracted. On average, an adult mussel filters over a hundred litres of water a day, with up to five litres of water going through every hour before filtered water is pumped out through the exhalation opening. The blue mussels are ocean cleaners. Researchers have discovered that the mussels along the Norwegian coast are the fastest of filter-feeders. During a single day, they may clean a quantity of water corresponding to a well-filled bathtub.²⁴ The purifying-capacity is recognized to the extent that there exist off-the-shelf mussel-systems for water treatment and monitoring. Due to their cleaning abilities and subsequent storing of environmental toxins, the Norwegian Institute for Water Research, regularly collect mussels as part of monitoring-programs along the coast and on oil platforms. Encrusters and reef-builders such as mussels, cannot escape and must endure the environment in which they settle. This is a practical trait to the researchers: As the communities change if exposed to toxins or disruptions, their fixed position turns them into reliable monitoring-units. Eventually, the most sensitive species are lost, whilst the more robust remain.²⁵

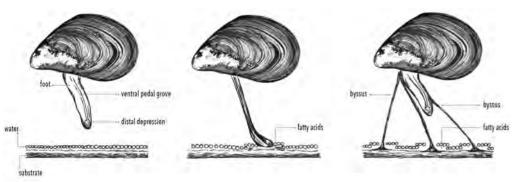
25 (Rinde, professional dialogue, April 2019)

^{21 (}Zagata et al., 2008)

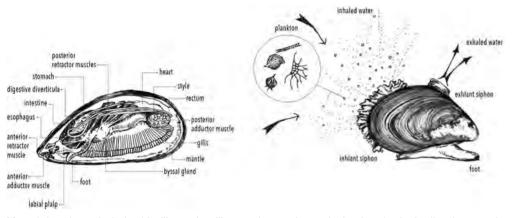
^{22 (}Brentner, 2002; Havforskningsinstituttet, 2019; Zagata et al., 2008)

^{23 (}Brentner, 2002; Christie et al., 2005; Havforskningsinstituttet, 2019)

^{24 (}Havforskningsinstituttet, 2019; Robson et al., 2010; Zagata et al., 2008)



Schematic drawings of the process of the mussel's thread formation on a hard surface



Mussels breathe exclusively with gills, yet the gills not only serve for respiration, but also for feeding the mussel (below, left). Gross anatomy of a blue mussel (below, right). Drawings/collage by Elin T. Sørensen © BONO 2020, based on Yunhong et al. 2018, p. 7152; http://respirationcbb.weebly.com/blue-mussels.html

The Blue Pastures

Mussel-farming represents highly sustainable food production. No manufactured animal feed or medication is required, as the shells feed on algae at the base of the food chain – and after one to two years, the mussels reach a marketable size. Mussel harvesting has a long history. Shell debris has been discovered in kitchen middens 10,000 years back in time, at the dawn of agriculture in the "New Stone Age". From then on, the mussel was picked from wild beds along the European coasts, utilized as food, fish bait and soil-fertilizer. Later, mussel-aquaculture was established for the sake of storage and to deliver reliable fishery products. Despite this, aqua-farming development often resulted in overfishing the natural beds, creating a need to overcome crashed populations. One innovation, dating back to the 13th century, was the French intertidal wooden-pole culture named "bouchots". During the 19th century this design-intervention spread along the entire French-Atlantic coastline, whilst in Northern Europe, a subtidal culture with bottom culture plots emerged. At the turn of the 1970s, new technological developments with a suspended longline rope culture streamlined the mussel-industry, with the keeping of wild beds for the supply of juveniles.

The blue mussel is a real cosmopolitan, thriving in most of the world's biogeographic regions. This has led to the introduction of blue mussels outside its native habitat, that together with technology transfer has expanded its cultivation. Today, China has become the world's largest producer. In Europe, Spain is in the lead, even though the potential of Norwegian waters is the greatest in Europe in terms of production. Still, some significant challenges need to be considered before Norwegian mussel-cultivation becomes economically sustainable.²⁶

The Blue Mussle – a "technical" Genius

"My dream is to create – with the help of what we learn from byssus threads – self-healing materials in an environmentally friendly process that have similar physical properties..." Dr. Matt Harrington, Max Planck Institute of Colloids and Interfaces²⁷

Byssal threads have caused excitement among material scientists. The mussel's silky filaments are produced in the mollusc's foot, from which the attachment fibres are spun within a fine groove. At the end of each thread is a small adhesive disc that allows the mussel to cling to hard surfaces, considered an unparalleled ability to adhere to structures undersea. Now, researchers at the Max Planck Institute, have found that these attachment-fibres stick to a surface better than any synthetic underwater glue. The study shows that many steps in the spinning-process are autonomous, without any active involvement from the mussel. This may reveal new insights on the technicalities of the assembly of polymers into more complex structures: "The biopolymer that forms the core of the thread is extremely tough and also heals itself when damaged. The cuticle of the thread is as hard as the epoxide resin used to manufacture printed circuit boards but is still highly extensible."²⁸ Their study promotes the blue mussel as a potential guide for developing advanced materials of biomedical and industrial relevance, for example, an environmentally friendly production of bioplastics based on biogenic high-performance polymers.

A Mussel Choir

Could art help us to come closer to mussel-ness? This is the intention behind the MUSSELxCHOIR, where other species' expressions are investigated artistically for the sake of co-creating a better future. In short, this artwork merges biological life and sound technology to convey new meaning. A choral society of mussels has performed at the Venice Architectural Biennale, in galleries and outdoors in Melbourne and New York, orchestrated by Natalie Jeremijenko, whose background includes studies in fine arts, biochemistry, physics, neuroscience and precision engineering. As mentioned above, the blue mussels clean water and their physical responses indicate water quality, as they literally "shut-up" if exposed to a certain degree of pollution. To capture this, Jeremijenko instrumented the shells with sensors to collect data on the gap angles as the creatures open and close their valves. This

^{26 (}Goulletquer, 2004; Havforskningsinstituttet, 2019)

^{27 (}Max Planck Society, 2017, p. 3)

^{28 (}Max Planck Society, 2017, p. 1)

data was converted into sound signals before eventually being refined into the mussel-recordings. The composition was further elaborated by making the pitch correspond to the depths in the water column where the mussels had settled. Finally, the tonalities were programmed to play a version of the tune "Daisy Bell (Bicycle Built for Two)".

To offer a bit of context, the 1892 pop-song "Daisy Bell" is an early example of a song that was recreated by speech synthesis or the artificial production of human speech. As a fun fact, this song was performed by HAL 9000, who is the spacecraft computer with machine intelligence in the seminal Stanley Kubrick sci-fi film "2001: A Space Odyssey" from 1968.²⁹ In my interpretation, Jeremijenko's artistic thinking adds new layers of context and understanding to scientific data-collection methods. Moreover, she enables us to listen to creatures normally unheard. The artist plays with technology, such as scientific instrumental precision analysis and the notion of artificial intelligence. However, concepts such as intelligence and precision are carried over to the natural world. In this way, the artist builds awareness of the capacity of mussels, and their potential role as active participants in our world. According to her, statistics shown in a graphical data representation provide insufficient readings of dynamic, complex, unpredictable urban ecosystems. In comparison, mussels perform with a legibility and honesty that embody far broader ranges than instrumental readings - by example a pH-sample. In general, the artist argues, the responses of nonhumans can help us understand the environment in ways unknown to us, and even more exactly than scientific recordings. As Jeremijenko puts it, "mussels have a higher standard of evidence, a higher literacy, and they're integrating over many more parameters".³⁰

The artwork inspires critical thinking towards our relationship with nature by pointing at the wisdom, if we may say so, inherent in ecosystems – understood as the "complex of living organisms, their physical environment, and all their interrelationships in a particular unit of space".³¹ Unarguable, Humankind is part of this complex but, regrettably, this perspective is neither particularly debated nor visible within the field of urban planning and design, and in the way the urban edge meets the sea.

Jeremijenko's choral society of mussels is part of an overarching art project called Unshoreline. The title resounds with the aforementioned concept of shoreline hardening – expressing the division between marine environments and urbanisation and, thus, the removal from the rocky shore of qualities and its inherent ecological functions.

I read the Unshoreline artwork to critically comment upon natural systems versus human-made environments. By reflecting upon the work-context, Jeremijenko states that all the cities' inhabitants bear the risk of how the public infrastructure is created. As large-scale infrastructure systems run on correspondingly large budgets, the design directly affects the public purse. Thus, urban renewal is a hugely public issue, and at the same time represents a socialized risk. On the other hand, largescale constructions, such as sea walls, are built to protect the citizens from natural forces. Unlike hard-edge sea walls, the multifunctional mussel beds absorb energy in the water masses. Hence, Jeremijenko posed the rhetorical question of whether man-built seawalls improve water quality or add any other environmental benefits. In her imagination, these neighbourhoods of the blue form adaptable "mega-metropolises". Metropolis being a precise analogy, as mussel reefs may house thousands of individuals, sometimes representing dozens of species all living in one place.

Jeremijenko suggests that designing with natural systems is neither part of the traditional engineering companies' mind-set nor competence portfolio. To be explicit about who benefits from the environments we design, and to make sure there actually is a shared benefit is as a huge political responsibility. The artist claims there is a lack of recognition towards the paradigm shift that acknowledges that we cannot design with force and mass. As she put it, "we have to design with buoyancy and tension, with living systems".³² This corresponds to findings presented in the Sinking Cities TV-documentary, which shared insights on how five global cities are coming to grips with the effects of extreme weather and rising seas. To mitigate these challenges, there is unanimous agreement upon infrastructure and engineering that are adaptive, encouraging the development of flexible building structures that yield rather than resist nature forces.³³

To share existence with the mussel, or any organism that is very different from us, one must invest in understanding the creature's responses to the environment. Regarding the participation of nonhuman others in urban planning, we can ask to what degree Jeremijenko's artwork brings us further. She clearly builds on knowledge that is recognized within the marine research community, where mussels already participate in monitoring-programs to reveal environmental pollution. Nonetheless, Jeremijenko's choral society of mussels exemplifies how artistic actions may offer new ways of gathering and disseminating knowledge. The artist invites people to get to know the mussels as responsive organisms which we stand with in a mutual relationship, thus opening the minds of the larger audience to what it could mean to invite mussels into our lives, and inspiring a multi-voiced literacy.

The philosopher Mikhail Bakhtin (1895–1975) writes about a dialogic imagination coming to life as a "many-voiced" expression. During the event of exchange, the different voices combine, resulting in a dialogic sense of truth. The word "event" was important to Bakhtin. In Russian the root of this word relates to "existence" or "being". In a more literal form, it can be interpreted as "shared existence or being with another".³⁴ By this perspective, any understanding occurs through responses, and through listening and speaking. In this way, various points of view, conceptual horizons, and different social "languages" come to interact with one another within a living context of exchange.³⁵ A dialogic imagination might be a tool we can use to

^{29 (}Hannah, 2017)

^{30 (}Hannah, 2017, pp. 207–209, 211–212)

^{31 (}Encyclopædia Britannica, 2019)

^{32 (}Hannah, 2017, pp. 202, 207, 213-214, 216)

^{33 (}Cineflix (Cities) Inc. in association with THIRTEEN Productions, 2018)

^{34 (}Bakhtin, 1963/1984, p. 6)

^{35 (}Bakhtin, 1982; Bakhtin, 1986; Irvine, 2004)

include different life forms in our world, and thus a strategy relevant to place-making between the land and sea. In campaigning for the creation of better housing standards for others, the recognition of, for instance, the mussel's far-reaching abilities is an obvious asset. For example, to help us come closer to nature, Jeremijenko suggests setting up situations from which we can read the signs of (wild)life in the urbanscape; a proposal directly related to the inclusion of nonhumans as participants in designing our environmental commons.³⁶

Additional perspectives on dialogic imaginings across mental, cultural and physical borders are offered in the anthology Tidalectics – imagining an oceanic worldview through art and science. Here, the tidal landscape is brought forth as a contact-zone analogous to "social spaces where cultures meet, clash, and grapple with each other."³⁷ As coastal landscapes enable exchanges between ecosystems, as well as mentalities and fields of knowledge – they are places from which new knowledge grows. Against this fluid backdrop, artistic practices are thought to produce a much-needed porosity, wherein different views can inform one another and co-exist.³⁸ In contrast to the interchanging coastal ecotones, disciplinary divisions are compared to the artificial lines of i.e. national boundaries. The traditional divisions between professions often block the exchange of information and the development of common understanding between people. To go beyond this, art is proposed as an arena where people can form new ties. Stefanie Hessler, the anthology editor, suggests that the artistic drive towards entering the unknown and testing boundaries can inspire an "undisciplined" mindset much needed for real interaction to take place.³⁹

Undisciplined Co-creation

Whilst Jeremijenko's unshoreline refers to removal from nature, I understand undisciplined, to stand for letting go of disciplinary assumptions, know-it-all, and siloed mentalities – all standing in the way for productive co-creation. A deep professional collaboration requires the ability to set oneself aside and to be receptive to the other – that is making space for otherness. Hence, these un-words encircle the work I stand amidst, seeking to bridge architecture and biology for enhancing urban hardscapes for the pleasure of people as well as marine creatures.

Stepping into the realms of others can be accomplished by changing from the position of operating as an expert to becoming a beginner with respect to the question at hand. This in turn, requires patience and trust – and ultimately, the acceptance of results that none of the participants may have predicted. Thus, all parties must give up their preconceived notions along the way. During my action research process, it has become clear to me that deeper professional understandings come from producing knowledge together – over time. By sharing experiences while thinking and doing together, the co-creators become familiar with each other's ways of

working and thus develop experiential ties that may eventually become a professional friendship. Here, the nuance added by 'friendship' opens up responsiveness and interdependencies.

Designing together is essentially different to what is still a common practice within the planning community, wherein each field delivers separate contributions in accordance with urban planning checklists. Within undisciplined co-creation the parts need to un-learn in order to build new collaborative knowledge. Yet, in the hasty world of urban development, to dissolve divisions and wait for people to loosen up to undisciplined co-work may be a utopian dream; even more so to include mussels as equal participants in the planning processes. Nevertheless, from undisciplined co-creation new conceptual horizons may arise, which at best can lead to innovation.

Being With Nonhuman Others

The activation of nature in urban development is clearly linked to making space for nonhuman others. Yet, how likely is it for us to include nonhuman others on the participant-list in decision-making processes, and to take the trouble to see the world from, for example, a blue mussel's perspective? There is a fair chance that such propositions would be perceived as naïve, and even silly. In the words of botanist Martin Spray, "If some or all of this seems silly, that is partly because we have placed H. sapiens at the head of Life's procession".⁴⁰ Only with an ethical paradigm shift in favour of all other living creatures will humans step down from this pedestal. As an option, Van Dooren & Rose suggest an ethics of convivality (friendliness), putting the "burden back on humans".⁴¹ To me this would imply being generous towards nonhuman others in planning and transforming our built environment. Technical inventions have enabled humans to perform the work of giants. Our footprints from making our way in landscapes through actions such as tunnel-blasting works, oil drilling and resources extraction are highly visible, and have fundamentally changed landscapes globally, even touching upon the Earth's atmospheric and climate system. Should we not turn our superpowers in the opposite direction, towards reclaiming and cultivating the ecological functions and qualities that are run-down or lost? A keen communicator arguing nature's case was philosopher Arne Næss (1912–2009). In one of his last books, he suggested ecosophy as a comprehensive way of looking at the ecological crisis. Næss had already introduced these ideas in the autumn of 1972, in a lecture given at the 3rd World Future Research Conference in Bucharest. Regarding a multi-voiced literacy, Næss argues that ecologists are irreplaceable informants for policymaking and thus change. However, to him ecology is a "limited science which make use of scientific methods". He questions the belief in science as a value-free zone by proposing a wider perspective: With ecosophy, ecology is united with a kind of $sofia - wisdom^{42}$ containing both norms, rules, value priorities and

^{36 (}Hannah, 2017, p. 217)

^{37 (}Pratt, 1991, p. 33)

^{38 (}Von Habsburg, 2018, p. 8)

^{39 (}Hessler, 2018, p. 32)

^{40 (}Spray, 2019)

^{41 (}Van Dooren & Rose, 2012, p. 19)

⁴² *Sofia* is the Greek word for wisdom, whilst the prefix eco- refers to the Greek *oikos*, that may translate to household in the sense of being the basis for life on earth.

hypotheses on the state of affairs in the broader universe: "Wisdom is policy wisdom, prescription, not only scientific description and prediction".⁴³ Næss suggests that such *ecological teams*, composed of scientists from varied disciplines, students and policymakers, would act as caretakers of this worldview. These ecophilosophical practitioners would supposedly act wisely with respect to life on Earth – beyond a strict reliance on scientific facts or truths.

In 1984, Næss and Georg Sessions defined eight principles which express the characteristics of the *deep ecology movement*. Regarding the above reflections, the third principle is of relevance; it states that "Except to satisfy basic needs, mankind does not have the right to reduce this diversity and this richness". By accepting that nature has intrinsic value the last principle points to a responsibility "for trying to contribute directly or indirectly to the realization of the necessary changes".⁴⁴ Stating that the deep ecology movement consist of as many "ecosophies as there are supporters"⁴⁵, they emphasise the importance of including a variety of views and voices. Actions as a companion to nature must grow from a value base that is adapted to individual capacity – but these together will form a multitude of responsible acts. By this, an ethical foundation for being with nonhuman others will be expressed.

It remains to be seen if we ever can escape from the human standpoint. This debate is seemingly on a gradient from human centeredness to a willingness to see and include nonhuman interests. Næss contributed to positioning nature as "a mentor, measure, and a partner rather than servant".46 His approach corresponds to Carson's ethic of wonder and Van Dooren & Rose' ethics of friendliness. All see nature as a partner rather than a provider of useful services. Nevertheless, over the last decade, the concept of nature services has become widely accepted within urban planning and management. As an example, the Economics of Ecosystems and Biodiversity (TEEB) was initiated in 2007, as a global initiative focused on drawing attention to the economic benefits of biodiversity and ecosystems as well as the costs of biodiversity loss and ecosystem degradation. From this outlook, urban nature is promoted as being helpful and beneficial to humans. For example, a mature tree has many affordances: Within its root, interactions with soil enhancing microorganisms goes on, and additionally, the roots behave as a natural erosion control. Its trunk and canopy houses song birds and pollinating insects. The foliage gives shade, and trees may have a spiritual standing. As posted by the Norwegian Institute for Nature Research, "The concept of Ecosystem Services provides us with a new tool to communicate the value of nature, putting nature into a perspective based on human needs".⁴⁷ Biodiversity is made visible because to ignore it is inefficient, or because there is even the danger that the natural capital might be ruined. From my professional experience, I acknowledge ecosystem services as an argumentation-tool which has paved the way for a willingness to invest in nature-based solutions. Yet, services are the work of servants. Is it not time to move beyond this perception of nature?

The Fjord has several important nature values⁴⁸, and as we have seen, marine plants and organisms play important roles in adding to this. To answer the question of whether we have the responsibility to return the disturbed seafloor and urban shore-line to a habitable place for all, it is productive to view nature as a mentor and a partner.

Tidalscape Actions

A longing amongst people for new courses is seemingly rising. Yet, longing for new directions is not enough. Change requires action. Arne Næss present a good personal example of this as he was an environmental activist and was the first chairperson of Greenpeace Norway when it was founded in 1988.⁴⁹ Both Carson and Næss stand out as guides leading us towards a knowledge-based dissemination where compassion for the environment emerges from close identification with, and feeling for, all life forms. Carson's marine fieldwork observations lay the basis for her emphatic and vivid wildlife accounts. Similarly, in Næss' lecture from 1972, the importance of engaging in close encounters with the environment is highlighted: "The ecological field-worker acquires a deep-seated respect, or even veneration, for ways and forms of life. [...] To the ecological field-worker, the equal right to live and blossom is an intuitively clear and obvious value axiom".50 A statement reinforced by Næss being an advanced mountaineer, exposing himself to a high degree of interaction with landscapes. Climbing, in a sense, happens as a teamwork between the senses, the vertical rocky walls and gravitational forces - requiring great awareness. Thus, the climber literary participates in a two-way communication with nature.

In my own participation with the marine landscape, my research is spurred by an urge to possibly influence people's mindset as well as the physical appearance of the urban foreshore. Stepping out of my comfort zone and indulging in *wonder as a state of* mind, snorkelling allowed me to be within this fluid world; discovering hitherto unfamiliar shapes, colours and ways of being. Further, by placing various building materials in the sea, I have been able to study how sea wrack develop from tiny spores, to more complex sea plants. I have seen minuscule crabs, barnacles and shells as small as sand grains grow and develop. Thus, I have cultivated a deeper understanding of the blue realm through multisensory observations – which have fundamentally changed my perception and fostered a desire to care for marine environments and creatures.

To achieve acceptance for nature as an equal partner and to change the urban development-culture, requires persuasive campaigners. But, before becoming a trustworthy advocate, one must start with becoming aware of and receptive to the often-overlooked wonders and rhythms of the natural world. What kind of neighbourhood and landscape do they need? Through my explorative action research, I have been able to examine these aspects in cross-disciplinary engagements. The first one concerned recommendations for the establishment of new marine landscapes in Bærum,

^{43 (}Næss, 1972, p. 99)

^{44 (}Næss, 2002, pp. 108–109)

^{45 (}Næss, 2002, p. 101)

^{46 (}Glasser, 2002, p. xxvi)

^{47 (}Norwegian Institute for Nature Research, 2019)

^{48 (}Chen et al., 2019)

^{49 (}Greenpeace Norway, 2009)

^{50 (}Næss, 1972, pp. 95-96)

a municipality neighbouring Oslo. The second discussed possible restoration actions to strengthen the biological diversity of Oslo's urban sea areas and the Fjord City.⁵¹ The third realized an undisciplined co-creation between marine biologist Eli Rinde and myself, through several workshops at a local porcelain factory. In this work we upscaled industrial wreckage products to new marine housing.

Multispecies Housing

Through the aforementioned co-creation-processes, we have articulated a common language for restoring the urban tidalscape, such as a diversity-enhancing reparation of developed shoreline and a diversity-enhancing marine landscape architecture.

The current extent of using smooth surfaces, straight walls and floor, providing few opportunities for plants and animals to settle, is striking. Additionally, it is highly likely that the light levels reaching the floor will be too low for any algae to grow and thrive. This is illustrated in the figure below, where the co-workers stand on the artificial concrete seafloor of a new building complex in the Fjord City.

As a landscape architect pursuing a diversity-enhancing marine landscape architecture, I fall short due to a lack of knowledge regarding all the user groups. In the case of submerged structures, they would be marine plants and animals together with the



The team of marine biologists, the property developer, and the landscape architect at the building-site of the new urban quarter in Bispevika Oslo. Photo by Elin T. Sørensen © BONO 2018

51 (Rinde, Sørensen & Haraldsen 2019; Rinde et al., 2019)

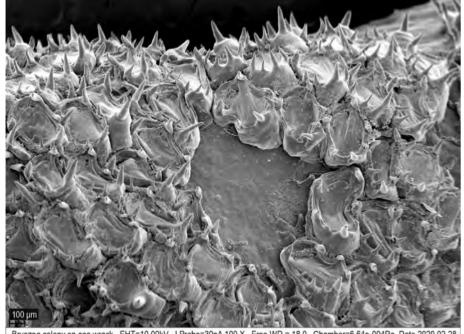
tidalscape features. Here we find a boundless diversity, from small sheltered niches to open spaces exposed to wind and waves. These are qualities and ecological functions spanning from micrometres to kilometres in scale. Marine organisms need folds, cracks and crevices to establish their communities. They opt for irregular surfaces and complex structures. In a review of worldwide ecological engineering measures applied to urban infrastructure, the researchers found that species responding most positively were those whose "body size most closely matched the dimensions of the resulting intervention".⁵² Why not create such miniature worlds for marine life onto our built environment? Here the natural rocky shore can teach us a lot about spatial wellbeing factors that are important both to humans and marine organisms. For new designs between land and sea the natural rocky shore is our best mentor and that is why I see the landscape as the true architect.³³

Humans and marine organisms are non-comparable, yet we share some common needs. Daylight is a key issue within architecture, and light is similarly essential to most marine life. Hence, we all need the benefits arising from forming good neighbourhoods and community living. Also, we have different needs through our life cycle. Along the natural rocky shore, each sea creature seems to have its own specialized way to withstand natural forces, such as seeking appropriate shelters for warding off predators from above and below, and in finding places that keep the creature moist and protect it from drying out, and in breathing within air pockets found in the cracks and crevices of the rocky shore. Hence, the natural shoreline provides creatures with a spatial layout and functionality with similarities to human shelters. Moreover, plants and some animals act as habitat forming species, creating and modifying their own environment. In my imagination, the layered world of kelp forests and seagrass communities resemble productive residential neighbourhoods. In the marine world, you find hosts facilitating a great diversity of inhabitants. Here, the plants' stems and leaves, as well as the blue mussel colonies, form three dimensional structures: An "Architecture" influencing currents, creating shelters and functioning as the local food supplier. In this sense, these habitat-forming species afford an undersea lifetime home standard with shelters, nurseries, and a graveyard kept clean by bottom dwelling scavengers. As living-complexes they comprise an interplay between form, function and diversity. Thus, I see them functioning as an all-in-one system from which to draw constructive inspiration.

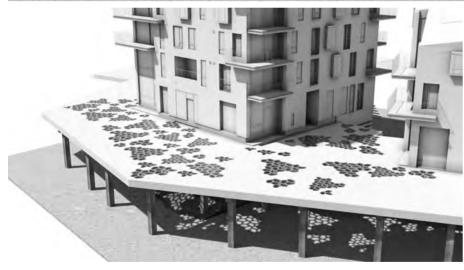
The creation of a diversity-enhancing marine landscape architecture builds upon digital fabrication. For example, photogrammetry is the technique of taking multiple overlapping photographs and from them creating 3D models of objects or scenes. The 3D-models enable large-scale manufacturing, such as large-scale additive manufacturing of three-dimensional objects by means of, for example, extruded cement-based mortar. In this case, close-range photogrammetry is used to record local geological features, and thus enable the transfer of physical features of the natural rocky shore. An example of structural adaption are artefacts with features based upon local geotopes and marine nature types such as rock pools. Textural examples may be the

^{52 (}Firth et al., 2016, p. 225; Strain et al., 2018, p. 426)

^{53 (}Rinde & Sørensen, 2019)

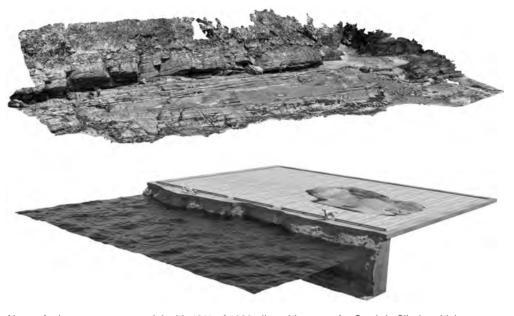


Bryozoa colony on sea wrack EHT=10.00kV I Probe=30pA 100 X Free WD = 18.0 Chamber=6.64e-004Pa Date 2020.02.28



Above: In the wild, the individual Bryozoans are minuscule. They join in colonies on rocks, seaweeds and on other sea creatures. Within each colony they live in numerous tiny houses, made from self-produced calcium carbonate. The individual Bryozoan's dwellings are only a few millimetres high, yet they can spread out in metropolises of a whole metre. In the colony they have different tasks. The chefs cook, the doctors are responsible for the children's health and upbringing. They even have their own army guarding the colony. Like mussels and other filter feeders, bryozoans gradually cleanse the water as they feed. Scanning electron microscope (SEM) image shot at the Imaging Centre NMBU, by Lene Cecilie Hermansen & Elin T. Sørensen © BONO 2020

Below: An example of diversity-enhancing marine landscape architecture for the Bispevika quarter, with a light-penetrating surface inspired by Bryozoa-colonies. The model also has a habitat-enhancement landscape element on the artificial seafloor, however this is not visible in this rendering. Concept Elin T. Sørensen, marine guidance Eli Rinde, and 3D-visualisation by Ivar Kjellmo. Kjellmo/Sørensen © BONO 2020



Above: A photogrammetry model with 1911 of 1930 aligned images of a Cambric-Silurian tidalscape at Hovedøya, an isle off the Inner Oslofjord. Photogrammetry by Ivar Kjellmo, assisted by Elin T. Sørensen. Kjellmo/Sørensen © BONO 2020

Below: Diversity-enhancing marine landscape architecture in the form of a Cambro-Silurian waterfront. Concept Elin T. Sørensen. 3D-visualisation by Ivar Kjellmo. Kjellmo/Sørensen © BONO 2020

transfer of geological surfaces from the local Cambric-Silurian coastal formations, as shown in the 3D-renderings below. The marine landscape-architectural elements are inspired by marine nature types which are fitting for the conditions of the Inner Oslofjord. Hence, the refined 3D-models suggest new ways of connecting the gap between the urban foreshore and the marine environment.

Another viable option for designing good marine neighbourhoods is to re-create and restore mussel beds, as has been done along the Swedish coast. Filter-feeders like the mussels may help us to clean the waters much in the same manner as certain plants work to remediate contaminated soil. In plant-based remediation processes, the plants are removed after a while and treated as hazardous waste. For the blue mussels, this would imply sacrificing some generations for the sake of better water quality. A more nature-friendly solution would be to let mussels assist in monitoring water quality, keeping us informed on a real-time basis. Inspired by the artist Natalie Jeremijenko, one could imagine that mussel-monitoring units, for instance in the form of sound art pieces, were set up along the urban foreshore – an intervention that would bring life below water to the surface and contribute to public education and awareness raising. Yet another option is to seek inspiration from the blue mussels' time-tested functionalities, such as, for example, the research on byssus threads. In my imagination, I picture building structures that attach to the shore with comparable strength and flexibility as byssus threads, giving us a marine landscape architecture which yields and adapts to the waves and the forces of nature.

One could imagine coastal defence structures put together like mussel beds as a permeable quilt of mussel-patches and empty spaces, retaining and slowing down the wave energy. And what if all plastic ropes used in the sea were replaced by marine-friendly manufactured byssus-like threads. One could just imagine the benefits of a bio-based product which could replace the eight million tons of plastic ending up in the World Ocean (equivalent to ten full grocery bags for every half meter of coastline in the world).⁵⁴

To conclude, Van Dooren & Rose's consideration of the city as a place for a variety of housing potentials, shelters, and habitats that complement each other is uplifting. As they point out: "Humans do not live in burrows or tree tops; there is room for everyone".⁵⁵ We have the option to adjust and rethink our built environment, both on land and undersea. Our artificial structures can be made complementary in ways to which only imagination sets the limits.

Acknowledgments

I wish to express my gratitude for encouragement and expert advice in developing my doctoral work and this essay – thank you Kristin Bergaust (Oslo Metropolitan University), Ursula Münster (Oslo School of Environmental Humanities), Eli Rinde (NIVA), Ulla Lind (Konstfack – University College of Arts, Crafts and Design), Venke Aure (OsloMet), Anne Beate Hovind, Christian Blom (Norwegian Centre for Technology, Art and Music) and Anne Katrine Geelmuyden (NMBU).

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Editor's Note

The formatting of this article has been left different from other texts in the book to comply with the author's dissertation.

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pro.vocations (for a not yet fully articulated time)

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ABSTRACT

This text developed alongside being read aloud in a variety of social settings. The work was conceived with a documentary approach to art in mind, explicitly applied in formats of the videoessay, where a narrative is generated by two interlacing timelines. In the setting of a social space the sequence of images becomes unpredictable when combined with a speaking voice. Seventy-two images would pass through hands or given out following simple rules, producing coincidental encounters, or possibly frustration, in a forced collective doing. The same images had earlier been used in a floor installation, for which writing was a constitutive tool to enable individuals to find the order while walking on an oversized board game, and to intervene in potential

displacements – meanwhile, in this case, the text kept a back-stage existence. The present version continues the experiments with different formats to give speech to things by bringing them into public, while pointing to agency in a relational co-acting of elements. The images and text are fragments from work with the *Agential Matter* (*Invisible Landscapes*) project, which examines the performativity of algae, objects and bodies in instances of observation in scientific research, industrial production and artistic encounters along the Norwegian Coast.

KEYWORDS: image objects, performativity, diagrammatic thinking, agency, algae

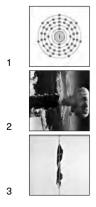
I heard on the radio one morning, that it was suggested to hand out the national storage of iodine¹ pills to all households in Norway – instead of keeping them centrally in Oslo, which doesn't make much sense. In case of any radioactive threat, caused by an accident or attack, the pills should be taken as protection against the effects of radiation within a few hours.

The broadcast made me think of the case of some patients in a hospital in Nagasaki when the bomb fell there in 1945². They had followed a specific diet based on algae³, which must have meant that they would have eaten even more seaweed than they would have done usually. At least, that's my preconception of Japanese food culture: that seaweed in some form would always be part of a meal⁴. In the case of this specific group of patients it was obvious that they weren't affected in the same manner as others by radioactivity, and they seemed to recover quicker. I assume (and I might be wrong) this had to do with iodine, as iodine is an issue when specialists of nutrition discuss the recommendable amount of algae to be consumed. The body needs and often lacks it, but it has a toxic effect when overconsumed. To fix a recommendation to a certain numerical value seems impossible as bodies are different.

The Japanese are to a higher degree accustomed to the intake of iodine, because they have consumed the sea for a long time. The closer one lives to the coast the higher the tolerance. **Porosity of the body as a case of attunement.** Could fishermen suffer from a lack of iodine at all? To point out the reversal: continental Germany has suffered from a chronic lack of iodine. Bodies are not primed for much of it there – unlike in Japan.

The types of seaweed, which interest me the most are among the species with the highest iodine content. I realize that I have eaten considerably more than I should have when experimenting without knowing, but I might be well protected against radiation now.

Laminaria hyperborea and Laminaria digitata are among the most prevalent kelp species along the coasts of the North Atlantic. On its Eastern side, Ireland and Wales have a strong tradition of the use and consumption of seaweed⁵ – even if it is not as strong as in Asia –, and a similar tradition was remembered in Iceland after the financial





crisis in 2008, when people tried to find new ways to earn some money.⁶ In Norway, the tradition still seems partly forgotten.

Certain things are eaten in one place, meanwhile they are ignored or disdained in others. In the same manner as **each step taken means a becoming with the ground**, eating enforces to an even higher degree the fusion of at least two entities. Disdain can be read as a denial of an intimate relationship with some particular elements of a specific, given landscape.

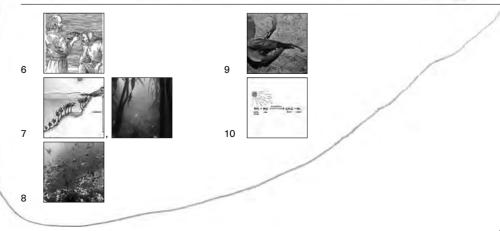
Eating kelp might have enabled the migration of maritime peoples from Asia into the Americas, when they travelled along the rim of kelp forests a very long time ago. The food provided supported transformation into the sea to make migration possible over such distances. **A passage of becoming other.** I imagine small boats, low in the water, and people stretching their arms down, piercing the surface, to grasp what is underneath at low tide.

The main part of the forests grows deeper than arms would be able to reach⁷. One has to dive to cut those, holding the breath to get down 5m, 10m, 20m or more to collect food to sustain one's life on a journey like this.

I cut kelp myself, and I cut what I can reach at the lowest tide from the shore. I cut the stipe about a fist below the blade. Each stipe only holds one blade, so what I do, stops the function of its metabolism, remnants of the stipe die off. If I left parts of the blade, it would continue to live. If I left the detached blade floating in the sea, it would continue to live, too.

Its metabolism doesn't depend on the stipe or roots like plants, as it is completely immersed in nutritious surroundings. It wouldn't need to be a static settler like a tree but might live a nomadic life in the currents like an animal⁸. It could travel to the Arctic, where cold waters would prolong its life.

It could – if it didn't sink to the bottom.⁹ Ending up in the dark of the depth. No light, no metabolism¹⁰. It also might be grabbed somewhere on its journey, devoured to become part of something else, to carry on the energy it received from something else. The blade is held on a lead by the stipe. And thereby kept alive.



Stories about Asia and ancient migration along the Pacific kelp highway are digressions from a focus I want to keep on kelp along the Norwegian coast in our times. However, it becomes increasingly difficult to see things isolated from their context, and not extending the gaze in time and space, following the spreading¹¹, branching and entangling of things. It was a modernist thing to see them isolated¹². Today we know that marine species spread with ballast water around the world. Exploitation, transport and trade of raw materials have had a long history already¹³ – more often than not connected to colonialism of humans and nature. What has changed is the scale. Raw materials cross many borders before they end up again at their place of origin¹⁴ – after having gone through a long chain of transformations. Norwegian kelp has been part of this system for more than two centuries. Not so much as human food yet, but **it has entered and touched human and animal bodies in a broad variety of guises**¹⁵.

In an email exchange with a marine biologist back in 2012, he expressed his puzzlement about the spread of Sushi bars: meanwhile nobody seemed to be aware of the local alga that is similar to the one used to produce Nori. The Nori used in Norway's Sushi bars is imported from Asia¹⁶ meanwhile the stuff grows just out there on the rocks. I had a lesson one early morning at Saltstraumen, close to Bodø north of the Arctic Circle. The waters are extraordinarily nutritious there due to a constant exchange of strong currents. It was in the end of March and still freezing. We had to be there at six for the lowest tide, right after the full moon, so we could pick from boulders, otherwise submerged under the surface. The quality was fresh and tasty, well grown already.

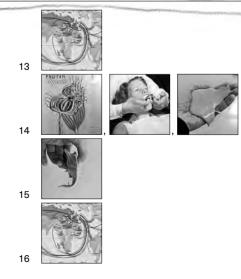
We didn't succeed with the production of Nori though.

We lacked the ambitions to gain control.

Processes are interesting to observe. They are an inter-play of tools and spaces and conditions, meanwhile a certain thing is in focus. They are transformations and fluxes,







which a processing industry aims to control. The goal is to fix certain states – at least temporarily – to make the resulting product part of an economy. It is then meant to become an immutable and mobile object, adapting into standards, ready for further processing somewhere else.

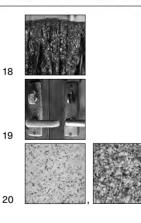
My desire to fix kelp is extremely limited.¹⁷ There is a driving curiosity about simple processes, and the pure involvement with or slowing down of them – touch kelp, collect it, cut it, drop it, hang it – to get in contact with something that otherwise would escape. The smell is strong, the touch has a character of a fleshy, almost leather like, strong body, which has grown from the tumultuous sea. The blades show allergic reactions when staying too long in fresh water¹⁸ and they get weak and slimy when they are stressed by getting too warm. A rise above sixteen degrees is potentially too much. **There is a quality in each small moment that is determined by a plurality of agents involved, where a varying balance comes into play, deciding the direction of a certain transformation.** In a wider sense, I become part of these transformations myself, at the same time as I cause them or make space for them to happen.

In a more natural context, kelp might move northwards as a consequence of warming water¹⁹. In a wider sense, we all become part of these transformations ourselves, at the same time as we cause them or make space for them to happen.

My awareness of the conditions is paralleled in the marine biologist's work to control the outcome of an experiment, which is a staging of transitions while keeping a certain openness²⁰. Deviations from the intended can make visible what would have stayed hidden otherwise – and become the actual point of interest.

Whenever I set up situations to handle kelp in a series or repetitive manner I can't but see Richard Serra's "Hand Catching Lead" in my inner eye. Or when hanging





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kelp²¹ as a step in certain processes I see Robert Morris' felt pieces. Gravity, the inner tension of the material, shaped by a certain structure and chemical processes, the impact of the humidity and temperature of the space, the forcefulness of the touch of a hand, are just some of the agents at work. It is not the figure-on-ground, which is at stake, but an entanglement of various parts in a wider field. **The figure-ground-relationship got dissolved** in the interest of material processes. Something similar happens in co-existences – when the figure of man (or kelp) dissolves into the background of its circumstances.

I am an artist. And I want to talk about kelp – in a way to give it speech. Taken out of its context, and as a particular case of materiality.²² An impossible task after what I've said. **It can't be isolated**. I just can force the change of context. The studio or White Cube never managed to live up to expectations of keeping the world outside – as little as the scientific laboratory does.

I want to talk about kelp as a particular thing. A thing I respond to. I'm affected by. Each handling is a two-way relationship, and the **effect doesn't stay at the outside of a self or other**. It is an encounter of mutual sensuous involvement. Bruno Latour describes what is the core of this encounter as secondary qualities, which are the ones accessible to the subjective body. He followed scientists in their laboratory work in the seventies to look at the interplay between matter, humans and instruments, in moments of the search for access to primary qualities, which until then had been asserted as being unaffected by prevailing social circumstances.

He conducted studies in the social space of a human-non-human collective endeavour to produce facts. He changed the perspective from a figure-ground-relationship to an actor-network, where ventilation pipes on the roof are part of what constitutes knowledge of substances in neuroscience.

A two-way relationship exists in each and any encounter, also between kelp and instruments, or instruments and the body²³, at the same time as **they form collectives and hybrid objects**.

Aesthetics is a way to sensitize us to what surrounds us, or rather what we are part of, to develop closer relationships, to become aware of existing relationships. This sounds at first glance really good.

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However, psychopaths also have a great awareness of the same aspects, so they know where an interference hits the most. Just as any specialist knows where to crack open certain entanglements to force new ones and by that a different development. Following similar principles material qualities of consumer products are changed. Plants are changed. Animals are changed. We are changed.

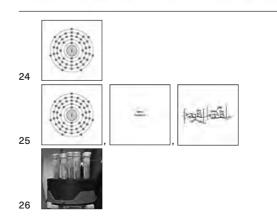
There exist fine nuances of **applied sensibilities to manipulate according to intentions**. What would it mean to develop sensibilities without intentions?

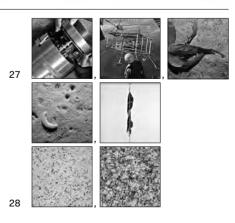
And what can kelp do to a human body by way of its chemical compounds like iodine?²⁴ This question addresses kelp's primary qualities²⁵ that – as opposed to secondary qualities – aren't experienced subjectively. They need the extensions of the body, in the form of scientific apparatuses²⁶, to be accessed. However, there still is an effect on the body which can obviously be perceived without any mediation, connected to its (lack of) well-being as a difficult to define frame. The concept of "primary" and "secondary" is that of a troublesome hierarchy, and it creates a separation to be questioned.

I can touch kelp, handle it, act upon it, eat it, and watch it through a camera²⁷. The scientist can look at it through a microscope²⁸, split it into chemical compounds, analyse it by gene sequencing. Still – the assumption is that kelp isn't a totally passive part in what is going on. It does something, too. Who's acting first? (Is there a "first"?) And what it does will vary depending on different circumstances – which means yet other agents are involved.

Karen Barad grasps that point in her writing on intra-action, which is something different from interaction. It doesn't stay in the space between bodies, but presupposes their porosity. There don't really exist individuals in advance, but subjectivity is shaped in the moment of intra-action. This agency is a constant doing, nothing that one agent has. Subjectivity is a constant becoming.

Occasionally we might say we are fascinated by something. This is the working of affect on us.





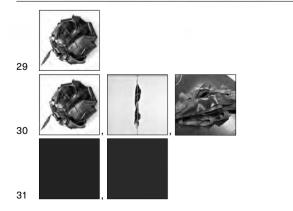
— PRO.VOCATIONS —

Latour wants us to leave behind mere fascination. Fascination is produced by the senses. Or it seems at least to start there – with a sharpened sense of sensation. The challenge is to get beyond such a first encounter. However, without overthrowing it by following a purely scientific paradigm. Without destroying its intensities. Spinoza talks about encounters between (human and non-human) bodies as moments of compositions or decompositions. Encounters are the consequence of bodies striving for more power. Power increases with composition, and decreases – at least for one part – in the moment of decomposition. This is how one can identify an encounter for one part as good or bad. It doesn't necessarily mean the same for both, but it absolutely can – in mutual empowering or mutual destruction.

The picture shows²⁹ green and warm nature as Latour calls it. It implies a notion of harmonic being together for every body's best. The green took over at some point in history from a red and bloody one. It is green and warm nature that Latour combats in his arguments. He prefers brown layers. He doesn't combat nature. It is our understanding of it which causes him trouble.

When you see an image of kelp³⁰ out of (its normal?) context you hardly would call it nature. The image is abstract. The kelp unit is taken out from the sea, detached from its holdfast and already transformed – in the first state of degradation as it has encountered boiling water and subsequently changed its colour, from brown to green³¹. From the not-so-interesting to the fascinating. From what it was to what it ought to be – if the point of green has to be made to visually bring the conventional concept of nature to the fore (and by that trigger a positive, activist, environmentalist engagement)³². However, it is in a sense a move from the natural to the more artificial, because a **cultural concept has intervened**. The encounter between water and kelp was enforced. And even if we think of water as nature as well, its temperature wouldn't rise naturally. Not like this. Not here. It happens due to human intervention.

Now we see the green, which is the green we think of, when we imagine nature, the affective green. When the green appears, chlorophyll is forced to lay open. The brown pigments, which protected the blade against destructive UV-light, are disin-





tegrated. The green is the main engine for photosynthesis³³, fuelled by light – the process that produces biomass by converting CO₂ into something better (from a human perspective, if we want to apply Spinoza's concept of "good" in this way).

Photosynthesis is the process we learnt about in school, when we learnt about plants. Hoimar von Ditfurth declared plants the real rulers of the world³⁴ in an evening program on Zweites Deutsches Fernsehen in the seventies. As a child I found him funny in his obviously absurd behaviour in the simplified acting and experimenting in the studio and in the field³⁵. I didn't listen. I only watched. Today I'm struck by his warnings regarding climate change – this was about forty years ago. He didn't seem to reach a wider audience. Nothing has changed. He crossed disciplinary lines in his work between the humanities and natural sciences, and did this publicly in front of a TV-audience. Von Ditfurth did this, shortly before Latour wondered about a big divide between nature and culture, or things and humans, as a result of his observations. Both saw a necessity for making things public as a cross- and co-disciplinary endeavour (including the arts in Latour's case).

Nevertheless, – back to kelp as the core of investigations – despite the photosynthesis, it wouldn't be totally correct to call kelp a plant. It rather is a thing between a mushroom and an animal – kind of. **This only confuses.**

For a period of time we were happy to call it a plant. But for a very long time we didn't think of us as an animal species either.

I call this a thing.

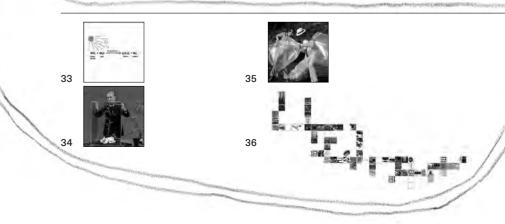
Not an object. A thing.

A thing can be in its own rights.

A thing can do - to me or other things.

I repeat myself. And others. We have heard this before, when we listen to object-oriented-ontology, more recently, for instance. **They say it's nothing new**, even if we thought differently for a while, when things only existed because we named them and projected ourselves onto them. Their references point back more than two thousand years to the cradle of western philosophy. We are still working on grasping its full meaning.

The work of grasping will never end – like when you scroll down a webpage with images, and the more you scroll down the more the number of images extends³⁶. If

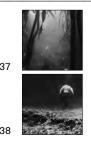


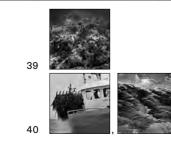
digital or in life: this happens due to a fluid reality without stability. The attempt to fix something – in a state or category – can always only succeed – if at all – for a short moment. When you let it free it will strive to somehow adjust to the surrounding flux, with a need to temporarily synchronize with what is closest at any given moment. This synchronization can be just another way to look at Spinoza's aspiration for encounters for enhanced power. The mechanisms work in the same manner for the field of concepts as they do for things and bodies.

Kelp forms communities we would call forests³⁷. Living space for some. A resource for others. A sublime landscape for the romantic diver, who goes hunting or exploring the ruins of the subsea. An economic interest is implied in all of them.

What would it be like to go for a walk in these forests, in the same manner as Simon Faithful walked over the bottom of the Adriatic Sea in 2011³⁸? It looks more like a desert where he walks. Like the barrens caused by the grazing of sea urchins³⁹ in the seventies all the way up to the north along the coast. It's still a puzzle what happened. The cause could have been a growing lack of natural predators. Or they were just really strong. Or temperatures were low and good (for them). Higher temperature means more crabs which eat more sea urchins. Fewer sea urchins means a renewal of the grazed forests, which means more hiding ground for fish, which means more fishery. Which means more money.

Loss of this ground is a concern in regions where kelp is harvested by trawls⁴⁰. It is only allowed in areas where kelp is abundant, and following clear restrictions and rules for a harvest cycle that allows regrowth. To secure this, the Norwegian Institute for Marine Research monitors the seabed, with drop cameras from a boat. Somebody then sits for hours in front of a screen to count and identify all the passing creatures. However, there are still disputes if harvest should stop or if it can be extended without doing harm to the fishing communities of birds and humans. The North and West of Norway have for hundreds of years depended on economies of the sea, so it's a recurring debate about who owns it. The fact that the processing factory has been under American ownership since the nineties probably doesn't make it easier, but it reflects a widespread economic structure.



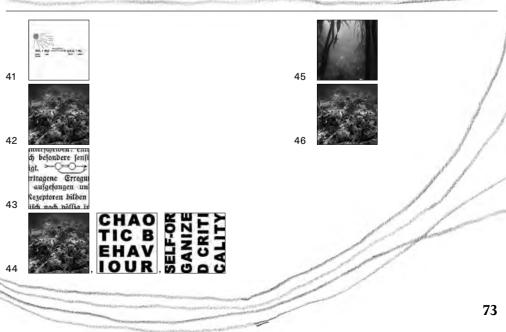


Where forests disappear, less CO_2 is absorbed and transferred into oxygen⁴¹. Too much loss might mean growing acidification of the sea. However, where large kelp is harvested, juvenile kelp is still left and grows quicker then – and by that transforms more CO_2 into biomass and oxygen. Does quicker growth mean enhanced transfer of CO_2 ? The grazed forests in the North⁴² haven't recovered yet after almost fifty years – even if they are back in some areas. One would think that urchins would starve to death in these barrens, as a result of a self-regulating feedback loop⁴³. Obviously, it doesn't always follow this logic⁴⁴.

The national carbon balance could be much better with fully developed forests everywhere they should be. All this potentially absorbed CO₂ could be taken into the Norwegian carbon account, which then would look better despite oil drilling. Would it work like that? What happens to absorbed carbon when the leaves are eater? Is it disintegrated? **It's not just gone. It moves somewhere else.** What becomes of kelp leaves when they are detached from their forest community at 15m depth and go down to 400m, to 1000m or more? Carbon goes in cycles. Small-scale cycles in the ocean, and large-scale cycles, which include the atmosphere and fossil carbon of the oil.

But when kelp is taken out of the sea to be processed into something that would enclose CO_2 for a longer time? Where does the absorbed carbon go in the industrial processes that follow the harvest? A wooden table at least can prolong the storage of carbon for about hundred years, compared to the piece of wood burnt in a fire. The handmade table only releases the CO_2 of the breathing of the one who makes it.

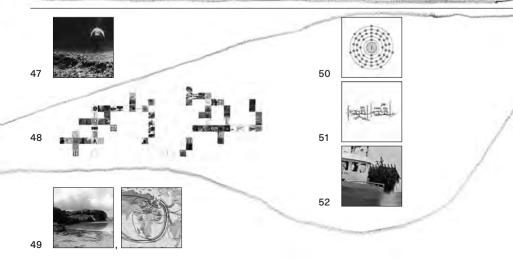
I'm interested in the forest⁴⁵. And the lack of it⁴⁶. Perhaps more in the forest. As a type of mythical landscape. As something kind of familiar and still extremely alien to humans. We can't live there in our current state of evolution. There is no way to just hang out with kelp on an equal level.



The figure's movement across the seabed – in the image of Simon Faithful's performance⁴⁷ – conjures up the image of a disinterested walk through a landscape belonging to the period of Romanticism when we developed an emotionally loaded view at nature at a time when we started to understand that we had power to destroy it.⁴⁸ However, we pretend to be disinterested. It is rather nature that is completely disinterested in us. The figure doesn't seem to contemplate it, but just walks through it (rather concentrating on his breath and on his steps).

Paintings of the period of Romanticism would picture man as a small figure off centre, at the margin of a tremendous panoramic view of a vast landscape. In Kitty Kielland's painting from 1879 Romanticism blends with Social Realism⁴⁹. She had an eye as well for the efforts of the Norwegian fisher-farmer in the county of Rogaland, where he would collect kelp from the shore after a storm. He might have collected it for drying and burning to salt ash used to lower the melting point of silica in the production of glass in England. But this was a custom applied a century before Kitty Kielland painted. Later they burned it for iodine⁵⁰ for a while. The fires were bad for fishing, as the smell of salty smoke would keep fish away from the shore, and clouds of smoke hid landmarks for navigation of the boats. The fisher-farmers didn't do it for a very long time anyway. The simple reason is that something else was discovered which fulfilled the same purpose in a much cheaper way – hard to believe as kelp was for free at the shore, just as it is today. Perhaps the weather wasn't stormy enough to secure a regular delivery.

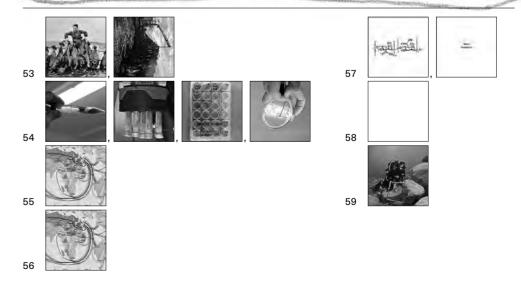
It is no longer the desire for salt ash, but alginic acid⁵¹, which drives the trawling⁵². This way of harvesting as it has been done since the sixties seems kind of obsolete in its concreteness. **We see what is done. Quite simple.** As long as we can watch it from our position on the coast. It fits the traditional concept of the harvest of natural resources, which prevail in abundance. Something grows, is picked, cut up, ground up and processed to serve a useful purpose in the economy of human life. From what is left after



the wild harvest, it grows anew, and multiplies. The equipment used for the harvest of kelp works similarly to the tool for picking blue berries – just on a different scale. The fisher-farmer only collected what he found, because he couldn't reach down. The techniques and tools have developed since. However, the wild harvest hasn't been the only option for the last 10 000 years when we look to agriculture. Nature gets trimmed to adapt to technology. Agri-culture is followed by aqua-culture⁵³. **The terrestrial territory isn't sufficient any longer. Cultivation implies a forced evolution**⁵⁴ and the concept of making something grow better, larger and stronger – more effectively and efficiently than before. In larger quantities. To do that in the sea was a bit delayed, but the field is extending and holds a lot of potential for a global future⁵⁵.

The original painting of Kitty Kielland has a different format from what you see here⁵⁶; it has a horizontal one – as all of these paintings would have for the panoramic view to grasp the abundance of the land. Or the sea. However, to achieve understanding it helps to put things in systems, which makes them comparable. The formula of alginic acid⁵⁷ is just another image, another visualisation, and another descriptive system for a representation of nature. The number of square kilometres and tons of biomass stand in for a very specific stretch of landscape as well. Both images show a different approach to that of Kitty Kielland's painting. So, I thought I could apply the square⁵⁸ to all of my images to better understand what they are and compare them, after having collected them for my work. The square is a format that is very convenient as it can be turned in any direction without confusing any up and down – as long as the content doesn't. Squares are easier to handle than rectangles. A series of them looks simply more orderly.

The square is applied in biological fieldwork, too, so that nobody gets confused about the content found⁵⁹. It is a metal frame, which is thrown or put randomly on an area to count this area's content. These areas never have a direction, not even the north-south



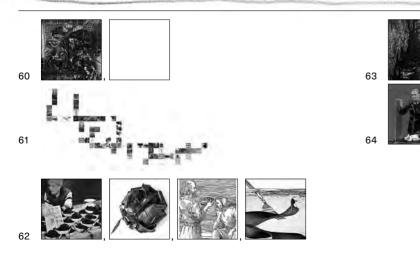
direction of the map, which would suggest an idea of up and down. They always refer merely to each other. Confusion would be without a frame – in science as in art. A limitless space is impossible to count, or difficult to relate to⁶⁰. To count means to give an account, and to keep out what doesn't fit inside. Without frames, narratives would meander endlessly. As they do in life. It's one of the crucial differences between the map and the terrain it represents. Even more so in the sea. Frames are applied in the attempt to grasp something of the complexity of chaotic systems. Frames can be multiplied⁶¹. And again, be counted. Compared. Layered. Displaced. Transposed. Counted. They can be applied as long as they follow a norm – in size, and way of application. But something might escape.

In recent years algae became potential.

After one of the climate panel sessions in 2015 it was suggested growing large areas of algae in the open sea to absorb more CO_2 . Innovation Norway – which is the Norwegian Government's most important instrument for innovation and development of Norwegian enterprises and industry – supports experiments with growing macro algae in aquaculture along the coast. The amount of concessions for growing algae increased from eight in 2014 to forty-seven in 2018.

If more people would eat $algae^{62}$, parts of a potential global food crisis could be solved. And we would reduce CO_2 by eating it. Norway could leave more oil and gas in the ground, because aquaculture would become a growing sector of the economy⁶³. The ecological consequences of fish farming could be counteracted, as algae extract minerals from over-fertilization. Biofuel could be produced without using terrestrial territory important for food production.

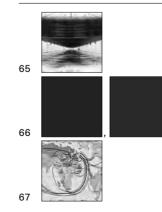
Some questions are not quite solved yet. It's not apparent how to sell the stuff in Norway, where people are not used to eating it. We need priests⁶⁴ to tell them. It's how people learned to eat potatoes in the past. Norway could have sold masses of seaweed to Japan after the meltdown of the nuclear reactor in Fukushima in 2011, when incred-ible amounts of radioactive water spilled into the sea there. Norwegian coast waters

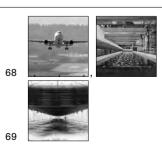


are regarded as being clean, despite of oilrigs and fish farms. However, transport of the ephemeral material that seaweed is still seems difficult, and drying is expensive in the current Norwegian climate. The drying of cod works somehow much better. The conditions might change in the future.

Picking up again on the concept of the romantic painting, the sublime image of nature today would look rather like this⁶⁵ – an image found on the Internet, which shows experiments with the growth of microalgae at the Technical University in Munich. They don't need the sea. They grow on the continent. They don't even need to change the colour from brown to green⁶⁶ to look like nature. They are green and thrive in bioreactors, which look like greenhouses. A slightly different model is set up on the premises of the Mongstad production facility (a natural gas-fired thermal power plant). The system is constructed from tubes, through which water saturated with algae circulates. One can see the greenhouse from the road. It's placed in front of the industrial area from where the CO_2 is obtained, captured from flue gases, to feed the algae. At Mongstad one is chasing proteins for supporting the growth of fish in aquaculture. The aim is to find a substitute for the loads of soya from Brazil⁶⁷, which again had substituted for the flour of ground up wild fish (which we found out is better to eat directly or leave to the bigger fish). The attempts to catch CO₂ have been successful, but not the originally planned deposit of it yet. To use it as fodder for algae, and algae for fish, could be (part of) a solution. In Munich, on the other hand, they managed to get the first plane in the air⁶⁸, fuelled with bio-kerosene, in June 2016. They are looking for high oil content in algae. They found some species, which they first nourish to let them grow, until they suddenly stop feeding them. The stressed algae produce oil droplets to avoid starving to death. These droplets can be transformed into fuel for planes. If it would be more common in the future to fly on algae, we all could finally relax, lie back in our seats, enjoy the flight and feel better without changing our travel habits – as long as we can stand the ethical problem of starving algae.

And what does the aforementioned image of the experimental site in Munich tell us when analysed in its formal and content aspects?⁶⁹ Nature has become abstract, technology is the concrete, and man is small but nevertheless the centre of the universe.





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Sabine Popp is a visual artist, living and working in Bergen, and a research fellow at the Art Academy – Department of Contemporary Art at the University of Bergen (UiB). She gained her MA degree from the former Bergen Academy for Art and Design in 2001, after having completed her studies there, at the University of Barcelona and at the Glasgow School of Arts. She has mainly based her practice on long-term and repeated residencies and site-specific, temporary projects, following her interest for life in the High North and human beings' engagement with their physical surroundings, researching areas of potential conflicts arising from different visions and perspectives in communities of transformation.

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The Ambivalence of Oil Aesthetics

GUNHILD VATN

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ABSTRACT

This article discusses how historical, linguistic and visual representations of the Norwegian oil industry create an aesthetic expression of optimistic enthusiasm related to Norwegian oil extraction. With a more complex contemporary reading, this topic also provokes a more dystopic and negatively charged image. This ambiguity expresses an ideological dilemma representative of our time. Documentary photographs from the construction of Norway's first oil drilling platform *Ocean Viking*, which was built at Aker Mechanical shipyard right in front of the Oslo City Hall 1966–67, is essential to this topic. These documentary photographs represent an ideological manifestation of Norway as an oil nation. The potential of these images has been developed in an artistic research project, to evoke emotions and create reflection on ethical dilemmas related to our identity as an oil nation.

KEYWORDS: artistic research, political art, porcelain, commemorative plate, oil industry, ideology, hegemony



Figure 1. Gunhild Vatn, "Ocean Viking", Detail. Porcelain plates, exhibited at Trøndelag Center of Contemporary Art, Trondheim, Norway, 2019. Photo: Susann Jamtøy @

Introduction

The two porcelain plates "Ocean Viking" (Figure 1) is from an art project where I have used historical images of the first Norwegian oil drilling platform as a motif. This is part of an art installation shown in a solo exhibition at Trøndelag Center of Contemporary Art in Trondheim, Norway, 2019. This art project is based on a political and socially critical viewpoint. To illustrate the ideological significance of the photographs of Ocean Viking, it is essential to understand the historical context, as well as how the shipyard industry and the construction of the first oil platforms made an impact on the city and the fiord areas around Oslo. This article discusses whether these images of the platform are positively charged symbols, and examples of the Norwegian national identity that also express industrial aesthetics and an optimism for the future. Furthermore, this article discusses how visual and linguistic representations of the Norwegian oil industry can be compared to other national symbols and the Norwegian cultural heritage, such as, for example, old wooden churches and Viking ships, and thus point to the platform's ideological significance. This is seen in connection with some of the political dilemmas that oil production on the Norwegian continental shelf entails.

To elaborate on the ideological significance of the images, they will be discussed in relation to selected chapters from Sturken and Cartwright's book "An introduction to Visual Culture" (Sturken & Cartwright, 2009). Their extensive and insightful research on art and visual culture is relevant to an understanding of how we view images as meaningful in our everyday lives, and will be useful in seeking a deeper meaning of images in various contexts. Will today's knowledge about the fossil industry's consequences for the environment and climate change give these images a more ambiguous reading, associated with negative and dystopic prospects? In connection with my artistic research project, it is also necessary to describe the tradition of memorial plates in porcelain and how this tradition has occurred, and how it reinforces or alters the reading of the images presented in this article. Artistic representations of the oil platform can affect and highlight ethical dilemmas related to Norway's identity as an oil nation, and this will be furthered explained in this article.

Oslo's Industrial Environment in Piperviken

Norway's first oil platform was built in the center of Oslo, right in front of the City Hall at the Aker Mechanical shipyard, which is often referred to as Akers Mek. The shipyard was a significant part of the industrial environment in Oslo and was a landmark in the Oslofjord, in an area called Piperviken. This area was originally a working-class district, with extremely poor and unplanned housing. Due to industry and economic growth, this area has a completely different expression today (Norsk teknisk museum). The shipyard is now closed and it has been converted into the modern districts of Aker Brygge and Tjuvholmen, which are popular tourist and recreation areas, with distinct post-industrial cityscapes. The area appears as a symbolically charged cityscape where modern architecture, art museums, shopping and business is united with historical buildings like the manufacturing hall from Akers Mek. (Bjerkesett & Aspen, 2015). Akers Mek. has historical significance as one of the largest and most important shipyards in Norway. The manufacturing hall from Akers Mek. (Figure 2) is preserved as a symbol of the industrial heritage which this area represents (Larsen & Berg, 2009).

Aker Mechanical shipyard's archive from 1841–1982 has become a part of Norway's documentary heritage which is the Norwegian part of UNESCO's Memory of the World register (The Arts Council). This illustrates what kind of historical and cultural value this area has.



Figure 2. Building the drilling platform Ocean Viking in front of Oslo City Hall, in the center of Oslo. Built for Philips Petroleum at Aker Mek. Photo: Norwegian Technical Museum, March 16, 1967 ©

The Oil - a Boost for the Shipyard Industry

The shipping industry crisis in 1957 led to hard times and fierce competition for the shipyards (Lange, 1989, s. 110). During the same period, severe overfishing led to a recession in the Norwegian fishing industry, and there was a great need for new jobs. The search for oil on the Norwegian continental shelf created a new industry that led to new assignments for the shipyards. In 1965, the contract for the construction of the first Norwegian oil drilling platform Ocean Viking was signed, and this occurred at a favorable time for Akers Mek. (Lange, 1989, s. 117). From this platform one of the biggest oil fields at sea ever discovered, the Ekofisk field, was found in 1969 (Gjerland, 2016).

Wealth and Environment – an Ethical Dilemma

The oil industry has played a crucial role in Norwegian industrial development and growing wealth, since the discovery of the Ekofisk oil field in 1969. Norway accounts for approximately two percent of the world's total demand for crude oil and is the

third greatest exporter of natural gas in the world (Norsk petroleum). The Government Pension Fund Global, also known as the Oil Fund, which is owned by the Norwegian state, has a market value of approximately 8 990 billion Norwegian Kroner (Norges bank; as of April 12, 2019). The discovery of oil in the North Sea has, to a great extent, contributed to making Norway a welfare society, and Norwegian oil production has until now had relatively broad support in the population. However, Norwegian oil production evokes several ethical dilemmas. The conflict of interests between oil production and fishing resources, particularly in vulnerable sea areas in the north, is a topic that has caused political disagreement for decades. There have also been several serious accidents, which raise questions regarding whether safety is being taken care of, especially after the Bravo platform blowout in 1977 and the Alexander Kielland accident in 1980 where 123 people died (Hveem, 2016).



Figure 3. "The wrecked *Alexander L. Kielland* platform". Photo: April 11, 1984. Alfred Aase/Stavanger city archive ©

Another ethical dilemma is the fossil industry's high carbon footprint and the impact it will have on climate change on Earth. Norway emits about 8.4 tons of CO_2 per capita, which is about twice as high as CO_2 emissions per capita (4.8 tons) worldwide (Klimavakten; global carbon budget). Knowledge of how CO_2 emissions from the oil industry affect the climate has been known for a long time. Benjamin Franta, who is a doctoral candidate at Stanford University, has written several articles where his research focuses on the history of climate science and politics. The article Early oil industry knowledge of CO_2 and global warming documents his research which shows that the oil industry in the 1950s was already aware of how fossil energy sources were leading to an increase in CO_2 levels in the atmosphere, and how this would possibly have devastating consequences for the climate. In a report to the oil companies from 1965 Franc Ikard, former president of the American petroleum institute, wrote:

"There is still time to save the world's people from the catastrophic consequences of pollution, but time is running out" (Franta, 2018). Franta also claims that oil companies like Exxon Mobile and Shell in the 1980s carried out internal assessments about the consequences of the carbon dioxide released by fossil fuels and forecast the impact on the planets climate.

"Shell's assessment foresaw a one-meter sea-level rise and noted that warming could also fuel disintegration of the West Antarctic Ice Sheet, resulting in a worldwide rise in sea level of "five to six meters." That would be enough to inundate entire low-lying countries."

Shell's analysts also warned of the "disappearance of specific ecosystems or habitat destruction". The oil companies knew, but yet they chose not to expose their knowledge to the public, and these reports were confidential, until they were leaked in 2015 (Franta, 2018; The Guardian).

The Oil Platform as a Cultural Symbol

The oil platform Ocean Viking might have had a strong impact on the viewers from the center of Oslo in 1966 when it first appeared. To get the full picture of the oil platform's potential as a visual and cultural symbol, I have studied Marita Sturken and Lisa Cartwright's book Practices of Looking, an Introduction to Visual Culture. Sturken is a Professor at the Department of Media, Culture, and Communication at New York University, and Cartwright is a Professor at the University of California San Diego, in Visual Arts, Communication and Science Studies. They are both well known for their research on visual culture, and this book provides a comprehensive overview of how we relate to different practices of looking in our everyday lives, which is relevant for my studies of the oil platform as a cultural symbol.

In chapter 2 "Viewers make meaning" (Sturken & Cartwright, 2009, pp. 49–89) the image is defined as an Ideological subject, and the impact of the image is discussed in relation to the role of the viewer. Sturken and Cartwright use Karl Marx, Louis Althusser and Antonio Gramsci in their analysis of the image as an expression of an ideology. The viewer's social point of view, and relation to the image will affect the way it is read. The time and context in which an image is displayed is therefore of great importance.

Much of the way ideologies are understood today derives from formulations in Karl Marx's theories. According to Marx, the dominant social classes and those who own the means of production, can also control the ideology conveyed in society. According to Sturken and Cartwright (2009, p. 69), Karl Marx's thoughts about ideology can be interpreted as a *false consciousness* that was spread among the masses by the political and economic power elite. His theories of *false consciousness* are criticized for being too simple, and for having too much focus on class thinking. Nevertheless, Marx's thoughts have relevance to the subject of this article and will be discussed further in connection with ideological representations of the oil industry.

An alternative to Marx's thoughts was developed in the 1960s by Marxist philosopher Louis Althusser. He argues that understanding an ideology as a false consciousness is too narrow. He understands ideology more as a set of ideas and thoughts that unconsciously shape us from our social conditions such as economics and affiliations. When we belong to a society our ideology is developed, Althusser argues, and states that our ideological point of view derives from where we are born, or asked to find our place. Althusser's alternative understanding of the concept of ideology is essential for understanding visual culture because it emphasizes the importance of presence in the social, economic and cultural life of society (referred to in Sturken & Cartwright, 2009, pp. 69–70). This is relevant according to the oil platform's impact on the viewer.

The Italian Marxist Antonio Gramsci introduced the concept of hegemony in a theory in the 1920s to help us understand how the dominant ideology and all kinds of resistance to it are formed in a society. Gramsci describes this as hegemony and counter-hegemony, where resistance against the dominant ideology can be fronted by political movements or subversive cultural elements. Cultural hegemony is not wielded by a particular social class, and negotiation between the different classes will lead to cultural development on the basis of opinions, laws and social relations. Therefore, a ruling class or state will have to use cultural institutions and ideological influence to maintain their cultural hegemony, formed as values, policies and actions. Gramsci's thinking about ideology and visual culture had a great influence in the late 1900s (referred to in Sturken & Cartwright, 2009, pp. 70–71). The oil platform as a cultural symbol, and as used in my work of art will be discussed in relation to Gramsci's ideas about cultural hegemony and counter-hegemony.

Sturken & Cartwright's definition of the image as an *Ideological subject* means that we can interpret visual media and images as expressions of a particular ideology. The potential of images as cultural symbols arises in a complex interaction between various factors such as, for example, the one who creates the image, the one who sees the image, and the social context in which the image is presented (ibid., p. 72). Visual and linguistic representations of the Norwegian oil industry presented in this article will be further discussed in relation to this.

Reproducible Images in a Political Context

In chapter five, Visual technologies, image reproduction and the copy, Sturken and Cartwright analyze the meaning of reproducible images in the context of Walter Benjamin's essay "The Work of Art in the Age of Mechanical Reproduction" from 1936. Benjamin argued that reproducible images would challenge artworks' elevated status, where uniqueness and authenticity created the basis of the work's value. He believed that reproducible images could have a greater prevalence in the population and thus might act as a democratizing force. Through better access to art, and also due to mass-produced images used politically, reproducible images would reach out to larger parts of the population (Sturken & Cartwright, 2009, p. 195).

On the basis of Benjamin's ideas, Sturken and Cartwright illustrate how reproducible images have been used in different political contexts. In combination with text, mass produced images have also been widely used in both propaganda and advertising, both of which can be distributed and circulated to many places at the same time, and thus reach a much larger audience. These are methods we recognize from, for example, the Nazi propaganda before and during World War II (Sturken & Cartwright, 2009, p. 199). The use of reproducible images in a political context will be further discussed in this article.

Linguistic Representations of Norwegian Oil Industry as an Ideological Influence

The use of memorial names and other linguistic representations might influence the way we perceive different phenomena in our society. Norwegian national symbols have been used by the Norwegian oil industry, which is often referred to as the Norwegian oil fairytale. Likewise many of the Norwegian oilfields are named after popular fairytale figures like Kvitebjørn (Polarbear) and Snøhvit (Snow White). An example is the Norwegian Oil Industry Association's Jubilee Book (Nebber, 2009), with a foreword by Jens Stoltenberg, who was Norway's prime minister at that time. The name of the book is "We found we found, Norway celebrates 40 years as an oil nation". In Norwegian this title has a clear reference to one of Norway's most famous fairytales, and the fairytale figure Askeladden. National symbols from Northern mythology, Saga literature and Viking culture have also been frequently used; Oil fields are named for instance, Oseberg, Gullfaks, Snorre, etc. The first Norwegian oil platform was named Ocean Viking (Figure 5).

After 2012, the practice of names for oil fields changed. From then on the Ministry of Petroleum and Energy named the oil fields based on recommendations from an advisory group. From then on oil fields were to be named after famous people like Edvard Grieg, Åsa Hansteen and Johan Sverdrup. Journalist and historian Karsten Alnæs was part of this recommendation group, and, in a chronicle (Alnæs, 2012; Aftenposten), the mandate for naming Norwegian oil fields was explained as such:

"All nominal proposals for new, independent developments must primarily be rooted in the Norwegian constitutional parliament in the years after 1814, for example, places or events with a significant symbolic meaning. The name proposals should highlight individuals who have contributed to the development of Norwegian democracy."

The new names will, among other things, signal the emergence of democracy and link the oil fields to terms such as human rights, humanism and compassion (Alnæs, 2012). The Norwegian Language Council opposed the fact that the Ministry of Petroleum and Energy should name new oil fields after famous persons. In news coverage (on July 7, 2011, Technical Weekly), the Language Council stated the following:

"The Language Council wishes to advise against introducing memorial names as a new naming category for oil field names."

In a letter to the Ministry of Petroleum and Energy, senior adviser Marit Hovdenak in the Language Council wrote that this practice might be unfortunate, and could lead to politically motivated names of the oil fields (Helgesen, 2011). Gramsci's ideas about cultural hegemony as a form of ideological influence in creating support for certain values or actions (Sturken & Cartwright, 2009, pp. 69–70), can be compared to the Norwegian state and the oil companies when they name oil fields. The oil platform Ocean Viking can be associated to our identity as an adventurous and courageous nation with roots back to the Vikings, while the recent name policy points to unifying ideals of democracy and human rights.



Figure 4. Ocean Viking, being towed in front of Hovedøya, Oslofjorden. Built for Philips Petroleum by Akers Mek. Oslo. Photo: 1967. Photographer unknown. DigitaltMuseum ©

Reading Images as Ideological Symbols

Images will always be influenced by the time and context in which they are viewed. One can imagine that the discovery of Norwegian oil and the construction of the oil platform at Akers Mek. at the end of the 1960s, led to optimism related to new jobs. As the picture of Ocean Viking in front of Hovedøya (Figure 4) shows, the platform is quite spectacular in the fjord scenery. This naturally attracted great attention, which the image clearly expresses with curious viewers along the seaside. At the time the picture was taken, the industrial activities and the construction of the oil platforms at Akers Mek. probably would be seen as positively charged symbols associated with industrial optimism and future prosperity. The images of the first platform with the first flame at the Ekofisk field might have had the same impact (see more images in color in the album part at the end of the book, pp. 194–195). Ocean Viking reminds us of Norwegians' sovereignty and dominance over the sea – new industries built on proud traditions from the Vikings who conquered the seas. These pictures have a completely different and more positive impact than, for example, the picture of the wrecked Alexander Kielland platform (Figure 3). The Marxist philosopher Althusser believed that one's political or social affiliation will shape your ideological point of view (Sturken & Cartwright, 2009, pp. 69–70), and this might therefore affect the way these images are understood. Various visual representations of the oil industry naturally might appeal to many different social groups in the population also in our days, as these images still might be associated with a prosperous future. This applies to both the financial world and the oil industry, as well as among the working class who depend on secure jobs. On the other hand, there is a growing environmental movement, representing another ideological point of view that relates the oil industry to climate change. This group most likely will perceive these images as dystopic rather than prosperous. Images from the oil industry might therefore have a different meaning depending on one's social, political or ideological affiliation.



Figure 5. Ocean Viking at the Ekofisk-field, 1969. Photo: Connoco/Norsk oljemuseum ©

False Consciousness and Cultural Hegemony

Our knowledge about the consequences of fossil energy might also affect the way we read these pictures. Despite the fact that oil companies were already aware of oil extraction's impact on nature and the climate in the 1950s, this was not communicated to the population at large (Franta, 2018). To shed light on the way we read these images, Marx's understanding of ideology as a kind of false consciousness is quite interesting (Sturken & Cartwright, 2009, p. 69). One might argue that the positive reading of images from the oil industry is based on a false perception of reality about oil extraction's impact on nature and the climate. Today, the consequences of fossil energy are generally known, and this is communicated by reputable research

institutions such as, for example, the UN Intergovernmental Panel on Climate Change (IPCC). This might change these images' ideological meaning, and affect the way these images are read today.

Despite the fact that most people today are aware of the consequences of oil extraction, we might nevertheless perceive these images in different ways. The visual representations of the oil industry can be studied as an example of this in our times. As history has shown, visual culture can be very effective in creating an ideology that supports certain political values or interests. The profile images on oil companies' websites etc. are often quite spectacular. There are many images of oil constructions in the sunset, or with a smooth ocean glittering in the sun. Just like the example above from the Johan Sverdrup Field (Figure 6), posted on the front page of the Norwegian oil company Equinor's web site. But also pictures of oil platforms in stormy weather and rough sea might provide positive associations; reminding us of how the oil companies' have conquered the mighty oceans with new technology. These images might serve as an example of where visual culture is being used to create an ideological point of view that supports their company's interests and values. This can be compared to Gramsci's description of a cultural hegemony (Sturken & Cartwright, 2009, pp. 70–71).



Figure 6. The Johan Sverdrup Oil Field in the North Sea: Equinor FrontPage. Photo: Bo B. Randulf / Roar Lindefjeld / Equinor ASA

The images from the Johan Sverdrup Oil Field, as well as the nostalgic images of Ocean Viking at Akers Mek. shipyard represent a kind of industry aesthetics that can provide positive associations, and serve as ideological symbols of prosperity and beauty. This I will define as Oil Aesthetics. These issues have affected my artistic research and will be further explained in this article.

Transfare-ware and Political Motives

As a part of my artistic development process, the tradition of porcelain plates is relevant. The import of porcelain to Europe from China started during the Ming dy-nasty (1368–1644). The exclusive Chinese porcelain (often mentioned as China-ware) with cobalt-blue decorations was admired for its quality, as Europeans had, as yet,

failed to make their own porcelain. The Europeans tried to imitate the Chinese porcelain, and developed their own pattern with the classic blue and white colored patterns often called blue-and-white. The motifs were often exotic, inspired by Chinese landscape motifs, river landscape, figures and pagodas. In the beginning of the 18th century the Europeans finally managed to create their own porcelain which became highly regarded and very expensive. The blue-and-white patterns is notably described as the embodiment of exoticism (Valle, 2015, pp. 26–27). Towards the end of the 18th century, a new technique for transferring prints from engraved copper plates to ceramics was invented. The transfer technique led to serial production which made porcelain products more accessible to a larger market and thus increasing their popularity (Bull, 2015, p. 39). Historically, this technique has also been used as a form of political activism, or as a response to special events or issues. The political message could also be more subtle with landscape patterns that could serve as an expression of a national identity (ibid., pp. 43–44). The fascination of this tradition has appealed to many ceramists. The use of transfer pictures and decals has become a widely used expression in contemporary ceramics, and is today considered a separate genre.



One example from this genre is the contemporary artist Paul Scott who uses this technique in his works. Scott's works are based on antique ready-mades with historical Willow patterns that are manipulated and combined with depictions relevant to our time. New patterns are superimposed on top of the old like a double exposure, in a way that bring new interpretations to the original work (Bull, 2015, pp. 34–49).

Figure 7. "Scott's Cumbrian Blue(s) After the By-Pass (tower)". In-glaze decal collage on Spode Tower plate c. 1930, Paul Scott 2012 ©

Commemorative Plates in Scandinavia

The tradition of commemorative plates in Scandinavia first appeared in Denmark. The Royal Copenhagen Porcelain factory released its first series in 1888. The Porsgrund Porcelain factory in Norway also gradually began to produce such plates and produced many commemorative plates in porcelain related to the dissolution of the union between the kingdoms of Norway and Sweden in 1905 and the coronation of the new Royal couple in 1906. The decor of the commemorative plates was often cobalt blue underglaze paintings, produced in limited editions. The plates were often published with current motifs, like the royal family, or memorable events of national importance. But also local motifs such as wooden churches or ships were common. These plates were decorative, but not like the willow pattern with exotic river land-

scapes and pagodas. They were not too expensive, and often had a short text or the

date to explain the event (Figure 8). This kind of porcelain plates appealed to collectors because they were national, and they could be grouped and dated (Polak, 1980, pp. 49–51). Such plates were also sometimes used for marketing purposes.



Figure 8. "DS Vesteraalen" Commemorative plate in blue and white porcelain. A combined passenger and freight ship. Built at Akers Mek. in Oslo. Photo: MIST, The Museums in Sverresborg, Trondheim ©

Artistic Research Project

The art project in this article is based on historical photos of the oil platform Ocean Viking. Through my research I have tried to create artistic representations of these photos, that might highlight ethical dilemmas related to our identity as an oil nation. These works have been shown at several exhibitions, the photos in this article are from a solo exhibition at Trøndelag Center of Contemporary Art in Trondheim, Norway, 2019.



Figure 9. Gunhild Vatn. Ocean Viking, 9 porcelain plates, Trøndelag Center of Contemporary Art, Trondheim, 2019. Photo: Susann Jamtøy ©

Commemorative Plates Used as a Social Critic

I am a ceramist, and a sculptor, and I mostly create porcelain objects combined with various materials to create different expressions. My artwork often comes from an interest in political dilemmas, and in this particular project I chose to use the commemorative plate as a social critique. I have used a transfer technique with decal images. As mentioned earlier this technique is considered a genre in the ceramic field, used by many artists, who create contemporary expressions on porcelain plates. My work also belongs to this specific genre, transferring images with a political message into porcelain plates. I have chosen brand new, neutral porcelain plates as a background for my motifs. I wanted to create a slightly different expression with a reference to the

Scandinavian commemorative plates, where exotic pagodas with impulses from the East were replaced by motifs of national, local or historical events.

In this art project, the photos of the oil platform are transferred to porcelain plates, but not in the traditional blue-and-white: I have transferred my motifs with the authentic colors from the original photo. There are no decorative and ornamental elements on these plates, in order to create an authentic image and thus emphasize the documentary aspect. Ocean Viking found oil in the North Sea in 1969, and the porcelain plates are meant to visualize these historical and documentary images, to commemorate our national history and identity: 50 years of Norwegian oil production.

In Memory of a Journey

The porcelain plates highlight the history of Norway's first oil platform Ocean Viking being built right in front of the iconic Oslo City Hall from 1966 to 1967. Then the platform was towed through the Oslofjord, and finally reached the North Sea, where the first symbolic flame confirmed the huge Ekofisk oil field in 1969. This documentary visualization of the platform becomes a symbol of Norway's journey towards becoming an oil nation (Figure 9). Similar to many of the original commemorative plates, these plates also have an inscription with the platform's name and the year the picture is taken, to emphasize the documentary expression. My intention is to enhance the significance of the motif as a cultural and national symbol of the Norwegian oil industry.

The Ideological Hegemony of Oil

In this art work I also want to express a more dystopic image of the oil industry, as a contrast to industrial optimism and oil aesthetics. Our knowledge about oil extraction's impact on the environment might affect the way we look upon these images. The public debate related to the consequences of oil extraction and Norway's role as an oil nation is slowly changing.

This debate reflects complex political and philosophical dilemmas where Norway's welfare is put up against the environmental consequences for future generations. The conflict in these matters is to some extent between generations rather than between political parties. Youth politicians are in favor of a far more restrictive oil policy than the parties in which they belong (Ullstein, 2019).

The movement Fridaysforfuture (#FridaysForFuture) founded by the 16 year old Greta Thunberg is an example of a huge generation conflict. The linguistic and visual representations of the oil industry to which this article refers, is representative of an ideological hegemony that has dominated our culture for decades. And the growing environmental movement with the youth's rebellion represents what Gramsci describes as a contra hegemony (Sturken & Cartwright, 2009, pp. 70–71). The conflict between the two different ideological perspectives will influence the way we perceive the images that are used on the porcelain plates. The nostalgic archive photo (Figure 4), with the old men in coats and hats, point out a gap between generations.

One could say that the old men represent the ideological hegemony wanting to preserve our country's privileges as a prosperous oil nation, while the young rebels are fighting to change this policy on behalf of the planet and their own future. The order of the plates in the exhibition underlines this aspect of the dilemma. We read from left to right, and the first images on the left are the nostalgic black and white images of the platform, representing our proud industrial history in the past, while the colored images to the right is pointing forward, reminding us of the huge problems we have to deal with as a result of climate change. The colored image with the black smoke (Figure 5) represent the dystopia, reminding us of the consequences of this industrial so called fairytale.

The Significance of Context and Exposure

To enhance the contrast between industrial optimism and dystopia in the "Ocean Viking" series, I chose to exhibit the porcelain plates in an installation together with two other artworks. (See color images in the album part at the end of the book, pp. 194–195)

"Propaganda" is an installation with replicas of old advertising and propaganda posters. The posters have different origins, but in one way or another they are connected to oil, and they are aimed at the viewer as a consumer. In many of the posters, the car is used as a symbol of prosperity and happiness. Replicas of old Norwegian sardine labels are also included in the installation as a reference to the conflict between the fishery resources and the oil industry which is relevant in the Norwegian debate. I have chosen these posters to point out how the oil companies and various states have used mass-produced images with linguistic and visual means to glorify the oil industry, to emphasize the oil industry's ideological hegemony. As described by Walter Benjamin, reproducible images can be widely distributed in the population, and this has been used both by government and oil companies to support their point of view (Sturken & Cartwright, 2009, p. 195). Perhaps this artwork will also reflect on the boundaries between political art and propaganda. By integrating the porcelain plates into the poster installation, I hope to emphasize the ambiguous expression of the platform images in the work "Ocean Viking".

"The Dance Around the Golden Calf"

From art history, we know that ecclesiastical motifs have been widely used as an expression of ethical and philosophical issues. I have chosen to use the title "The Dance around the Golden Calf" which often represents the desire and worship of material wealth. In this sculpture I created a small porcelain bull, as a representation for the golden calf. (See color images in the album part at the end of the book, pp. 194–195)

The bull is referred to in many religious writings as sacred or divine, and in artistic representations, the bull's strength and power is often emphasized. However, with its golden horns and glory, this porcelain bull has a reference to the biblical golden

calf, which provides room for different interpretations. The little porcelain bull is exhibited on a steel and cement base in a rough industrial expression, to create a reference to the platform that was built at Aker's Mek. The Golden Calf is enthroned above and blesses the oil platform in the work "Ocean Viking". By choosing the golden calf/bull as a symbol, I want to materialize the complex political and ethical dilemmas where Norway's prosperity and welfare is put up against the environmental consequences for future generations.

Concluding Remarks - the Ambivalence of Oil Esthetics

In the "Ocean Viking" artwork, the oil platform is perpetuated and elevated on commemorative porcelain plates. At first glance these images might be seen as a tribute to a memorable Norwegian industrial adventure, 50 years after Norway found the first oil on the Norwegian continental shelf. The images represent both nostalgia and a kind of industrial aesthetics, a testimony to Norwegian economic growth and welfare. But exhibited in this context, and at these times, they might also be seen as a dystopian testimony pointing out the environmental consequences of this activity. The ambivalent and ambiguous understanding of these images is what I will define as the ambivalence of oil esthetics.

The time and context in which the images of the oil platform are exhibited, as well as the viewer's ideological point of view will affect the interpretation of these images. The commemorative porcelain plate that has traditionally exposed events of national importance, are now used to expose a motif that represents an ideological conflict in the population. During the past three years, while working on this project, the ideological hegemony concerning these ethical dilemmas has changed. The youth movement for action for climate change, has grown rapidly over the last months, and the recent EU election shows that the green parties have increasing support. Despite this, and despite what we know about the oil industry's impact on climate change, the Norwegian government still supports further extraction of oil in Norway. In the "Ocean Viking" installation, together with the work "Propaganda" and "The Dance around the Golden Calf", I hope to have visualized this conflict between the existing hegemony and the counter-hegemony that has emerged.

The ambivalence of oil esthetics that these images represent is highlighted in this exhibition to create a contrast between future optimism and dystopia. My aim is to create an ambiguity that contributes to different interpretations of this work, and question the ideological hegemony that anchors our prosperity and happiness to the continued extraction of oil in the North Sea.

Author's Biography

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Be Extended: Oslo

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ABSTRACT

This article will explore how sculptural objects can be created and developed in a meeting between artists and the audience. In this way the objects can not only be perceived as an extension of a bodily presence or the experience of the audience and artists, but also as a meeting point in which the sculptures can extend further the actual meeting point between the artists and audiences. Thus, the meeting point almost vanishes and ends up as a socially present sculpture where the sculpture's intentions is created so the audience will meet in, on and around the sculptures. Felix Guattari (2000) highlights how social ecosophy will change the way we live, as the world is changing. Social sculptures such as Be Extended: Oslo will create meeting points where new dialogues and understanding can arise. Be Extended is a project that constantly seeks new experiences, new directions and new dialogues.

KEYWORDS: sculpture, dialogues, presence, Be Extended, Oslo



Figure 1. Be Extended: Oslo (2019). Photo: Line Lyngstadaas

At a Sidewalk Cafe in Barcelona

We were sitting at a table in a sidewalk cafe in Barcelona with a glass, talking about how we were finishing the week with students from Oslo Methropolitan University at the Joseph Beuys Schmerzraum (1983) at the Fundación Bancaria La Caixa. To enter an installation such as Schmerzraum which consists of a small dense room where all the surfaces are covered with copper, with only one light bulb in the ceiling, makes you feel vulnerable and thoughtful. The work is in intense contrast to the week we were about to finish, full of energetic and interested students. Schmerzraum was thus the start of this evening's art discussion for the authors of this article.

The previous week's experiences of Barcelona's streets and art experiences were like particles that stuck to the body. We breathed and thought Barcelona that evening, nurturing the art discussion that ran around and back and forth between us. The two of us, Anneke and I, have the kind of brains that accept and understand each other's jumps, laps and detours. Our way of talking together is our method of developing ideas and thoughts that lead to joint art projects. At that evening's end, we arrived at thoughts that would be the start of the *Be Extended* project. Since we had just accepted an invitation to participate in the Oslofjord Ecologies artist/researcher network, the conversation drifted towards themes of consumption during the evening, and how we consume nature.

Plastic Toys for Children

In Norway children are involuntary consumers from birth. A report made by Fremtiden I våre hender shows that there were 13018 tonnes of toys imported to Norway in 2010, and according to grønnhverdag.no, Norwegian children have an average of 500 toys each (as of February 3, 2020). It seems that we have a collective understanding that children have special needs in the form of objects that will make it easier for us as parents to handle the child. Toys are produced for the child in all the situations the child is in, so the child is stimulated all the time, and does not get bored in any situation. It seems to be important that the child has something to look at all the time.

The idea that the child should be stimulated by custom-made objects for children, also called toys, fills our space – a space where we could imagine that children might be listening to voices, sounds, their own voices, their own sounds, or perhaps seeing shadows, colours, a piece of duvet or their own foot. But we fill it up with rattling sounds and plastic figures creating colours. For kids love red, green, yellow and blue!

The toy stores are filled with pre-made toys that are so well-thought-out that children quickly finish playing with them. So, where has the old worn textile rag doll that has been mended and sewn gone, the kind that children played with for generations? These worn-out doll torsos earned their place in the child's life, sharing experiences rather than representing status or consumption. Our *Be* Extended project was inspired by the idea of the worn-out doll torso. These thoughts around toys for children, we would bring into the eco-philosophical debate, where ecology is largely about the being of the subjects in the world and the interaction that arises and can occur in order for the world to survive the predation we humans have been responsible for (Næss, 1995).

In the Eco-philosophical Debate

The anthropocentric perspective places man in the centre of the world. Man is superior, at the top of the hierarchy, and everything else on earth exists for man. This can be traced back to Aristotle and Aquinas. The alternative is a holistic idea that man is part of the diversity on earth, with the idea that all living and non-living objects have an intrinsic value. We associate our identity and existence with the environment around us, and it is in the meeting and coexistence with our surround-ings that the self takes shape. According to Næss (1995), "I" is dependent on an environment to exist. Our consumption of nature causes diversity to disappear and thus our ability to develop our own identity deteriorates. This also means that the individual needs a group. Through ecosophy, Felix Guattari (2000) highlights how the social will change, as the world is changing. He claims this will require us to establish close relationships in order to be able to stand in these changes. And that the relationships through the subjectivity that drives the world today will create new compositions of close relationships.

"It will be a question of literally reconstructing the 'group-being' modalities, not only through 'communicative' interventions but through existential mutation driven by the motors of subjectivities" (ibid, 2000, p. 24).

In the following, we will look at how the Be Extended social sculpture project came into existence, from the initial experiments with textile forms and children to the concrete sculpture located in Kontraskjæret, between the City Hall and Oslofjord.

Be Extended

That night at a sidewalk cafe in Barcelona, we asked ourselves a question: Can an object with an open form and no given utility function provide a wider area of application and a larger space for exploration and play? Still at the sidewalk cafe in Barcelona we decided to create objects that did not have a given utility, to see if these could provide a more flexible space for individual meetings between children and objects. We decided to explore both the shape and the weight of the objects and to develop the objects further in collaboration with children. And we decided to start with a neutral surface, to let the objects stand out clearly as form. We wanted to see if it was possible to create objects that, in interaction with children, could be perceived as an extension of the child's bodily experiences and explorations, and thus the project got its name Be Extended.

In the studio we sewed and designed simple shaped forms. We were inspired by the torso of a doll, sewn and patched after play over the years and created simple shapes

in different sizes. For some of the shapes we saw that the child could enter, almost dress up in the meeting with the object. Other objects we made were so heavy that the child probably would have to haul the object to move it; to counter this, we also made objects that were so small and light that they could be thrown high up into the air.

We Explore Meetings

The first meetings between the objects and children took place at Tona's studio in Grünerløkka in Oslo. We used Go-Pro cameras that the children could wear, so we afterwards would be able watch the videos to study how they were interacting with the objects. At the first meeting we invited six children that we already knew, aged from 6 months to six years.

In this meeting, it looked as if the two youngest children were concerned with small details, such as the surface texture of the fabric as they rubbed their hands repeatedly over the fabric, or when they poked the small feathers that come off the objects filled with feathers with a finger. The older children wore the objects on their body; they were dragging them around, wrapping themselves in the objects, crawling, crowing, wearing out all the power and energy they could use in the meeting with the objects. Then they could find a relaxing position in, under or over one or more objects.

After this experience, we decided to make small tags, similar to those on washcloths, and hoops that could make it easier for the youngest children to drag the objects along with them. We focused on different structures on the surface materials, and we worked to bring out clear stitches and visible repairs. Everything was still produced in white, so that the objects stood out as form. We also decided to create several larger objects with multiple cavities, making them easier to crawl through and to wear on the body. Larger objects could give the older children the same sensation as the smaller children would experience when the objects became so large they were impossible to move, and then it became possible to creep under, over or even through the object.

The next meeting between the audience and Be Extended was again in Tona's studio. During that weekend Oslo Open was arranged all over Oslo so the studio in Grünerløkka was open for visits. During these two short days, over 100 people visited the studio. For the occasion of Oslo Open, we stripped the studio and painted all the walls, floors and ceilings completely white. When the audience arrived, they found Be Extended objects lying strewn across the floor. Nothing was fixed. That weekend we did not use Go-Pro cameras, as we found it difficult to protect people's faces and provide anonymity with so many people present in the room at the same time. Instead we took still photos with blurred faces. After asking participants for their approval, we ended up taking almost 500 stills. We observed that the parents were as involved in the objects as their children, so we realized through Oslo Open that Be Extended does not have an age limit.

Meeting With Objects



The next meeting between Be Extended and an audience took place at Galleri RAM (2017) in Kongensgate in Oslo. The moment we saw the gallery room, we understood that we had the possibility to create really large objects for explorations. We made the largest object a full 16 meters long, a continuous object that could extend through the entire room.

Figure 2. Be Extended at Galleri Ram (2016). Photo: Be Extended

There were objects hung from the ceiling that had different weights, and there were larger objects available on the floor throughout the room. On one of the walls we hung all the small objects on pegs, so that the audience could take the objects from the wall. The objects hung like a puzzle at the wall. In addition to the installation of the objects, we created two video works, and an audio file where a seven-year-old child explained what the different objects looked like to her, or how they could be used in her opinion

Already during the Oslo Open, we had decided that we wanted music for the installation. We invited Ylva Gulpinar, who composes music based on the Norwegian fiddle, to write a piece for the work. We encouraged Ylva to compose a work based on her personal meeting with the objects, rather than giving her guidelines. After the composer had crawled around in the objects, rolled around, let herself be buried in the objects, she came to the idea of the composition *Be Extended*. We also invited the dancer Beata Ilden to interact with the installation for 20 minutes each day during the exhibition period. She was free to interact with the objects, the music, the room and time in the way that suited her that specific day.

Throughout the exhibition period at Galleri RAM 30 groups of children from kindergartens visited and met the installation, accompanied by staff. At the weekends there was a large audience of people of all ages. Through all these meetings between bodies, thoughts and objects, it became clear that Be Extended has an openness that invited all of the audience to somehow interact with the objects and the room. People lay down on the objects, crawled under, and placed them around their bodies. Thus, the objects were transformed into extensions of the audience, and in this extension the objects became the link between the visitors. The objects became social sculptures. People talked to each other through eyes, movements, objects and words while they were interacting with the objects. The artist Joseph Beuys' ideas about the social sculpture (1974) also include volatile material such as thought, speech and discussion, all of which became apparent in Be Extended's meeting between the audience at Gallery RAM (2017).

The Social Sculpture

Joseph Beuys worked with both performance art as well as sculpture and installations. He had clear ideas about how art and society should work together. He challenged the traditional view of art, both on what art was and how it could work through his performances, installations and sculptures. When it comes to where the experience begins, Beuys (Beuys & Volker, 2010) says – "sculpture" starts in our mind, that the idea of the thing, or the experience, is the beginning of creating the impression that the object or artefact will create: "The creative, forming process begins in our thought process: Thinking = Sculpture" (2010, p. 1). The expectation and knowledge that something will happen starts a process that helps shape our notions of something that lies ahead.

Expectation is something that takes us away from the present and the present situation and helps prepare us for something to come. There are the feelings of leaving something to move on to, or over to something else. This is what Beuys sees as parallel processes. It is, as he says, an object-based work on the one hand and the discussion or reflection process on the other (Beuys &Volker, 2010). The formative process already starts in the preparation, in the thought, in our imagination, and this helps to create the idea of the work. And also the work itself will change its character as it becomes concrete. Some works will end up as physical artefacts while others will be final forms that can only work in our consciousness.

What is important to Beuys is that a sculpture in itself is not unchangeable. It changes character also in terms of how you relate to it, whether you see, whether you touch, whether you walk around it, whether you climb in it, as children often do if given the opportunity. There is an awareness that the sculpture is changing, that it can cease being only a physical object, that it can become part of the aesthetic experience as well as part of the consciousness with which we experience a work. He divides the process of experiencing / living a work into phases: The thought form, shapes our performances in the next phase where the conversation and reflection shapes and develops our ideas of the actual meeting with the object, which is already in shape through our imagination and our conversations and the conceptualization of our imagination.



Figure 3. Be Extended (2017). Photo: Be Extended

These phases shape what Beuys calls social sculpture, which is how we shape and create the world we live in, with the awareness that the work and the experience of the work is a process that moves us and never lets us stop being influenced and affected throughout our lives.

Anthropologist Thomas J. Csordas (1993) writes in his article Somatic Modes of Attention "... Culturally elaborated on ways of attending to and with one's body in surroundings that include the embodied presence of others" (1993, p. 138). In a meeting with a social sculpture where there are room for many bodies at the same time, it will not only deal with the individual's encounter with the object itself, it will at the same time be a meeting with other bodies. As sentient and experienced subjects, we do not live in isolation in our bodies, but we share what Csordas (1993) calls an intersubjective meeting with others. We can see that Be Extended is no longer just a work, or an installation of objects, but it becomes a room inhabited by a participating audience. This includes all the objects, music, video works and the people that are present at all times.

Be Extended is, at this point, a mobile installation, as the audience moves around the objects and reorganizes the room by moving the objects. To an extent the work activates the viewer's presence; presence that Gumbrecht (2004) calls epiphany is a prerequisite for meetings between art and the viewer, where the public's attention is shifted, and when acknowledged it makes sense and creates meaning, and the audience becomes part of the work.

At RAM, we saw that there were not only layered meetings for the individual, but layered meetings between all those who are present in the gallery, both objects and audience. Based on this experience, we decided to continue working with *Be Extended* as a social sculpture. The next time Be Extended was exhibited, the installation met the audience at the The Annual Craft Exhibition, 2016, where we exhibited three large composite objects as a social sculpture. Be Extended was the only work in the exhibition that enabled physical contact.

From a Sidewalk Cafe in Barcelona, With a View to Oslofjord

In the summer of 2019, one of Be Extended's large objects (12 meters and 22 tons) was cast in white concrete. It now lies at the bottom of the Kontraskjæret in Oslo, down towards the sea, in front of the City Hall in Oslo.



Figure 4. Be Extended: Oslo (2019). Photo: Line Lyngstadaas

It lies like a glacier that never melts, in a material that gives it a cold surface; it will not yield to the weight of the bodies of people. The object has a look of a soft object that can be moved around, but it lies firmly. A meeting with this object gives people other opportunities for interaction than the soft, removable objects we created earlier in this project, and it might give the audience some other meetings and political insights, both in the face of the work and the site, which also includes the City Hall Building.

Rancier (2012) argues that art has an actual connection to society, and therefore cannot be viewed without a context. He considers that the power of art is based on how it interferes with our perception of the world. Since art is sensuous and part of the sensory world, it will make sense through the disruptions that art often makes to already established truths. According to Rancier, the relationships that art creates must, therefore, be regarded as political, and this by virtue of the fact that art opens up new opportunities to see. Art is fundamentally political because it involves a new distribution and division of the sensual. For Ranciere, politics is about transforming our senses into a community, and these common senses will have an impact on how we communicate within that community.

The work is not only an effect of the spectator's movements, but also an effect of the work itself (Jalving, 2011); not only in meeting with the shape or the material, but also with the situation. While our experiences of artwork, according to art historian Camilla Jalving (2011) are private experiences, it will act performativity as a lens, becoming a social, cultural and historical matter, since our senses as artists do not relate to the work itself, but to the situation in which the work appears and how the audience meets, reads, understands and gives meaning in the face of the social sculpture.

As the object is moved out of the gallery and into a public space, the object acquires other meanings, connotations and new ways of interaction. One will be able to lie on the object to look at Oslofjord, without knowing that the idea for this work came at a warm afternoon in a sidewalk cafe in Barcelona. And that exactly this shape and form has occurred through all the meetings Be Extended has had with the audience on the road to becoming this unshakable object. All of these meeting points have accidentally brought *Be* Extended here to the Kontraskjæret where it will lie under the trees, overlooking the Oslofjord.

http://beextended.no

Author Biographies

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Gupinar, T., Hernes, L., & Vist, T. (2019). Estetisk læring i et kunstpedagogisk perspektiv – en artikkel om kunstneriske møter. In L. Hernes, T. Vist & N. Winger. *Blikk for barn*. Bergen: Fagbokforlaget.

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Anneke von der Fehr has been educated at the National Academy of Fine Arts, Oslo (SKA), and the National School of Arts and Crafts (SHKS). Her works include sculpture / video / installation, and the works are often contextual and site-specific. She works individually, but also in collaboration with others, and exhibits nationally and internationally. Anneke von der Fehr is an associate professor in visual arts at Oslo Metropolitan University. Membership: NBK, NBF. From 2015, she has collaborated with Tona Gulpinar on the *Be Extended* art project.

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Eutopia – Where the Heart Matters

NINA VESTBY

ABSTRACT

This article tells the story of a research project that developed a visual method, SPLOT, which was created into the art project *Eutopia*. Young people, sometimes from difficult social circumstances, answered the question "Where do you feel good?" by embroidery. From this experience, a language around Thirdspace knowledge and transcultural youngster identity is tried out. Thirdspace is understood as a space of extraordinary openness and reflection. Through embroidery as material and narrative stitches as the method I seek to explore the possibilities that lie within the connection between ones' stories and identity. Between the concrete and abstract of thinking and doing. Between intuition and sensuous knowledge visualized with thread and a needle. In the meeting between individuals and communities. And in the space and place of a transdisciplinary research project.

KEYWORDS: embroidery, youngsters, transcultural, interdisciplinary and Thirdspace knowledge.

"We do not learn from experience, we learn from reflecting on experience." John Dewey

I Knew Better

In 1971 my mother married Don. They met at a dancing club in Oslo. He was 20 years old, from Oklahoma and very tall. He did as many other African-Americans did: got a ticket out of poverty by joining the army. This brought him to Oslo where he met my mom. They fell in love and risked the comfortable by entering the life of an interracial marriage. I was then about to turn 5 years old and experienced inclusion and love in the black community and ignorant questioning from my own. To me the uncomfortable became part of my every day life. I was in between. My life became transcultural. The uncomfortable and unknown became the place and space where I knew how to navigate. A researcher once asked me how I coped with how my life was being questioned: I answered: I had been out in the world. I had the arts as a room for reflection. I knew in-between. I knew love. I knew better.

Since 2014 I have been a part of the Amplifier Co-op, a transdisciplinary collective working on the project Alternative Space: Youth Stories of the Future. This is a research project that started out in Tøyen, the area where I live in the inner City of Oslo. When I grew up it was a working class area and when immigration started this is where they settled. It still has this mix but also as other cities it is changing. We collect and map out how the youngsters in the area move and live their lives in this urban space. Most of the youngsters are transcultural in the sense that they are either born in Norway of immigrant parents or have come here at a young age, mainly from Somalia, Pakistan, Iraq, Iran and Afghanistan.

"Alternative Spaces: Youth Stories of the Future is an action research project for and with youth (12–21 years old) living in cities. The project is led by researchers from the Work Research Institute AFI at Oslo Metropolitan University and landscape architect Jenny Osuldsen from NMBU (Norwegian University of Life Sciences) and architectural firm Snøhetta. It is a joint effort of anthropologists, artists and architects to experiment within a disciplinary framework. The aim is to increase youth's well-being and enhance the participation and influence of youth on policy making in cities." (Tolstad, Hagen & Andersen, 2017)

My role in the beginning of the project was to be a part of the SPLOT workshops. After the first workshops I started thinking we could take the conversations further by adding work with the hands, and creativity, and embroidery especially, a craft that is close to my heart and artistic doing. In a previous article I wrote about my own practice with embroidery connected to narratives and identity (Vestby, 2015). I was curious if some of the same phenomena I have experienced in the activity was more than just my personal view or whether it had some universal elements to it such as room for reflection, dialogue and silence, and if the act of embroidery could have a calming effect on the body.

One of our most central innovations is what we refer to as a SPLOT analysis (Space, People, Learning, Observation, Track), a tool inspired by initial interactions with youth. The SPLOT is a visual method developed by the leader of the project, anthropologist Aina Landsverk Hagen. We use this as a visual tool to get information from the participants on how and where they move around in the city. Through simple techniques of drawing, the tool allows participants to explore their sense of (be)longing to multiple places and also provides the link between personal feelings and experiences and more structural factors and challenges in society. The youth have become participants in our research through different channels, such as collaborations with local schools and municipal youth programs (Tolstad, Hagen & Andersen, 2017).

The curator, writer and educator Mary Jane Jacob states in the book Art as Social Action (2018) "I am a product of Dewey's pedagogy". So am I. The '70s was a time where we as kids where included into the art space on our own premises and talent. In Norway, it was part of the national thinking on education where arts & culture were key components of the German "bildung" tradition. Scandinavians have their own term for it "danning". My understanding of Dewey and Art as Experience connects to the process of "danning" where Dewey talks about that the learning is not in the person, nor in the subject or material, but in between these cooperative actions. This can be looked upon as an abstract place or space that goes above or further on its own. Also, since the '70s I have been engaging my hands, body and soul into the material of fibers, textile and storytelling. I have made form and it has shaped me and I have shaped it back. Together we have gone in the sense of Dewey, beyond what was already there and into a mode of reflection that stretches the already given.



Figure 1. Ali and his SPLOT at the Intercultural Museum in Oslo 2018. Photo: Nina Vestby

These days I call myself a community artist and a "craftivist". I have taken inspiration from Sara Corbett and the art of gentle protest. "Craftivism as a word and concept may have only been around since 2003 when Betsy Greer came up with it, but craft has been used as a form of activism for years" (Corbett, 2017, p. 8). I am on a mission for the crafts in general and embroidery in the form of narrative stitches especially. In this time of high globalization I believe in building communities from the grassroots. I believe embroidery can create a space for dialogue. In my transcultural life, arts, craft and community is a life saver, a space for reflection, dialogue, love and compassion. As an educator I connect my work not only to John Dewey but also find support and inspiration from bell hooks (Gloria Jean Watkins), the African-American educator, cultural critic and feminist, and her views on democratic education. In her book Teaching Community – A Pedagogy of Hope she says "Certainly as democratic educators we have to work to find the ways to teach and share knowledge in a manner that does not reinforce existing structures of domination (those of race, gender, class and religious hierarchies)" (hooks, 2003, p. 45). I also connect her thoughts to the SPLOT method because it can open up for dialogue and acknowledgement of things that are close to the heart.

"We have to get back to "we". It's important to get back to "we" not just "I"." Questlove

In 2014 the journey of EUTOPIA started, the word derives from Greek and refers to the place of well-being. This is a nomadic embroidery and transcultural community art project. Each individual embroidered SPLOT is sewn on a bigger canvas: Where I becomes we. The method and drawing of the SPLOT is the starting point. I see it as a visual method for people to think and talk about their "feel good places and spaces". Participants draw a heart and around that heart write or draw the things, places, spaces, people and dreams where they feel and think "this is good!", then they finish it all by making a line around it, this line embraces it all. This usually makes a sort of cloudy organic form. I love this method because it is both complex and easy. It is organic and has a lack of hierarchy where there is no right answer. This visual method also makes sense with the youngsters that move and breathe in between. And as educators we are obliged to give them tools that resonate with them. EUTOPIA is also a place and space for different stories and perspectives not for a given truth. This is what Irit Rogoff from Goldsmiths also emphasizes when she describes visual culture as a relational geography: "There are no set relations between things; there are no hierarchies (the philosophical is not more important than creative practices; politics do not override everything...), so there is a sense that says "these are the components" but you don't set out to look just for one perspective." (Vives & Fernández Pan, 2015)

When the participants have made their personal SPLOT they transfer that shape only, no words, maybe the heart if they like, onto a 10x10 centimeter embroidery canvas. When the method of SPLOT is combined with the method of embroidery as a place for self expression and artistic practice, it is merged and transformed from the concrete towards an abstract form. This space that rises in between these two



Figure 2. Workshop with youngsters at PBX Harlem House, NYC 2019. Photo: Nina Vestby

activities, it is a space of its own – Thirdspace. This can also be seen in the light of Irit Rogoff when she talks about art as a production of knowledge. As this project moves into different arenas, the concept of knowledge changes: from the school via youth houses to the youngsters' own community connected to their daily life. This draws a line to bell hooks who says "Knowledge rooted in experience shapes what we value and as a consequence how we know what we know as well as how we use what we know." Since this project is artistic I also connect it to Baumgarten and his Aesthetics, and how the Danish Philosopher Søren Kjørup drew inspiration from his sensuous knowledge "as another way of knowing", arguing that we "have to consider the relationship between aesthetic practice and aesthetic insight". This can give us an understanding of knowledge as something to explore and not given. That it is organic and has a plasticity that moves in between different spaces. As Irit Rogoff puts it "knowledge does rather than is" (Rogoff, 2010).



Figure 3. Malik with his embroidery. Workshop at Arendal Kulturhus 2019. Photo: Nina Vestby

"We tell ourselves stories in order to live." Joan Didion

It is quiet, the only sound I can hear is the sound of bodies concentrating, arms and hands moving. A little group of youngsters, moving in a repetitive and almost synchronic way. For a second it looks like it is choreographed. Heads tilting towards a 10x10 centimeter piece of embroidery canvas. Fingers holding the needle creating

their personal pattern. Calm bodies letting themselves go stitch by stitch into the art of creating. I do not know what is going on inside of them. I hope that they are making sense of their lives through the craft of their hands, body and soul in meeting with textile, color and fiber the way I do. Ten minutes ago the room was noisy with around ten 15 year olds of lived lives. Rucksacks, bags, earplugs, smartphones, liveliness, lots of energy, and a bit of "what on earth are we doing here" attitude. I get that a lot. All the resistance from 10 minutes earlier is washed away as if by a tornado. The transformation of bodies minding themselves in the gentle act of stitching. A single needle, a bright colored embroidery floss and a small piece of canvas is all it takes. One by one they create their personal piece of craft that becomes a community of socially engaged artwork. Often this opens up a gentle space for sharing. We share stories, worries, passions, love, longing, belonging and acts of solidarity, and through this learn and acquire knowledge about human conditions. In the following, I will share some of the interactions from the meetings with a few of the youngsters in these workshops. I think of them as some kind of snap shots that captures a glimpse of how those meeting are embodied in me and in my memory. This again has kicked off new questions, wonderings and reflections on some of the phenomena that have caught my attention and curiosity so far on this journey.

LEJLA 19 – OSLO/ALBANIA

"I have put the drawing of my SPLOT on the wall next to my bed, so it is the first thing I see in the morning, it helps me get up and remind me that life is good. I am going to be okay because I have written what makes me feel good. And I tell myself that it is there for me."

I am sitting next to Lejla at the end of the long table surrounded by professionals working in the field of arts and pedagogics. We are hosting a seminar "When the heart matters" at the Intercultural Museum in Oslo where I am the "Artist of the Month". It's like I'm an extra in her play and this is her stage. I am witnessing the immediate reactions she is getting back from what she just said. It's like they all took a common breath and I can tell by their faces and body language the emotional effect she has on them. They are obviously moved by this young girl, with the talent of self reflection and putting it into words. The contrast of her body covered by the textile of her chador and giving them this naked and raw testimony has an impact on us. This is her narrative.

EVA 14 – ARENDAL

I sit myself down next to this 14 year old girl with long hair; they all have long hair these days; I am a '80s girl and it was a time with a lot of short hair like my heroines Grace Jones and Annie Lennox. She looks a lot like the other girls around her I've just talked about their SPLOTS with, all filled with summer, sun, sea, horses, Netflix and more summer, sun and sea. This is a small town in the south of Norway by the coast, it is late February, dirty snow everywhere and we are all longing for the summer life. She too has written this but also she has made this beautiful drawing of an old fashion analog single-lens reflex camera, so I ask her about the camera and what kind of pictures does she like to take. "I don't. It is after my father. He just died and left this to me and mom." We have a dialog about losing our loved ones; she about her father and me about my friend Marianne. We talk about grief and how it sets in the body and the feeling of being left alone. Longing. Meeting our beloved in our dreams. And faith. God. No God. The feeling of being beside of yourself and so completely in yourself. Death. Life. Sun. Summer. Sea. Love. Netflix. I start humming Sometimes It Snows In April by Prince.

NOOR 9 & INGRID 71 – OSLO/IRAQ/OSLO

Noor sat next to me for almost two straight hours. With a proud posture and small hands leading the needle up and down with a clear goal. Now and again she would ask me quietly to give her needle some fresh thread. While she is sitting on my left side there is an older lady Ingrid sitting across from us. Around us a bunch of youngsters with high energy. I ask Noor why she made a fish instead of a heart in her SPLOT. She looks at Ingrid and me and answers quietly: This is my waiting fish. I ask: What is a waiting fish? She replies: "If my father gets protection and asylum in Norway I am promised a real fish in a bowl. But until that happens this is my waiting fish." She gives me her finished waiting fish, says good bye to Ingrid and me then runs off to play with the other children.

Sarah 15 – OSLO/SOMALIA

We are sitting on a path in between the end of the fence outside the schoolyard and the football ground in a park in Tøyen. Aina and I are having a pop-up workshop with some 15 year olds that are a part of a summer youth work program for what they call troubled youngsters, whatever that means. We are a bit nervous. It is in the very start of the project. Up until now we have been in the schools with teachers preparing it all for us to come and conduct the workshops. Here, we have to actually pitch the project to the youngsters and hope we do it well enough so they just don't walk away, which they can. They seem a bit demotivated and for good reasons – everything has been decided over their heads.

We start in the usual way by drawing the SPLOT. One of the girls, Sarah, asks carefully if I know anyone from Somalia. I answer that my daughter has a friend who is Norwegian-Somali. "OH!" she replies and says she had never heard that term before. When I ask what she replies when people ask, and they do ask where she is from. She said something like: "When I'm here I say I'm Somali, when I'm in Somalia I say I'm Norwegian." I asked how that made her feel and she said divided. She smiled and kept on stitching, she liked that double term. She seemed relieved.

CARLOS & RAFAEL 15 – THE BRONX/DOMINICAN REPUBLIC

I am invited to a school in the Bronx by the former principal Carmen. She has retired and if I understood it correctly, more or less has occupied the back part of the parking lot that faces the two main roads to create a community garden. "We got to give these kids something good!" While standing in this urban garden preparing for the embroidery workshop there is a razzia with police and drug dealers 30 meters



Figure 4. Carlos stitching on his SPLOT Bronx/ NYC 2017. Photo: Nina Vestby

from me. This is these kid's daily life and I'm thinking: What am I doing here? My project must be a joke to them. Here I am, this privileged middle aged white woman from the country Trump talked about as the opposite of the "shit hole country" their people come from. What can I possibly bring of good into their lives. Four lively girls and four reluctant boys approach the table. On the fence dividing the parking space from the community garden I have made a gallery of pictures from my childhood with me, mom and Don, my stepfather, also photos of some of the youngsters from the project. One of the recurring topics throughout the workshops has been about gender; the girls are mostly like "oh I know this" and the boys are standing with arms crossed and a whole lot of resistance. This happens here too. I start talking about the project and showing them the pictures and this one boy with earplugs asks: "Are there black people in Oslo?" I answer yes and tell about my childhood and the youngsters in Tøyen we have had workshops with. He asks a lot of good questions, and I answer my best. This goes on for ten minutes. Then he takes his ear plugs out, winds the cable gently, places it on the end of the table, puts his phone next to it, sits down and he is in.

His name is Carlos. He starts drawing the heart for the SPLOT but suddenly stops and asks me what heart is in Norwegian. I reply HJERTE. He takes the paper he has already written on and folds it into a paper plane and says to me in a poetic manner "I will send my heart all the way to Oslo!" and he sends it up and away into the air in the garden. Then he writes HJERTE on a new piece of paper and makes one of the most extraordinary SPLOTS I have ever seen. He is not only poetic he is innovative and creative too.

When I start walking around them to talk about their SPLOT almost all are written in Spanish. Together we are having a language class and continue our communication about The Bronx and Oslo while stitching. About forty-five minutes later the four girls are done and start taking selfies and hanging with the others in the garden. One and a half hour later Carlos and Rafael stitch their last stitch. Rafael is so proud of his embroidery with meticulous little red stitches. But what has most impact on me, and maybe Carlos himself, is the transformation Carlos went through from the beginning to the end. His smile will be with me forever. I think we have just been a part of and first hand witness to the thinking of John Dewey when he connects art to sharing and bridging the gap. "Works of art are the most intimate and energetic means of aiding individuals to share in the arts of living. Civilization is uncivil because human beings are divided into non-communicating sects, races, classes and cliques." (Dewey, 1934/1980, p. 350)

"A journey is called that because you cannot know what you will discover on the journey, what you will do with what you find, or what you find will do to you." James Baldwin

Still after all these workshops, both my colleagues and I are a stunned that people share intimate, personal and close-to-heart things with us after just being in the same room for about 10 minutes. Aina and her anthropologist crew talks of it as a safe space. I think of it, in a good way, as "naive". That we only ask for the feel-good things. Some of these youngsters are talked about as troubled and at risk, and that might be, whatever that means, but I also see that they need a place to block out difficult things and for a second just be mindful about the good things that enrich their lives. As in the case of Lejla. And that we as grown-ups simply acknowledge them. We are researchers, educators and artists and we are amazed about all these heartfelt meetings we have had through the workshops. We in the team started out thinking it was going to be one workshop, four years later I have SPLOTed and embroidered with over 400 people, the youngest 3 and a half, and the oldest, my mom 73. We have obviously hit some kind of nerve in our own time. After the workshops are done, we in the co-op write field notes and have conversations about the experiences. One of the things we keep saying is: this is magical, as if we are youngsters that don't have a vocabulary for what we are experiencing. What we do know is that we practice workshops that are inclusive. And by using the SPLOT method the youngsters' own stories are the starting point and a bridge for the conversation that takes place. In her book Teaching Community – A Pedagogy of Hope bell hooks connects this to freedom and the students' own activity with "the "magic" that is always present when individuals are active learners" (hooks, 2003, p. 43).

We do have a vocabulary within our own disciplines, but not a common one within the interdisciplinary group yet. That vocabulary gets created while we walk. From my lens this looks a lot like the process of the "danning". But not everything applies, and

my way of seeing it is narrow, as the others in the co-op get narrow minded, rigorous or exacting when you start digging in their discipline. It is like this hybrid way of working creates one place we all have in common and that is in between professions and disciplines. I have been inspired by bell hooks to look to the urban theorist Edward W. Soja and his thinking on Thirdspace where he says: "Thirdspace. It is instead an efficient invitation to enter a space of extraordinary openness, a place of critical exchange where the geographical imagination can be expanded to encompass a multiplicity of perspectives that have heretofore not been considered." (Soja, 1996, p. 5) I think this applies both for us working together in the project but it can also make sense to the participant in the workshops and maybe that is also one of the reasons we experience this as magic. But I also want to add knowledge to this space because that is the basic ingredient. So I am wondering and trying out if we can use "Thirdspace-knowledge" as something in common for the people in the co-op hosting the workshops, but also with the other people that are connected to the project from other fields. Some of them to stand behind a bit baffled about what just happened. And this concept can also be a good tool to use with outsiders when giving a pitch

about this magic we keep talking about. At this moment I have no idea where we are on this journey, but I have the need to try to analyze and describe it in a more tangible way. I am still in a mode of wondering and probably will be for a while longer. I am stitching and making room for my mind to enter a space of reflection. Paulo Freire, in conversation with Myles Horton says: "I had a kind of umbrella, a framework of knowledge, which was not so clear at that point. Beginning with what I learned initially, I discovered lots of possible extensions of knowledge, which where otherwise almost invisible." (Horton, Freire, Bell et al., 1990, p. 171) This also resembles how we could describe the process of Eutopia.

Paulo Freire's notion that knowledge grows from and is a reflection of social experience, provides a connection to how the Eutopia workshops are described by participants. The use of "Thirdspace-knowledge" as a concept of what is created, can open up reflection in our project because it is grounded in being social, it is both these and on many levels; it alters between the concrete and abstract; it is art; it is research, mind, body and soul; there are no correct answers but methods; we don't know what the outcome is yet, but we trust that something will appear.

Everything comes together in Thirdspace: subjectivity and objectivity, the abstract and the concrete, the real and the imagined, the knowable and the unimaginable, the repetitive and the differential, structure and agency, mind and body, consciousness and the unconscious, the disciplined and the transdisciplinary, everyday life and unending story. (Soja, 1996, p. 56)

Stories of Thirdspace-knowledge

In the story of Lejla, who had her SPLOT next to her bed, there are two phenomena that come to light that can be looked upon as Thirdspace-knowledge. Even though there is a gap in age, religion and culture between Lejla and I, we connect, talk and reflect. Our common life saver is to see our narratives linked to our identity in the



Figure 5. Abdul and Fahd stitching on the EUTOPIA canvas. Workshop at the Youth House in Oppsal/Oslo 2019. Photo: Nina Vestby

sense of Ricoeur: "The narrative constructs the identity of the character, what can be called his or her narrative identity, in constructing that of the story told. It is the identity of the story that makes the identity of the character." (Dauenhauer & Pellauer, 2011, 3.4) The other one is the process when Leljla connects with the drawing and embroidering of her SPLOT where the learning experience is not in her alone or in the act of stitching but in these cooperative activities – while sharing and reflecting on this in the community with others in the workshops.

In the story of Eva, the girl who lost her father, the dialogue we had gave me the feeling that an invisible bubble appeared and we entered a new space as if all sound of the others and they themelves sort of got locked out. In this case, there were 20 noisy and active youngsters. But we went into this space of our own talking about deeply existential matters. This was not the first time; it also happened in the story of Noor and Ingrid as well.

In the story of Noor, the girl with the waiting-fish, she connected us to her as if she trusted us. This episode has fascinated me because, even though I am the grown up facilitating the workshops, I am not in control of the life the material opens up, as with Noor. And I do hope it also has to do with the SPLOT and the act of embroidery, which hold the quality of giving trust which takes a leap and makes connection with strangers. Though ten minutes later when she was done she gave me her embroidery to keep and walked away to play with the other children, and

then she just looked like any other kid playing, far away from the tiny second of real life drama that had just taken place.

Others too have sort of done the same as Noor, but they have been much older when opening the door to their personal space. Another thing about Noor that others have also done is that when we ask them draw a heart and make this organic form we get nice surprises like her waiting fish: flourishing green grass, a horse, a meticulous tiny square, a very cool black triangle with breaking waves, the hand of The Black Panther symbol, and the route Shamsad takes from his home to the gym and then later to the Mosque and then back again. Things that matters to them. And maybe this is because the project itself moves in between. Even though we do workshops in the schools or connected to the school but in other spaces, we are not a part of the curriculum; we represent something else and we also point out we do not look for correct answers but their own stories and creativity.

The story of Sarah, the girl who felt divided between Somali and Norwegian, happened early in the project and that was when I really experienced the quality of the SPLOT and how it applies with a transcultural being. The form is organic and not hierarchical. This also makes sense with the thinking of Irit Rogoff that "everything is in relation to one another, so none of these materials are authoritative." Where materials can be translated to country, culture or language. Where being from one place or another is more or less valuable. It is both and, not either/or. This is also when the Thirdspace makes sense; she is not a silo where Norway is placed into one separate tube and Somalia in another, she is more and above. Trans. Like the others. Like me. And it makes me think of multimedia artist Miranda July and the title of her book "No one belongs here more than you".

In the story of Carlos and Rafael, the two boys in the school garden in the Bronx, I hope it was the power of art that took us to the state of open communication that held trust so we could enter a curious dialogue and reflection around each others' lives. Even though we at first seemed so far apart, they gave me insight into their lives, both inside and outside school. The dedication and satisfaction these two young boys showed, as if they where hungry for this space they did not know existed. For Carlos I think that being in a room open to critical and creative thinking appealed to him. Rafael sort of embraced one of the key elements that goes as a red thread through all the embroidery workshops: Silence. The act of embroidery can also provide a slow space and in the prologue of Shannon Jackson Social Works: Performing Art, Supporting Publics there is a passage that refers to Petra Kupper where she looks at the phenomena of the 1840 fashion, walking a turtle instead of a dog. Sometimes I wonder if this is what some of the youngsters might think when they start the embroidery. It's slow and it's not in their place to command, then the thread only gets messy and tangles up. "Meanwhile, the pace of the turtle slows the walker down; the flâneur does not so much walk the animal as he is walked by the animal, a relation that requires a change of internal odometer ... "dialogue of being in space" is created by this change of pace" (Jackson, 2011, p. 5). So, in one way the participants are creating their own Thirdspace-knowledge by being in dialogue and reflection with themselves. By walking the turtle.



Figure 6. Mira, Safi and Hanne. Workshop at the Youth House B7 in Hovseter / Oslo 2019. Photo: Nina Vestby

Going Back to My Routes

When people ask me where I am from I find it hard to answer one specific place and I usually answer "in between". It's also a bit tricky because of my biological father, who I did not connect with before I was 27, even though he lives only an hour's drive away from Oslo. He and his family all live in a small radius around the family house. There is no question of where their roots are and that is also in one way pointed out to me, but I do not feel it that way. I grew up with my mom and Don. And we traveled. I feel a belonging to different places and communities that hold people like me, the inbetweeners. People that move and live in transit. Many of the youngsters I meet resonate with that. They do not talk about roots as if it is one place where they (and all they are) come from. Like me they talk of it in a more abstract manner and this goes right into the heart of what Stuart Hall describes as roots and routes: "Instead of asking what are people's roots, we ought to think about what are their routes, the different points by which they have come to be now, they are, in sense the sum of those differences" (The Journal, 1999).

This sum of those differences I think of as a Thirdspace that appears as described by Sarah. It is an abstract melting pot of something else that we as individuals can fill with what makes sense to us. As if we know something others do not. And I think we do, because we know that the truth is not always given, we inbetweeners get to experience different perspectives. And for many of us we struggle because it can, when you are young, feel like you don't belong and that this ambiguity can be challenging and uncomfortable. I think the rock legend Nick Cave gives hope to this 10 year old boy about belonging and listening to his music: "This secret knowledge you have is a strength that lives only inside certain people. It is a strength that will inspire you to do wondrous things – like write stories, or draw pictures, or build rockets that fly to Mars. It will give you the courage to take on any thing that the world might put in front of you. It's a wild power that can be of untold value to the world. Your name, Ptolemy, is a warrior's name. A boy full of inspiration with a warrior's name! The world is waiting for you. Blow 'em away, kid. Love, Nick" (Cave, 2019)

Acknowledgments

One love and thanks to all you generous youngsters joining the Social Embroidery Community. The Amplifier Co-op. Synne. Mom. Darius.

Author's Note

Since 2018 the project Alternative Spaces has developed into a new research project called "A place to be young" – Methods and framework of innovative participation in the development and establishment of youth places (YHouse). It is founded by The Research Council of Norway led by anthropologist Aina Landsverk Hagen based at OsloMet and AFI – Work Research Institute until 2021.

Author's Biography

Nina Vestby, born in 1966, is a freelance community artist, and educator. She was born in Oslo but belongs in between places and spaces. She holds a MA from OsloMet – Art in Society. Through her "EUTOPIA – where the heart matters" embroidery project she collects transcultural youngsters' feel good places. She is a true believer and campaigner for The Arts as vital to education and society.

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Embodied Sound Archive

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ABSTRACT

What is an embodied sound archive? How does listening create art experiences in the public sphere? This paper introduces the thought that all of our sound and auditory experiences are embedded within us and that they constitute our own personal embodied sound archive. Our memory confines all our auditory experiences and stores the sounds that we experience. This is what builds up our embodied sound archives. Embodied sound archives form randomly through conscious and unconscious listening. Active listening, on the other hand, is a way of listening that actively expands our embodied sound archive. It requires attentiveness of our mind and body to process meaning from our auditory environment meticulously. By introducing the term *embodied sound archive*, this paper investigates if listening can be a conducive method to work with sound art in the public sphere. It furthermore points at ways of incorporating the methodology of radical listening into art in public spaces.

KEYWORDS: embodied sound archive, radical listening, memory, public art, artistic research, public sphere

This paper is an artistic research enquiry into listening as a process and practice. It investigates how listening can be a conducive method to working with sound art in the public sphere and introduces the term of the *embodied sound archive*.

The philosopher and pedagogue John Dewey compared the act of attention to the projection of a beam of light. In many ways what he described can be perceived as a reversed prism. "In attention we focus the mind," he wrote, "the lens takes all the light coming to it, and instead of allowing it to distribute itself evenly concentrates it in a point of great light and heat. So, the mind, instead of diffusing consciousness over all the elements presented to it, brings it all to bear upon some one selected point, which stands out with unusual brilliancy and distinctness." (Dewey, 1887, p. 119)

It is a very intriguing thought that there would be such a thing like a reversed prism for our mind. That by solely paying attention our mind focuses and everything else becomes irrelevant. Meditation certainly works along these lines; also, when we pay attention to someone or something we do tend to gain focus. Concerning listening, however, it quickly becomes evident that the light beam metaphor is too simple. We hear everything, always. At the same time, we perceive various states of flux, in which multiple temporalities and identities are entangled and coexist. It is certainly not enough to merely pay attention. In order to focus our attention on listening we have to find ways of tuning into a specific state of listening. It is also useful to apply a set of questions in order to access a specific state of listening that takes into account the complexities of the public sphere: Who is listening, and to whom? What is heard, retold, and given attention? Clearly listening asks a lot more from us. However, it might be worth to put in the extra effort.

In a time when hearing may be one of the least encouraged of our senses, we find it to be the one that unites us with all beings. Every day hearing frequently occurs in the context of acoustic challenges; in many of our environments we are bombarded by an array of sounds. Through the depths and ways of listening and responding to listening, one becomes conscious of one's everyday auditory environment. The ear, unlike the eye, does not have lids. Therefore, we have learned a form of unconscious, selective listening that enables us to ignore much of the sound around us. We spend much time avoiding the sound of others, and our ears shut down by default. It is, therefore, essential to distinguish between listening and hearing: as two different modes of perception. Hearing is a term often defined as auditory perception; it is used to describe our ability to detect sound frequencies, which we perceive not only with our ears but also with our body. If one is not hearing-impaired, hearing happens by itself, and because we are often not actively paying attention to or waiting for a sound, most hearing is subject to change. Active listening, on the other hand, is something one consciously chooses to do. It requires attentiveness from your mind in order to process meaning from sounds and language.

Active listening has always been a critical artistic practice in one way or another as artists collect field recordings as part of the research process for a new work. This again points to the core of artistic research, that is about being conscious in the process of art-making. Active listening is a way of being in the world, which concerns being present, conscious, and aware. In order to listen, really listen, you have to set aside lifelong training in self-absorption and self-protection.

Every living thing with hearing capabilities houses an embodied sound archive. The realization of this discovery started when I became aware and conscious of the role of sound within my processes in artistic research and art-making in the public sphere. There is a reciprocal relationship between perception and audible experience, in terms of how listening signifies and recalls specific events in relation to our memories. Situated at the intersection of public art and artistic research, this paper presents an appraisal of cognitive and environmental accounts of active listening as a conducive method of working with sound art in the public sphere. Public art has most often been referred to as a visual format. Sound art, on the other hand, is often denied a presence in public spaces because sound artworks are very often perceived as being intrusive or even obstructive. The concept of the embodied sound archive can be used when advocating for the presence of sound art in public spaces, since it requires engagement with, and even encourages, active listening. Furthermore, it enhances our auditory environment through shared listening experiences.

There are many works of art that inform our understanding of active listening in public spaces. Janet Cardiff and Georg Burres Miller's "FOREST (for a thousand years...)" sound installation (2012) at Dokumenta (13) is one interesting example of such a work. As you entered the "FOREST (for a thousand years...)", you became one with the sound installation. The sound space made you sit down amongst other listeners to be able to take in the audio composition emitted from more than thirty

speakers. The experience was profound, as it led the listener to explore the potential of what sound can do in a work of art as a collective experience and an intimate act of listening. It effortlessly unified a group of strangers who were sharing the same experience by the mere act of active listening and it connected everyone with their auditory environment at the same time.

There is potentially a broad audience that may be ready to listen if artists have something meaningful to say about their concerns, even if (or perhaps because) the communication arises from outside the domain of commercial culture. Sound art has a strong potential to communicate and to connect people (and arguably art is communication), especially if it is contextualized in an everyday auditory environment.

Method

The Auditory Environment and Radical Listening

The writer Italo Calvino wrote; "As this wave from memories flows in, the city soaks it up like a sponge and expands. A description of [the city] as it is today should contain all [the city's] past. The city, however, does not tell its past, but contains it like the lines of a hand, written in the corners of the streets, the gratings of the windows, the banisters of the steps, the antennae of the lightning rods, the poles of the bags, every segment marked in turn with scratches, indentations, scrolls." (Calvino, 1974, p. 9) Listening to the city is a way of mapping and understanding ourselves within an environment of human-made sounds. The city is a landscape of acoustic memory. The sounds we encounter every day form our auditory environment. Consequently, the auditory environment (constantly) expands our embodied sound archive. Artists use their auditory environment to challenge and explore their own embodied sound archive by means of listening actively and creating artworks in response to this process. We all share a common desire to engage with the world through sound. For many artists listening then becomes a critical way to re-learn, explore and connect with the embodied sound archives of others, - retold in their stories and/or environments. Listening helps us to open up. It generates situations that share and at the same time emancipate the position between the listener and their auditory environment. The method of radical listening provides especially helpful ethical guidelines for this practice.

Radical listening as a term was first coined by the pedagogue J. L. Kincheloe (2008) to aid both decolonizing and feminist restorative practices and "deconstructing the positioning" of psychology in childhood studies. Informed by Thomas and Kincheloe (2006) and taking a co/autoethnographic approach (Coia & Taylor, 2009), he analysed reflections of enacting radical listening in teaching pedagogy. In doing so, their aim was to dismantle the internal and external noise that limits our understanding of "what is" and to open a dialogue about what it means to be educators.

Radical listening is an imperfect praxis of historicity as the present is always also a reflection of the past and a trajectory toward a possible future. Practicing radical listening is very much like listening to sound projected across an expanse. The echoes that return are reverberations of the original events and they remind us to attempt to improve our listening practice continually over time. According to Kincheloe (Kincheloe, 1999), taking a postformal approach in our work means that we assume that knowledge is situated and partial, and that being attuned to our intuition and embodied forms of knowledge is crucial in developing new forms of awareness about ourselves, others and the world we inhabit. As Kincheloe (Thomas & Kincheloe, 2006) explains, an appropriate metaphor is close enough to the original event or concept in question to be familiar and recognizable, but it is different enough from the object of investigation to encourage new ways of seeing and, consequently, new ways of knowing and being. These differences create what Kincheloe "calls a sonic boom of awareness".

Radicalization in relation to listening practice and awareness involves an increased commitment to the position one has chosen. It is predominantly empathetic as well as critical, humble, communicative, and, therefore, a positive stance.

Radical listening also demands mutual respect, dialogue and understanding. It is a practice that challenges how we see and how we participate in the world.

Artist, writer and researcher Salomé Voegelin goes as far as stating that "focused listening is radical as it makes us 'see' a different world" (Voegelin, 2010, p. 36). Our understanding of what it means to listen is still expanding. Listening radically encompasses much more than sound. It is a language beyond any conventional comprehension. Consequently, re-learning to listen with focus is an extreme test of patience as it asks for intense awareness, demanding that you shut down everything else. Sounds are everywhere, in the here and now, connecting us to past, present and future. Focused listening can be defined as a kind of radical attentiveness.

However, there is a difference between the kinds of sounds. There are sounds when you hear nothing at all, and the kind of silence that comes with actively listening to someone else. That second kind of silence – the kind that involves listening – is a radical act, and it is a simple way in which we can start to break down the systematic barriers around us.

The act of listening is not straightforward. Listening to understand is one thing, but radical listening is an act of self-control. Therefore, Carol Gilligan and Jessica Eddys "Listening Guide" (2017) is a tool in shaping our approach to radical listening both as a method and a methodology, a way of working with a distinctive framework or epistemology. Originally it was presented as a psychological method. It reframes the research process as a process of relationship, guiding both data collection and data analysis. Seen in this light, authentic relationships and responsive listening become integral to the process of discovery, where one becomes more aware of the fact that what is said directly may differ from what is implied.

The Listening Guide opens up the potential ethical challenges by specifying a series of questions to the listener before a session starts:

Four questions about voice and relationships set the parameters of the inquiry:

- 1. Who is speaking and to whom?
- 2. In what body or physical space?
- 3. Telling what stories about which relationships?
- 4. In what societal and cultural frameworks?

These questions break down the boundary between the ones that listen and the ones that are listened to and opens up the space for shared responsibility by giving an insight into the relation between the listener and the storyteller.

One text that is of particular interest on this matter is "Acoustic Communication" by Truax (1984), which explains how sound works positively to create a relationship with an environment. Truax's chapter on listening in his text is confirmative about how listening to sound can be an agent that integrates an artwork with its surroundings as if it had always been there. The World Soundscape Project (WSP) calls these "earwitness accounts" (Truax, 1984, p. 17).

Earwitness

Listening is being a witness. One becomes an earwitness when one listens. Naturally, being an earwitness can also be a collective experience. Accordingly, any collective earwitnessing account forms a collective embodied sound archive within us in our time. Working with participation in the public space gives many opportunities to explore the potential of radical listening. Radical listening also constituted an integral part of my art project: "Høring" (2018) a one-day public hearing on participatory monuments. "Høring" gathered testimonies from witnesses that have had direct experience as participants in the temporary artworks "Peoples House" (Folkets Hus) (2015) at Akershus Kunstsenter, Lillestrøm, and "Kammer" (Chamber) (2017) at the Munch Museum in Oslo. "Høring" took place at Gamle festsal at Domus Academica in Oslo and was presented in Norwegian and simultaneously translated into English to a select audience. The artproject put into practice the principles of radical listening and simultaneously opened up a way of listening together in a large group, forming a shared collective memory.



Figure 1. *Høring* (2018) by Merete Røstad, participatory monument. Photo: Steffen Kørner



Figure 2. *Høring* (2018) by Merete Røstad, participatory monument. Photo: Steffen Kørner



Figure 3. *Kammer* (Chamber, 2017) by Merete Røstad, sound sculpture. Photo: Steffen Aaland We share our stories to keep memories alive, and when we set our stories in situations and places we activate or enrich the listener's embodied sound archive. Thinking about how stories can be retold, we have to reflect on our own experience as a listener and how we can imagine experiences through active listening in the public sphere. Artworks encourage us to share and reflect upon our memories and past experiences. Sharing how we perceive moments in time can be inspiring and deepen our exchange, which, in return, builds relations, empathy, and a greater understanding of our personal and collective identities.

We all remember and memorialise differently, and our interpretations of our memories add to the richness of our culture and transcend our differences. Making art is a powerful way to contextualize memories and express them to others. Through actively listening to another person's stories following the principles of radical listening, those stories become part of our consciousness and our embodied sound archive.

As much as listening is a mental process it equally is a physical one. Consequently, we do not just remember with our minds, we remember with our bodies, too. This notion, that we remember with our bodies too, is at the heart of a psychological theory called "embodied cognition", which explores how the body influences our memory.

The awareness of the importance of listening and memory becomes very striking when one thinks of the role of a sound or the lack thereof in memorials and memory sites. The subtle but still striking use of silence in memorials, dull out the



Figure 4. *Kammer* (Chamber, 2017) by Merete Røstad, sound sculpture. Photo: Steffen Aaland

site's auditory environment. This subtle but directed auditory construction creates a mood of contemplation and active listening. Silence appears frequently in memorials – as a metaphorical absence, a warning against forgetting, or, simply, the only appropriate response. But powerful though these meanings are, they often underplay the ambiguity of silence's signifying power. Urban sound environments and memorial silence creates a parallel symbolic space that the past and the present can inhabit simultaneously. In its unpredictable fluidity, silence becomes a mobile and subversive force, producing an imaginative space that is ambiguous, affective and deeply meaningful.

Silence is never complete, nor is it monolithic; there are many kinds of silence and, as John Cage noted, there is always "something to hear" (Cage, 1961, p. 42). This is important to keep in mind when one focuses one's attention on silence at a memorial site. It is an injunction to think deeper about listening and its importance in relation to remembrance in the public sphere.



Figure 5. The National Memorial for Peace and Justice in Montgomery. Photo: Merete Røstad

A recent visit to The National Memorial for Peace and Justice in Montgomery, Alabama, United States was a very strong listening experience. The memorial's sober architecture heightened the experience of a meaningful site where people gather and reflect on America's history of racial inequality. The memorial at the center of the site is constructed by over 800 steel rectangles, in the size and shape of coffins hanging among and over the visitors as they walk through the site, each pillar representing a county in the United States where a racial terror lynching took place. The names of the lynching victims are engraved on the columns. The construction and materials of the memorial make the visitors aware of every step they take as the sound environment heightens the awareness. In the deep center of the memorial one finds a wall of cascading water.

As one approaches the water it washes away the sound of other visitors' footsteps. The white noise of the water masking and thus drowning any sound present in this space creates a paradoxical silence. It is this silence that brings one's consciousness towards the opening at the end of the corridor. This poignant placement of the water feature encourages the visitor to move on and the white noise of the falling water intensifies and allows the visitor to equally turn inwards towards their own core. This contemplative silence makes room internally so one can realize and face the pain and violence that the memorial represents. The auditory environment creates a vacuum so intense that it makes you feel your own heartbeat. This sound-scape in relation to the site, the memorial and the visitor creates a very powerful memorial site.

Memorials and memory sites like The National Memorial for Peace and Justice are a striking reminder on how places and spaces create a relation between memory and sound.

There are a lot of opportunities for deeper research on the importance of sound within memorials and sites of remembrance and how they affect us as visitors.



Figure 6. The National Memorial for Peace and Justice in Montgomery Photo: Merete Røstad

Field Recording, Becoming Aware of One's Auditory Environment

The preservation of memory is also at the heart of why artists choose to record their surroundings. Documenting auditory environments presents challenges. One has to consider alternative methods of documenting and archiving places and spaces in time. Artists record sounds because they want to recall situations, spaces and places. Sound memory drives us to collect, to record, to create material – information or evidence that serves as an alternative log – and we spend a lot of time and effort to preserve them. For most artists, some of these recordings are strictly personal and are kept as part of the process of the making of works, never to be presented to others. Field recording preserves your time in situ.

In the last decade new practices and increasing awareness of listening positionality have emerged as an answer to critical voices on how to decolonize the practices of field recording. This involves identifying habits of colonial perception and contending colonialism's "earwitness" that renders silent the epistemic foundations of indigenous oral traditions.

One can already find apt examples of how this translates into works of art. The artist Maria Thereza Alves has worked within indigenous communities for decades and is, therefore, a practice of interest to share as an example.

One of her recent artworks could be experienced within the tropical greenhouse at the Botanic Garden in Berlin, Germany. "Ivory mboporã pónhuregua" ("You Will Go Away One Day But I Will Not", 2020) was an immersive spatial sound installation



Figure 7. *Ivory mboporã pónhuregua* (*You Will Go Away One Day But I Will Not*, 2020) by Maria Thereza Alves and Composer Lucrecia Dalt, sound installation. Photo: Merete Røstad by Maria Thereza Alves and Composer Lucrecia Dalt. The installation opened up the greenhouse for the multifarious voices of the rain forest – organic and inorganic, human and non-human, speculative and lived – while also pointing to their silencing and erasure. The audience was encouraged to walk through the tropical greenhouse wearing headphones that track each user's movements to generate individualized binaural sonic experiences. When wandering through the installation one encountered sounds, voices, pulses, and testimonies, ranging from actual field recordings with the Guarani community in Brazil to the imagined and unlocatable.

Experiencing this artwork for an extended amount of time made it obvious that it clearly is possible to open up sound memories to others and thus share our embodied sound archives. Not only does the piece engage the audience to listen actively, it also translates the core principles of radical listening as a method into a tangible sound art experience.

Sound and Memory

Listening takes into consideration aspects of the environment of the listener, the built environment, social spaces etc., as these are stored and remembered and turned into memories at the intersection of sound, space and the body. These memories are biased: we choose to remember familiar sounds and link them to our personal 'sound' archives to store and interconnect information that fits with what we already know and remember. Similarly, the more connections we can make with what we already know, the stronger the sound memory becomes. Unfortunately, this doesn't necessarily mean that we can hold a vast embodied sound archive or that we get better at recalling these sounds as we age. On the contrary. Since we are not really able to replicate most of the sounds that we have heard, and memorized, they simply fade away and we forget them.

Artworks based on sound in the form of music can work as a form of repetitive recognition. This is undoubtedly true for the sound installation "Die Gedanken sind frei" (Thoughts Are Free, 2012) by artist Susan Hiller. Here the audience can actively choose to play songs on a jukebox according to their own interests and memories. Alternatively, they can also listen to other audience members' selections. Her selection of 101 songs from popular culture activates different responses according to the listener's age, background and preferences.

The songs are in many ways a soundtrack of the artist's own embodied sound archive that she shares with the audience. This work, along with others, is inspiring in terms of how artists can share these extended personal embodied sound archives with others.

Through mobilizing sound experiences and embodied memory through observation, embodied sound archives emerge from within our private and public memory and surface. Sharing collective memories and remembrance is what unites and separates us.

Artists, scholars and society at large explore the emotional weight that unites us with the loss of auditory environments in our private and public sphere. By exploring

global phenomena and oral traditions that relate to sounds and loss, one also becomes aware of how artistic research and practice is embedded in our culture and the politics of remembrance.

The monumental performance piece by artist Tyron Simon, "An Occupation of Loss" (2016), presented professional mourners from all around the world. The installation invited the audience in to experience the simultaneously performed lamentations, enacting rituals of grief. In this work Simon showed how sonic mourning can be explored as an intangible authority that manifests in the performers negotiating the boundaries of grief. This work has inspired this research by showing how individuals and communities pass through the unspeakable consequences of loss and how the role of the listener becomes an intimate one, as one emerges transformed. The results of this transformation are unpredictable; the void opened up by auditory experience creating change and an unspoken language of sounds.

In Aleida Assman's book Cultural Memory and Western Civilization: Arts of Memory (Assman, 2011), she states that the contents of "Erinnerungen" (memories) is never consciously learned or reproduced. She writes that remembering is a reconstructive process and that it always starts in the present and is shifted, distorted and reshaped. This gives insights into how the absence of sound within auditory environments leaves us with an unspeakable void that challenges the authenticity of our embodied sound archives. The potential role of listening and loss in relation to our auditory environment is an interesting line of inquiry to explore further.

Conclusion

Some theories suggest that sound memories are stored for slightly more extended periods than visual memories. This tells us something about the fundamental role listening has in our lives. We can imagine that our personal sound archives are the soundtracks of our lives and that they create a narrative for our experiences. Listening as a method in artistic practice and research in the public sphere has the potential to be a shared experience as well as an individual one.

Here is an exercise you can try out right now.

Getting to know your "Embodied Sound Archive, exercise #1" (2019) by Merete Røstad

- 1. Think of a sound environment that makes you feel safe
- 2. What does that sound environment open up in your memory?
- 3. Are you thinking of a single moment or several ones?
- 4. Are you in the company of others?
- 5. Do you hear voices or noises made of natural or human-made sounds?
- 6. How could you share this experience with someone else?
- 7. Close your eyes and listen

Clearly, most answers will be of a personal nature. We do not share most of our embodied sound archive, but still, some sounds and noises have been learned through shared experience, such as universal sounds like thunder, rain, or crying. Other examples could be closely related to where you live and the environment you inhabit. Nevertheless, how we respond to listening experiences emotionally is certainly highly individual. Just half a century ago, listening was a central part of human interaction in the western world. There was collective listening to the radio since, after reading, it was the primary source of information. Certainly, it is a strong way for creating a collective embodied sound archive amongst a significant number of people. As we live, we archive sounds that help us orient ourselves in our everyday life. This is not the memory of intellectual contemplation, which reaches from the present into the past to retrieve from silent moments that which remains abstract. Instead, this memory is the act of perception; it is the body approaching the world through a past that produces the present and hints at a future. There has been a great deal written on memory and listening and how they affect us as part of our daily life. It affects how we move and why we move and how we co-exist with our environment. It also causes changes in our behaviour and emotional spectre. How and where we listen might be a key that unlocks and reveals how complex listening is in relation to our understanding of ourselves and our memory. Our embodied sound archive explores our body as an "interface" for keeping and transforming memory in migratory contexts in the public sphere. Listening is the foundation to a better understanding of each other and a way to relate and adapt to our ever-changing environment.

Therefore, it allows for the creation of intimate moments and binding of personal relationships because listening addresses our very own embodied sound archive while at the same time, expanding it. Consequently, listening holds a vast potential to connect us if we allow it to become an established method for the artists working in the public sphere.

Author's Biography

Dr. Merete Røstad is a visual artist, educator, and curator whose projects are rooted in the examination of public life, collective memory, remembrance, and archives. Røstad completed her doctorate in artistic research with her investigation The Participatory Monument – Remembrance and Forgetting as Art Practice in Public Sphere (2018). Røstad lives and works in Berlin and Oslo and is an Associate Professor in the Art and Public Space master program at the Faculty of Art and Craft at the Oslo National Academy of the Arts in Norway. https://orcid.org/0000-0003-3971-0723

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ABSTRACT

This article reflects upon how eco-social art strategies can be a tool for expanding both methodology and, even more importantly, onto-epistemological positions in qualitative research. Three different examples, rooted in eco-art, are used as empirical material to discuss characteristics that can be productive in a further onto-epistemological and methodological analyses. The research highlights perspectives that advance theoretical and relevant positions in qualitative research connected to art.

KEYWORDS: eco-art, eco-social art strategies, epistemology, ontology, methodology, qualitative research, artful responsiveness

A Short Historical Framing – a Trajectory of Relational Aspects

From my position as a theoretical researcher with a close affinity to practice, educator and contributor to transdisciplinary and artistic projects over several years within and outside the institution, I became interested in how I could combine and co-think some theoretical positions with artistic and practical experiences. This article shows this position through theoretical reflection and by presenting a coming eco-social art project as an initiator and participant. In the framework of Oslofjord Ecologies some questions are raised through this text, one of the most crucial ones is: What can art do in our times of ecological crises?

The paradigmatic shift from seeing art as an autonomous context-free object to understanding artworks as a relational phenomenon, which means to look upon art as an interaction between the viewer, the artwork and the context, is nowadays an established perspective in contemporary art. However, this relational epistemological position is part of compound theoretical and artistic traditions. Following these earlier discourses, the influence of the philosopher and social theorist Michel Foucault emphasized the relationship between knowledge and power, and he claimed that concepts of knowledge that excluded history, context, discourses and power relations worked reductively (Foucault, 1996, s. 460). In the field of art, the philosopher and cultural critic Walter Benjamin's book Author as Producer from 1934 and the philosopher, critic and semiotician Roland Barthes' essay Death of the Author from 1968, are examples that can be seen as a part of the relational turn, as their texts emphasize the position of the recipient as a co-creator and interpreter. Also, the avant-garde, such as Fluxus and the Situationists, active in the 1960s promoted relational approaches. In later years, it was common to refer to Nicolas Bourriaud's further development of the term in the book Esthètique relationelle from 1998 (Bourriaud, 1998). Many questions have been raised about the artistic value and social impact of the complex term relational. As a part of the social turn in contemporary art, the art historian Claire Bishop, in her text Antagonism and Relational Aesthetics, critiqued the perspective in Bourriaud's essay as being too consensus-driven and conflict averse, a point of view she accentuated as follows:

...instead of a "utopian" agenda, today's artists seek only to find provisional solutions in the here and now; instead of trying to change their environment, artists today are simply "learning to inhabit the world in a better way"; instead of looking forward to a future utopia, this art sets up functioning "microtopias" in the present (Bishop, 2004, p. 54).

The relational turn has later been expanded with perspectives concerning interdisciplinarity and more experimental art practices in situated events, a position Umberto Eco in the text The Open Work from 1962 had already pointed out as "works in movement ... that opens a new page in sociology and in pedagogy, as well as a new chapter in the history of art" (Eco, 1962, pp. 22–23). Understanding works of art as a dialogue in process, led to what is characterized as the performative turn, which emphasizes that encounters with art could contain a transformative power for reflection and meaning making (Fisher-Lichte, 2008). Regarding this aspect, Norman Denzin argues that the "performed experiences are the sites where felt emotions, memory, desire, and understanding come together" (Denzin, 2003, p. 13).

These paradigmatic, "theoretical turns" have evident parallels in art practices. Both site-specific art and land art, also called earth art, movements which emerged in the 1960s and 1970s, are related to relational, situated ideas, but in different ways. Site-specific artworks are understood as inseparable with their location, often located in an urban city. An iconic site specific work is Richard Serra's Tilted Arc, which Serra created specifically for a public plaza in Lower Manhattan in 1979.



Figure 1. Tilted Arc by Richard Serra, 1979. © Richard Serra / BONO 2020

After disagreements and discussions about the location of the Tilted Arc, it was removed in 1989. The artwork was never re-installed anywhere else, as Serra had been contracted to make Tilted Arc solely for this specific site. In this context Serra argued that "to remove the work is to destroy the work" and he continued to claim that: "if moved from the place it was made for, then Tilted Arc would be nothing more than a hunk of steel" (LeBourdais, 2016). This statement from Serra emphasizes that communication between the place itself and the artwork is crucial for this tradition. However, the social dimension is not prominent in this genre of site-specific art. Environmental art emerged in the 1990's as a more social and ethical relational approach for artistic practices. The artists were concerned about interdisciplinarity and welcomed influences, from philosophy, biology and pointed at social and cultural concerns. The environmental art perspective is related to historic land art and

ecological art that have become a focal point in contemporary art practices. Land art was based on an idea where the works were more concretely integrated in the landscape itself than in site related art. Structures were frequently made directly in the landscape, often with use of natural materials, and usually documented through photographs and maps which the recipient would meet in exhibitions. In addition, land art was often presented by bringing in material from the landscape to create installations in the gallery, often with the intention to state a critique of the content of the institutionalized art world.

Land art practices were often made as temporary interventions, as in Richard Long's work A line Made by Walking from 1967. In this project Long walked backwards and forwards in a field in Wiltshire, England, until a line became visible in the grass. Long photographed the line as a formative piece of art showing his intervention within the landscape as a visual language sensitive to the environment.

Robert Smithson's Spiral Jetty from 1970, is a seminal land artwork built into the great Salt Lake in the USA. In the text Epistemologies of Art in the Anthropocene Daniel Falb links Spiral Jetty to ecological ideologies: "Robert Smithson is an early exponent of an artist whose work seems informed by an awareness of the geologic timescale" (Falb, 2014, p. 316).



Figure 2. Spiral Jetty by Robert Smithson, 1970. © 2020 Holt / Smithson Foundation and Dia Art Foundation / Licensed by VAGA at Artists Rights Society (ARS), NY.

Ritual aspects, referencing a close relation to earth, water, minerals and universal energies are evident from the material that has become the representation of this work, such as the film Spiral Jetty. Nevertheless, it should be mentioned that the work with Spiral Jetty also caused criticism because use of bulldozers to scrape and cut the land made permanent impairment upon the landscape.

Another iconic work that also is connected to ecological ideologies is Joseph Beuys 7000 Oaks that was staged at Documenta in Kassel in 1982. In this project Beuys and his assistants questioned the condition of the local environment by planting 7000 oak trees, each with an accompanying basalt stone. As a part of his art works Beuys introduced the term *social sculpture* to emphasize art's potential to transform societies through different art strategies. By announcing that if a basalt stone was moved from where it had been placed by a tree in Kassel a new oak tree had to be planted in the new location, Beuys underlined how 7000 oaks as a social sculpture could problematize and show thoughtfulness towards environmental issues.

These historical examples of artistic engagements with nature and ecology points to developments we recognize from contemporary eco-art projects.

Eco-art as an Extension in the Field of Art – a Theoretical Framework and Three Examples

Nowadays, environmental concerns, climate and ecological crises have influenced social and political fields, this can be described as a general societal and social science movement, the ecological turn. As a part of this, the eco-art movement has grown rapidly, representing an expanded aspect and a further development of social art practices, perspectives Cathy Fitzgerald has advanced in a thorough manner in her work (Fitzgerald, 2018)¹. We see a lot of examples where art claims a relation to ecology, but it is not obvious what this exactly means and what are the artistic consequences. Of course, the movement turns the issues in art from content, materials, form and the object-based to environmental issues and growing ecological understanding, but still I often wonder in what degree this involves any form of ecological responsibility. There is a tendency to assume ecological obligation in eco-art, but also the chief executive of the Wildfowl and Wetland Trust (WWT) in the UK, Martin Spray, raises this kind of critical question, and in a provocative way he asks if the eco-art field is connected to reality or if it is embarrassing hype (Spray, 2014). Related to these questions Andrew Brown has, in his book Art and Ecology Now, developed what he calls "a clear taxonomy - a conceptual system created so that we can classify and understand the natural world – that helps the reader make sense of the rich diversity of practices and works that one can encounter today" (Brown, 2014, p. 15). Brown has structured his book based on this taxonomy and given the six chapters titles that indicate a spectrum of artworks different ecological obligations. This spectrum points out the complexity in the field of eco-art and brings forth questions as to whether artists should just report on or represent ecological phenomenon in the world, or whether they should take a role recreating and searching for changes to environmental problems.

I have summarized Brown's six perspectives and created a "level-model" as a support to enlighten degrees of such obligations. In my search to get a grip on how we can look at social and ecological commitment in art today I find this model supportive and will use it for further analysis in this text to clarify the degree of ecological commitment in various projects.

I will first present the "level-model", then show the benefit of this as an analytical tool by considering three art projects with a view to the structure it offers. It is important to have in mind that this is not a rigid model, so it's obvious that different projects can be characterized by more than one level. There are also "transition zones" between the six levels.

The structure of the "level-model" consists of the following six aspects of eco-art and ecological commitment:

- Re/view "artists represent the world as they see it ... they believe that simply showing something in a different way is often enough" (pp. 18–19).²
- Re/form "the physical environment provides the raw matter from which to make art. Not content with simply examining their surroundings as detached observers.... Not happy with merely framing a view of the natural realm, they take things a step further by recontextualizing elements of the landscape in new ways and alternative settings" (p. 72).
- Re/search this is "one stage further: [a] wish to go deeper to understand the elements of nature". And the artist's work "foregrounds the methods and objectives of investigation as its primary defining characteristic" (p. 108).
- Re/use "the work of artists whose primary concern is the way we use and abuse the Earth's resources ascribe value to the natural world and respond to our throwaway culture" (p. 144).
- Re/create "develops the search for solutions to environmental problems... Radical in intent and iconoclastic in method, they seek to challenge the status quo and disrupt conventional habits" (p. 182).
- Re/act "[Artists] actively set out to transform the world and change it for the better. No longer passive observers or reporters, or even engaged researchers, who leave the task of acting to others ... they seem more like eco-activists operating within an art context and using creative means to achieve their environmental goals" (p. 218).

Continuing my reflection, I will employ the phases Re/form, Re/search, Re/create and Re/act to describe three different art projects related to distinctive eco-art practices. The two first examples are two completed projects implemented by artists and eco-social art practice researchers. The third project is at the planning stage, and here I am an active participant which is a direct consequence of my academic work where I have collaborated over several years with artistic projects within and outside institutions. This project will be emphasized in this text because of my direct involvement and because of the intention to develop a practice closely connected to ecological obligation. As a consequence, my partners and I intend to develop an art project connected

¹ Fitzgerald's work will be presented later in the article.

² All references in this part is from Brown's book Art and Ecology Now.

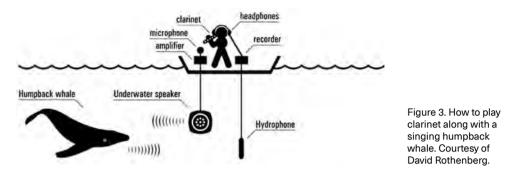
to level five and six – in other words, the levels that connect more strongly to ecological commitment in Brown's model. Further, I will use these three examples to elucidate possible expansions of methodology and onto-epistemology in qualitative research.

Re/form, Re/search & Re/use Eco-art: David Rothenberg – The Song of the Humpback Whale

David Rothenberg is a professor of philosophy and music, and a composer and jazz musician with a special interest in animal sounds as music. Rothenberg is often called an interspecies musician because of his experimental interactions with animal music. Recordings he has made let us listen to his long time work in understanding other species such as singing insects, by making music with them. Among other animal sounds, Rothenberg became strongly involved with the song of whales. Rothenberg's diverse background provides a basis for investigating these interests both from scientific and from artistic angles.³ He clearly conveys this capacity in the book Thousand Mile Song. Whale Music in a Sea of Sound from 2008. In a review of the book in The Guardian, Susan Tomes characterized his writing abilities as the following: "He writes now as a philosopher, now as a new age pantheist, now as a jazz clarinettist, and finally as a sober scientist" (Tomes, 2008).

From ancient times, sailors have told stories about singing whales. Sometimes the anecdotes were related to the myth of the "siren songs". But no one could listen to the entirety of the sounds of whales until recording techniques were developed. The sound of the humpback whale was first described in the literature by Roger Payne and Scott McVay, in the journal Science in 1971, where the topic was presented through scientific analysis based upon a great volume of recorded songs from humpback whales. They argued that these songs are the most extended patterned vocalization produced by any animal (Payne & McVay, 1971, pp. 587-595). In the following years scientists learned to identify whales communicating with one another, and whales' songs made their way into human culture with inspiration for classical compositions and into jazz and pop music. Rothenberg's investigations explain some of this huge interest in the way he clarifies that humpback songs are far more musical in structure than the sound of any other dolphin or whale. The songs, always sung by males, have long-range structures, sometimes lasting for hours, consisting of repeating patterns, hierarchically organized at the level of unit, phrase and theme. The songs also seemed to be transmitted to other whales living in the same area who sang them too (Rothenberg, 2008). When this happened, people started to ask if the whales responded to each other.

Rothenberg thought so, and in February 2007, equipped with hydrophones, underwater microphones and speakers he set sail from the coast of Maui to examine possible music communication with whales. He knew that sound travel five times faster underwater than it does through the air, he also had knowledge about speeds in different layers of the ocean. Based on this knowledge he placed the hydrophones on either side of the boat to capture the sound of the whales one believed was in the area. And what followed became a performative collaboration between Rothenberg's clarinet in duo with the whale's song.



As a result of these scientific and cultural investigations with resulting productions, a new attitude to the whale as a creature grew. As Thomas formulated it: "Whales became big" and she continued, "The idea that the world's largest creatures were singing at the bottom of the ocean had great emotional power. Set against the knowledge that we were harpooning them in order to use their precious oil for soap, machine grease, lipstick and dog food, their majestic undersea laments suddenly made us feel guilty" (Tomes, 2008). The emotional connotations of the whale's song become amplified because we know that these animals' sounds contain complex messages. This emotional aspect, combined with increased information about the whale's well-developed communication abilities, inspired musicians from different genres to use whale songs in their music.⁴

Through playing clarinet live with whales in their native habitats Rothenberg used the enigma of whale sounds to explore the understanding of nonhuman minds. I see Rothenberg's use of the communication with whales to make interspecies music related to level two *Re/form* in Brown's model, connected to his description of the physical environment that provides the raw matter for artists to engage with the stuff of nature directly... to make art.⁵ At the same time, Rothenberg works as a scientist and a musician to investigate "to go deeper to understand the elements of nature", a description given for level three, *Re/search*, in Brown's model. Rothenberg also warns about the possible negative consequences of the increasing noise level in the sea caused by motorized shipping and seismic exploration. This can influence the whales, and he claims that there is evidence that whales are trying to sing louder to make themselves heard, and he continues to stress that we know the complexity of whale songs-messages, but we still don't know what they mean or what we could learn from them, and now they may be under threat (Rothenberg, 2008). Because

³ As a curiosity I will mention that Rothenberg in an interview told that when he traveled in Europe after graduation, playing jazz clarinet, he listened to the record song of a hermit thrust, and the structure he heard reminded him of a Miles Davis solo (Rothenberg, 2008).

⁴ To name a few: John Cage, Toru Takemitsu, Pete Seeger, Crosby Stills and Nash, Jethro Tull, Yes, Paul Winter, Charlie Haden, the Partridge Family, Laurie Anderson, Tom Waits and Lou Reed.

⁵ References to Brown's model are given earlier in the chapter and will further on not be repeated.

of these social ethics in Rothenberg's descriptions I also see his work connected to level four in Brown's model, *Re/use*, that points to the artists concerns about "the way we use and abuse the Earth's resources".

Re/create Eco-social Art Practices: Cathy Fitzgerald – The Hollywood Forest Story

Cathy Fitzgerald is an eco-social artist, researcher and educator who created The Hollywood Forest Story, an ongoing (since 2008) eco-social art practice in South East Ireland. Her academic dissertation The Ecological Turn for her PhD in Visual Culture by Practice from 2018 is also included.⁶ Since the late 1990s she has followed and been inspired by long-term eco-social art practices that use creative activities to invite, engage and inspire collaborators and communities to reflect on their relations to lands, forests and watersheds anew. Based on an ecologically-informed forestry project in the Hollywood forest in a rural community in South East Ireland where she lives, Fitzgerald implemented her ideas as practices which she made available in a blog/eBook called The Hollywood Forest Story. In an online format she wanted "to share my activities across the "real world" rather than restricting its operations to a local art gallery context" (Fitzgerald, 2008). Fitzgerald describes her presentation of the project in the eBook as a cultural artefact that offers an audio-visual presentation of the sights and sounds of Hollywood forest and its human and non-human residents to both local and secondary audiences further afield.

The main motivation for Fitzgerald's work was twofold. First, to learn how to transform Hollywood forest, a monoculture conifer plantation, to foster the wellbeing of a more complex and dynamic forest ecosystem (Fitzgerald, 2018, p. 5, 86). Second, with this experience and the artistic practices that her forest work evolved, she strove to communicate the challenges and potential of eco-social art practices as an important part of contemporary art discourse. Fitzgerald describes how it took some time to evolve this way of working: "Even though I have lived in the conifer plantation that was to become Hollywood forest since 2001, it was not until much later in 2008, when I had gained skills across art, science and politics, that I considered developing an eco-social art practice" (Fitzgerald, 2018).

In her practical work to transform a monoculture tree plantation, Fitzgerald used the so called "new-to-Ireland Close-to-Nature continuous cover forestry management approach" that involved aspects from ecologically-informed forestry practices such as thinning activities to transform Hollywood forest from a homogeneous plantation to one that is characterized by biodiversity with mixed species and trees of differing ages (Fitzgerald, 2018). The goal was to develop an eco-social art practice model to "overcome the life limiting aspects of industrial clearfell forestry practice" because "all sectors of global society in the 21st century need to urgently implement ecologically-sustaining practices to the Earth's lands, forests, rivers, oceans and atmospheres" (Fitzgerald, 2018, pp. 84–85).



Figure 4. Sharing The Hollywood Forest Story by Cathy Fitzgerald, 2015. Photo: Gwen Wilkinson. Courtesy of Cathy Fitzgerald.

As a real-world example, the Hollywood Forest Story has had an influence on the new national forestry policy and contributed to public discourse about the crime of ecocide in Ireland. Thus, the project has had the consequences related to Fitzgerald's important ideal that she formulated as the following: "... my creative practice that explores an alternative ecoforestry management system is a critical response to both local and global environmental concerns" (Fitzgerald, 2018, p. 85). These factors in the Hollywood Forest Story, that emphasize changing society's thinking and practice related to ecology can clearly be connected to Brown's model level 5, eco-art that *Re/creates*, characterized as projects that "develops the search solutions to environmental problems".

Re/act Eco-social Art Strategies: the Fluxhus Group – Developing Artful Responsiveness by the Black Sea

The Fluxhus Group consists of artists, scientists and interested citizens that represent different professions and competencies. We work together to develop the project Artful responsiveness by the Black Sea, from a northern part of the Black Sea area which borders Bulgaria in city called Balchik. Regardless of the diversity of our backgrounds, the intention is to establish a transdisciplinary project. We believe that Joseph Beuy's slogan "unity in diversity" offers a productive starting point to work with today's environmental crisis, a situation where creative thinking and new perspectives are urgently needed.

We have given the group of collaborators the name Fluxhus Group to conjure up the name of the avant garde art movement Fluxus, established in 1961. In Norwegian, "hus" means "house". This is to underpin the fact that the Fluxhus project is centered on

⁶ The title of Fitzgeralds's thesis is *The Ecological Turn: Living Well with Forests. To Articulate Eco-Social Art Practices – Using a Guattari Ecosophy and Action Research Framework.* This title inspired me to use the term *eco-social art strategies* throughout this article.

a specific place and specific houses. According to George Maciunas, the founder and organizer of Fluxus, "everything is art and everyone can do it", and he declared in the group's manifesto: "Purge the world of the forms of bourgeois life. Know how to promote Reality" (Maciunas, 1963). In the article Art of the Twentieth Century Loredana Parmesani elaborates this point of view as the following: "Fluxus activity involved the different art forms in which simple every day activities like sitting, smoking, breathing, and talking were interlaced in a structure in which art and life together created the work or the event" (Parmesani, 2000, p. 60). The Fluxhus Group mainly share this view upon art related to life and will attempt to integrate and concretize this ideal into the project.

Because the Developing Artful Responsiveness by The Black Sea project is in the planning phase, the content here will be presented as preliminary. In this article the main focus will be to explain the project in relation to Brown's model. But in reality our ideals are based upon a transdisciplinary idea, and the substance of the project will be carried out and communicated through varieties of art-related genres. The content's focus will explore situated local challenges with an aim to develop a more responsive attitude and practice regarding local eco-social issues. We will use different eco-social art strategies in cooperation with schools and the broader community in creating workshops, working with material practices, events, bio artistic experiments, exhibitions and so on. We will consistently apply the term art strategies and not art practices to emphasize the strong degree of ecological commitment in the project.

The Developing Artful Responsiveness by The Black Sea project consists of three main parts. In the first, Elin T. Sørensen, a visual artist and landscape architect, will transfer her exploration of the Inner Oslofjord to seek possible knowledge exchanges between this area and a part of the Black Sea.⁷ The point of departure is an effort to re-establish the relationship between people, the urban foreshore, and not least life below water. In her work, Sørensen pursues the unfolding of a 'community of learners'; Whether few or many, that and those entering the process contribute in different ways to the situation at hand, both informing and forming the artwork, thus arriving at productive ways to co-create and coexist in-between urban form and natural systems.

The Black Sea is part of the Atlantic Ocean, connected to it through the Mediterranean Sea, with inflow and outflow in the Bosporus and Dardanelles. The sea borders the eastern Balkans, Eastern Europe, the Caucasus, and Western Asia. Many rivers, such as the Danube, Dnieper, Southern Bug, Dniester, Don, and the Rioni supply freshwater to the Black Sea. Drainage from so many countries into the Black Sea has caused severe ecological problems to the waterbody over time. In the context of establishing an exchange of knowledge between the coastal communities and urban sea areas of the Inner Oslofjord and environmental issues of the Black Sea, the project will explore to what extent we can share and learn from each situation.

On a metaphoric level, the Fluxhus Group will work to create distance from the Greek tradition of referring to the Black Sea as the "Inhospitable Sea" (presumably due to climatic conditions, which made navigation a difficult task). Later on in

history, the Black Sea was renamed the "Hospitable Sea". With ecological awareness we know – a current polluted and human imposed state of inhospitality; that is a difficult environment to live in – we could take these names as points of departure for ways to get back to a "Hospitable Sea". This part of the group's work is motivated by an urge to foster a deeper understanding of the sea landscape through the lens of landscape architecture and to engender creative solutions to its most pressing issues. This work is grounded in artistic research and biological investigation.

The second part of the project is called Connecting Through Art and is initiated by the visual artist Ivan Liotchev and has been inspired by The International Collaborative Drawing Project (ICDP) that he founded in London 2010 as global participatory practices which use drawing as a starting point for cooperative creation. Liotchev works with diverse cultural organizations and communities to develop drawing events, exhibitions, public art, and multi-media spectacles to explore drawing within a wide context. Diverse workshops encourage groups of people to work together to create large drawings, sculptures, digital and new-media artworks. In the ICDP's web site it is written the artworks produced through these projects are usually permanently installed within the communities that created them, instilling a sense of pride and ownership in their creators. In Developing Artful Responsiveness by The Black Sea, collaborative drawing and other art-based practices, such as installations and performances, will be used to communicate ecological challenges in the local area.

The third part of the project will focus on questions connected to how we think about and treat animals and our environment in this current epoch of humanity. We live in a period of time, characterized by Donna Haraway as the chthulucene, that among other characteristics highlights sympoiesis, a term that leads the attention on "complex, dynamic, responsive, situated, historical systems" (Haraway, 2016, p. 58). As Haraway, also the environmental philosopher Glenn A. Albert propose an alternative to the human focused term anthropocene, which both of them see as focusing too heavily on the "antro", this prefix meaning human, and as a consequence omits more extensive relational and environmental ideas. Haraway claims that the term anthropocene "is not an idiomatic term for climate, weather, land, care of country, or much else in great swathes of the world" (Haraway, 2016, p. 49). The term Albert suggest as an alternative in his book Earth Emotions – New Words for a New World is the symbiocene "characterized by human intelligence and praxis that replicate the symbiotic and mutually reinforcing life-reproducing forms and processes found in living systems" (Albert, 2019, p. 102). The overall critical reflection here addresses the role and place of animals in today's human-made problematic environment. More concretely, we will work with donkeys and employ different approaches to illuminate the changes in how we use and think about this animal's character and function in society. The sources will be stories told by local people, old photo archives from the area that shows the great importance of the donkeys connected to farming and transport. The project will also learn from having its own donkeys. More generally, this part of the project will shed light on the current and global challenges we face when it comes to industrial animal livestock. On a more general level these topics will also include questions related to multispecies extinction and the pandemic crisis we face today.

⁷ Sørensen contributes to this anthology with the essay The Blue Mussel's Voice.



Figure 5. The Melancholy Donkey: Nose-to-nose with a donkey by Marina Abramović, 2010. © Marina Abramović / BONO 2020

The ideology we rely on here is, again, inspired by Donna Haraway and here her multispecies philosophy. In the book, Staying in the Trouble. Makin Kin in the Chthulucene Haraway describes that her way of thinking is connected to "a method of tracing, of following a thread in the dark, in a dangerous true tale of adventure, where who lives and who dies and how might become clearer for the cultivating of multispecies justice" (Haraway, 2016, p. 3). Haraway is concerned about what the ability to "think with other beings, human or not" can facilitate "to elaborate the possibilities of ecological evolutionary development biology and nonhierarchical systems theories for shaping the best stories" (Haraway, 2016, p. 7).

This part will also involve the locals' deep-rooted competence in biodiversity gardening to increase pride in a tradition that will be necessary to the world to survive. Narrative texts and a photo-essayistic exhibition will be some of the ways to communicate this. Workshops and discussions will also be arranged.

Through these ways of communicating the project is moving into a territory where collaborations between artists, scientists and general public are productive and enable consciousness raising through community building actions. In this sense the project can be characterized by Brown's fifth level of eco-art called *Re/create* where the participant "develops the search for solutions to environmental problems". In addition, as the title *Developing* Artful *Responsiveness* by the Black Sea indicates, the project is also clearly connected to *Re/act*, the sixth and last level in Brown's model, that points to practices where artists "actively set out to transform the world and change it for the better".

Common to the Three Examples: an Eco-ethical Starting Point

The three examples from eco-art have a common departure point, which is an intrinsic interest in, and passion toward responding to ecological insights in their work. As shown above, the degree of ecological commitment differs from using the physical environment as material to make art (Re/form) to understand the elements in nature (Re/search), as in The Song of the Humpback Whale, to a focus upon how we use and abuse the Earth's resources and search for solutions to environmental problems (Re/use and Re/create) as in The Hollywood Forest Story. The last example, Developing Artful Responsiveness by The Black Sea goes a step further, to the last level, Re/act, in Brown's model, in the way the project aims to raise community building actions through artistic strategies. Nevertheless, strong ethical concerns characterize the three projects, and this is a constant feature underlying eco-art in general. This implies a change in the onto-epistemological way art is produced, and of course, the epistemology and methodology have to correlate to this eco-ethic foundation to be valid in production of theory in qualitative research in this field.

Eco-art and Environmental Ethics

Eco-art raises questions about the human role in the anthropocene, a concept that is the proposed and still debated geological term for the current epoch, that refers to how modern mankind's activities have noticeably impacted the Earth's planetary systems, including anthropogenic climate change.⁸ This discussion has expanded in the environmental sciences, sociology, philosophy and in the field of art. Since human actions have led to transformation of the earth of such a magnitude, art projects have included environmental ethics in theory and practice. Examples given in this text are The Hollywood Forest Story and, if it turns out as planned, to the most binding level, level six, connected to Brown's model in Developing Artful Responsiveness by The Black Sea. As Brown comments on the artists that work on the Re/act level, in spite of even relatively small results "these artists offer a model for the future" (Brown, 2014, p. 219). Related to this context Daniel Falb argues that part of the art field is living in a "long present" with regards to art in anthropocene, meaning that, for example, a 1968 Hans Haacke or Robert Smithson piece stands virtually on the same epistemological grounds as a piece you may encounter at the 2014 Taipei Bienniale, which under the heading "The Great Acceleration" chooses the anthropocene as its emblem (Falb, 2014, p. 309). Consequently, the eco-social art strategies emphasize the social and ethical movement of environmentalism. Haraway connects this ethical aspect to "multispecies justice" and the existential, responsible questions this raise: "What must be cut and what must be tied if multispecies flourishing on earth, including human and other-than-human beings in kinship, are to have a chance?" (Haraway, 2016, p. 2).

A Participatory and Interdisciplinary Framework

It is likely that an eco-ethical starting point as described, that include a shared passion toward an ecological imperative, also stimulates the sharing of knowledge in a creative, collective effort where individual capabilities are incentivized collectively. This will often involve combining several academic disciplines or professional specializations to approach a topic or challenge. Transdisciplinary cooperation takes a stand

⁸ The term was widely popularized by the Nobel laureate in chemistry Paul J. Crutzen in 2000.

in clear contrast to a traditional epistemology characterized by rigidly separated specializations. As Cecilia Sjöholm emphasizes, the participatory aspect is "the idea that art should work together with the sciences in order to be at the forefront of innovation and creativity" (Sjöholm, 2017, p. 17). This transdisciplinary collaboration will usually involve experimental qualities with a mission to create and communicate projects in new contexts and through diverse forms of mediations. *Re/create* in Brown's model has a sense of experimentation about it and can be framed in different theoretical directions; one possibility could be sensuous and participatory ethnography. In the book *Social Works, Performing Art, Supporting Publics* (2011) Shannon Jackson, for instance, combines ethics and the cooperative aspect and proclaims that this can open a "…grassroots ethic of participatory ethnography" (Jackson, 2011, p. 69). Haraway draws this point to an ontological level when she claims that we alone, in our separate kinds of expertise and experience, know both too much and too little and therefore we need to "require each other in unexpected collaborations and combinations… we become-with each other or not at all" (Haraway, 2016, p. 4).

Eco-art as Disturbance and Construction

Art has the possible potential to disturb established orders and norms to create new reflective platforms. As such, art can challenge conventions and give voices to cultural and social questioning. Again, as Haraway emphasizes: "Our task is to make trouble, to stir up potent response to devastating events, as well as to settle troubled waters and to rebuild quiet places" (Haraway, 2016, p. 1). Implementing socially anchored art strategies to "rebuild quiet places" require possibilities where the peculiarities of the processes get space on a theoretical and practical level. This kind of endeavour characterizes the Developing Artful Responsiveness by The Black Sea project in the way that it is planned to empower people's capacity and willingness to initiate alternative solutions when it comes to eco-social challenges. We believe in having a specific place for imagination and praxis for desirable future ideas in a local society, a line that can be traced to the Fluxus movement's concerns about daily activities in art and to Beuys' concerns about transforming the acts of everyday life into art. Interviewed by Dušan Bjelic in 1982, Beuys formulated this point of view as the following: "My understanding of art is strictly related to everybody's work. [...]. So organically it is related to the working places of the people. And the element of self-doing, the element of self-determination, self-administration and self-organisation is the element of this anthropological type of art" (Bjelic, 2014, p. 195).

Ideas underlying eco-art construction of course calls into question the established separation between nature and culture and raise issues concerning the centrality of the human's role in the anthropocene. As Anna Tsing writes, a new science is on its way, one whose key characteristic is multispecies love (Tsing, 2011). Also Fèlix Guattari's ecological theoretical framework as presented in the book *The Three Ecologies* is applicable regarding these issues. He claimed that traditional environmentalist perspectives obscure the complexity of the relationship between humans and their natural environment through the dualistic separation of human culture and nonhuman nature (Guattari, 2005). In the book Being Ecological, Timothy Morton ends up crushing this duality in a way that can be characterised as a symbiotic ontological position: "But you are already a symbiotic being entangled with other symbiotic beings. The problem with ecological awareness and action isn't that it's horribly difficult. It's that it's too easy. You are breathing air, your bacterial microbiome is humming away, evolution is silently unfolding in the background... You don't have to be ecological. Because you are ecological" (Morton, 2018, p. 157). These points of views will also influence questions related to established thinking in terms of an urban/ rural dualism in which the city is seen as a strictly human space will also be of importance (Van Dooren & Rose, 2012). Further, on an epistemological level I see the rebuilding of quiet places connected to a dehierarchized, pluralistic, and horizontal eco-art model of cooperation.

Eco-ethical and Eco-aesthetic Action Research

In putting value into ethical, transdisciplinary and participatory perspectives as the basis for working methods, I define, on the ontological level, eco-social art strategies as eco-ethical and eco-aesthetic action research. On the epistemological level this will, through experimentation and sometimes disturbance art strategies, represent a form of explorative action research. I stress the explorative aspect because eco-social art practices involving transdisciplinarity are enquiry-driven. Hannah and Jeremijenko's concept of performative experimentation is related to this positioning in the methodological field, and they characterise that it is both academically significant and open ended: "There's an emphasis on performing how knowledge production happens, calling attention to the fact that the parameters have to be selected, the data have to be cleaned, exhibiting that there's a lot of openness and ambiguity in how data can be collected and interpreted" (Hannah, 2017, p. 214). The normative aspect is strongly associated with action research and this is particularly important in eco-art projects. Suzi Gablik was early to identify such practices, in articulating a moral ecological imperative as the following quotation clarifies: "I believe that what we will see in the next few years is a new paradigm based on the notion of participation, in which art will begin to redefine itself in terms of social relatedness and ecological healing" (Gablik, 1992, p. 27).

To call this form of quality research eco-ethical and eco-aesthetic action research signals that the extensions in the theory of art and in art practices can be connected to similar tendencies in the field of quality research methodology. Conventional methods based on criteria such as generalization and verifiability are replaced with more exploratory and inquiring perspectives in research designs. This tendency is particularly strong when it comes to the relation between methodology and the field of art because the ongoing changes and "turns" in the field of art require research methods that correlate with the new questions raised. Connected to the growing awareness in recent decades about the connections between art and science, an increasing emphasis on "art-science" interdisciplinary projects and art-based and artistic research has evolved.

Developing Responsive Artfulness in Qualitative Research

Ethics and methodology are integrated as a part of the content in eco-art projects. Different sources emphasize responsive ethics, as Sacha Kagan in his article The Practice in Ecological Art: "Ecological art is an art practice that embraces an ethic of social justice in both its content and form/materials" (Kagan, 2014, p. 1).

The EcoArtNetwork established in 1999 is a network of many global practitioners of ecological art practice. On their homepage they define that EcoArt was "created to inspire caring and respect, stimulate dialogue, and encourage the long-term flourishing of the social and natural environments in which we live. It commonly manifests as socially engaged, activist, community-based restorative or interventionist art", and I see art has potentiality as a uniquely sensuous mediator in these works. A responsive artfulness influences the initiation of, and the processes in, eco-art projects. A responsive artful point of departure effects how to articulate art and science in a new determination of life. Dave Pritchard, organizer of the Arts and Environment Network of the Chartered Institution of Water and Environmental Management, describe these ideas as follows: "this is not about 'using art' merely as a medium to 'communicate' about something else. It is about adopting a more 'art-ful approach' that connects us in a different way with the world we are in, and fans the sparks of that greater creativity we need as a society for the challenges we face" (Pritchard, 2012, p. 3).

To choose responsive artfulness as the basis for eco-art projects leads to an expanded, hybrid theoretical-methodological framework which correlates with the many lavered social and political questions at stake. Gablik related this thinking to an ecological paradigm where art practitioners "are no longer merely the observers of our social fate but are participating co-creators... amidst other communities (human and non-human) incorporating an eco-ethic" (Gablik, 2000, p. 26). In addition, Gablik raises this theoretical framing towards an onto-epistemological level as she presents the concept of the "connective aesthetic" that is "oriented toward the achievement of shared understandings and the essential intertwining of self and other, self and society" (1992, p. 6). This theoretical position involves a constructive critical methodology that abandons the "autonomous" sciences and artwork that avoids engaging with social or political concerns. The focus is on responsive artfulness in dialogue with social, economic and environmental criticism, and, through eco-art strategies, fostering an understanding of eco-social challenges. These practices appear seemingly diverse because they involve long-term engagement and complex constellations of art and non-art activities. For these perspectives, on an ontological level, Haraway use the concept "complex worlding" to describe "the game of living and dying well together on terra, in Terrapolis" (Haraway, 2016, p. 29). Throughout her text Haraway makes many turns related to different themes, but all concerning care and "making-with" where "we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all. That kind of material semiotics is always situated, someplace and noplace, entangled and worldly. Alone, in our separate kinds of expertise and experience, we know

both too much and too little, and so we succumb to despair or to hope, and neither is a sensible attitude" (Haraway, 2016, p. 4). We can say that the projects presented and connected to Brown's model have taken this responsibility seriously in the way they "actively set out to transform the world and change it for the better". For example, Rothenberg's project The Song of the Humpback Whale can be related to a macro perspective in the way Morton, in his ironic and serious manner, reflects upon our consciousness about whales and its further implications: "OK, so happily that particular extinction hasn't yet occurred. It hasn't yet occurred because people became enchanted by recordings of whale sounds in the mid-1970's. Enchanted. What does it mean? In terms of charisma, it means some of us submitted to an energy field emitted by the sound of the whales. The fact that in my line of work (the academy) this is a wholly unacceptable, beyond the pale way of describing what happened is a painful and delicious irony" (Morton, 2018, pp. 104–105).

Developing responsive artfulness in qualitative research is also related to what I see as a lack in general theory and methodology that responds to 21st century eco-social concerns. But there are exceptions, such as the already mentioned doctoral work by Fitzgerald where she uses what she calls a "Guattarian action research method framework" as expressed through her long term art-forest project (Fitzgerald, 2018). In the article *Goodbye Athropocene* – *Hello Symbiocene* she also relates her work to what I have described as an ontological shift between these positions (Fitzgerald, 2019). Another issue is that in spite of the wave of publications that present art based and artistic research, the theoretical and methodological descriptions are often vague. I believe that being both theoretically and artistically explicit and reflective is necessary to get our voices heard regarding questions that can have an impact on local and global, ecological and social transformation. Acting like this, eco-social art practice and theory can contribute as a platform to develop extended onto-epistemological and methodological positions in qualitative research.

The artist Georges Braque once declared that "art is meant to disturb. Science reassures". My ideal is that art and science together should disturb, not as disillusion, but as a way to strengthen social reflections and the ethical ethos in qualitative research – in order to propose paradigms which are sustainable and congruent with the life forms and resources of our planet, which are currently exposed to ecological and virus crises.

Author's Biography

Venke Aure is a professor in Art Didactics at Oslo Metropolitan University in Norway. She has held this position since it was established in 1993, and from then has been responsible for science theory and research method at the master's program in aesthetic subjects at the Department of Art, Design and Drama. During years promoted and linked scientific theory and research method to art theory and practice and to the field of dissemination and education. Current research is concentrated on the question of how qualitative research, in theory and practice, can be developed to act responsibly towards the ecological challenges the world face today.

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Intimacy, Solidarity, Fragility

Everyday Objects and Ecological Awareness in Arts and Crafts Education

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ABSTRACT:

This article explores how the concept of ecological awareness, as defined by the British philosopher Timothy Morton, can be connected to educational practices of arts and crafts. Through a process-oriented methodological approach called "interrogations" the text uses an art project. Everyday Object. A Translation in Porcelain, by the Norwegian arts and crafts teacher Kristine Næss as interlocutor in a dialogue about ecological awareness. In the project, Næss translates an industrially produced drinking glass from the French company Vereco into eight different porcelain objects, through slow processes of material and formal exploration.

The second part of the article uses concepts from Object-Oriented Ontology as analytical tools. The results of the interrogations are presented through the unfolding of three modes of connection between humans and non-human objects related to ecological awareness: intimacy, solidarity, and fragility. These three modes suggest possibilities for how to *tune* to the world in a way that is different from the human control promoted by neo-liberal discourses on sustainable development and are thus examples of modes that should be explored by *arts and crafts* in order to enhance ecological awareness and begin the inhabitation of the world in new ways.

KEYWORDS: art education, arts and crafts education, ecological awareness, interrogations, everyday objects, Object-Oriented Ontology

Introduction

Since 1992, Education for Sustainable Development (ESD) has been a political priority forwarded internationally by the United Nations. Through initiatives such as the Decade for ESD from 2005 to 2014, the UN has promoted a broad conception of sustainability, including economic, social and environmental dimensions. While this conception has rightfully been criticized for being rather weak and undefined, as well as for its underlying neo-liberal assumptions (Jickling & Wals, 2008), the launch of the 17 Sustainable Development Goals (SDG) by the UN in 2015, seems to promise a more inclusive approach to the global challenges caused by humans (United Nations, 2018).

In connection to the 17 goals, new learning objectives emphasize that "ESD concerns the core of teaching and learning and should not be considered as an add-on to the existing curriculum" (UNESCO, 2017, p. 49). The Norwegian Directorate for Education and Training (2017), has chosen to follow this advice by listing sustainable development as one of three interdisciplinary topics that have to be implemented in almost all school subjects from the summer of 2020. Together with the other two topics, health and life skills and democracy and citizenship, sustainable development shall help to prepare Norwegian children and youth to "live, learn and work together in a complex world and with an uncertain future" (ibid., p. 6).

From an ecological perspective, this seems to be good news: finally, policy makers are putting forward educational agendas that seriously consider how we can change our lives in the light of "an uncertain future". Yet, from a less enthusiastic point of view, it is also easy to see that the new Norwegian curriculum is still based in neo-liberal and anthropocentric worldviews, and these are neither exposed nor discussed. For example, it continues to define sustainable development in a human-centred way as "protecting life on earth and providing for the needs of people who live here now without destroying the possibility for future generations to fill their needs" (ibid., p. 16). In terms that come very close to the first definition of sustainable development, presented by the Brundtland commission more than 30 years ago¹, humans are defined by their indisputable needs, while 'life on earth' is reduced to something exterior that exists only because of human protection. Another example is that 'life skills' are identified as "the ability to understand and influence factors that are important for mastering one's own life" (ibid., p. 15), meaning that instead of exposing ourselves to difficult and seemingly irrational feelings of loss and anger, for example in relation to the climate crises, we have to teach humans how to become (even) more robust, rational and self-regulated to meet future challenges².

Arts and Crafts Education

In the Norwegian proposal for the school subject arts and crafts³, the topic of sustainable development is mainly linked to issues such as innovation, raising consciousness, product development and problem solving. Together with my colleagues at the University of Agder, I have protested against the proposal, because we find that it continues to link arts and crafts education to a neo-liberal position of mastering the environment for human purposes. In contrast, we defend a position where sustainable development is directed at solidary relationships between human and non-human forms of being (UiA, Faculty of fine arts, 2019). In our view, arts and crafts education can be used to explore forms of life and processes of becoming that are more insecure and fragile than what we have been used to. By enacting aesthetic, sensuous relationships with non-humans we can connect to our surroundings in new ways and start to perceive the world differently. The school subject arts and crafts can thus be conceived of as an arena where students should be encouraged to work with artistic experimentation with objects, materials, social forms, and physical spaces, in order to create new and unexpected relationships (Eriksen, 2017; Svingen-Austestad, 2017; Illeris, 2018; Klungland, 2019; Jamouchi, 2019; Skregelid, 2019, Anundsen & Illeris, 2019).

From this position, I will use this text to go further in the exploration of how the concept of *ecological awareness* can be connected to *arts and crafts* education⁴. Borrowing a definition from the British philosopher Timothy Morton (2018, p. 128), I define ecological awareness as the "acknowledging in a deep way the existence of beings that aren't you with whom you coexist". In order to challenge the anthropocentric world views still embedded in the Norwegian curriculum proposals, I will try to explore artistic practice as a possible path to living with and through ecological awareness.

Interrogations

I will adopt a process-oriented methodological approach that I call interrogations. It is very simple and hopefully also in line with many of the ideas outlined above. It consists of establishing a dialogue with an existing art or *arts and crafts* education project in order to ask the project about a theme or a problematic that I am interested in exploring, where I believe that the project has important contributions to make. Instead of analysing the project from a distance, I try to involve it as interlocutor and to create a common engagement⁵.

Methodologically I see the approach as related to ethnographic field work. Like an ethnographer I spend as much time as possible with my interlocutor, trying to negotiate my presence and my culture in relationship to her/his presence, as well as to trace how the project – with its histories and intertwinings – might relate to me through processes of becoming. While fieldwork is the preferred method of anthropologists when trying to create new knowledge about human conditions and their perceptions of reality (Hastrup, 2015, p. 58), an increasing number of researchers use fieldwork related to research on/with nonhumans or more than humans, for example by living with and through landscapes (Ingold, 2008) or by creating anthropological assemblages by engaging in the life of a particular species of mushroom through 'open ended gatherings' (Tsing, 2015, p. 23).

Politically I am inspired by the activist positions of scholars such as Rosi Braidotti (2013), Donna Haraway (2016) and Bruno Latour (2018), whose work increasingly is

¹ The 1987-definition from the Brundtland report *Our common future* is "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987).

² For an extensive analysis of how social democratic progressivism has been taken over by neo-liberalist discourses in order to ensure the production of human capital for economic prosperity in Norwegian educational policy documents, see Hilt, Riese and Søreide (2019).

³ The proposal was made accessible by the Norwegian Directorate for Education and Training (2019) on the internet as part of a public hearing. In November 2019, after the final manuscript for this article was accepted, the final version of the curriculum was published in Norwegian at https://www.udir.no/lk20/khv01-02

⁴ In previous research (Illeris, 2012a, 2012b, 2017) I have introduced the term Art Education for Sustainable Development (AESD) as part of my homonymous research project. I have declared that for me AESD will be a lifelong project, since I expect my personal and professional engagement with sustainability and ecological awareness to be life enduring. I consider ecological awareness to be a key concept for AESD.

⁵ Previous interrogations have involved relationships to a limited number of favourite art projects that I have consulted over and over again. One of these projects is the project *Looking for a Husband with EU Passport* by Tanja Ostoic, which I have interrogated about performativity and environmental sustainability (Illeris, 2012a). Another is the project *The Hill* by the artist group Parfyme which I asked about subjectivity, togetherness and environment (Illeris, 2015, 2017).

about the elaboration of normative proposals for how to conceive of life in the new 'man-made' geological era of the anthropocene. In his seminal article, Running Out of Steam. From Matters of Fact to Matters of Concern (2004), Latour argues that while many post-structuralist academics like himself have spent many years recently analysing, criticizing and deconstructing common understandings and the values of contemporary western discourses about 'man', 'nature' or 'science', they have been blind to fundamental political changes. Despite the work of critical researchers in order to destabilize the values of discriminating truths, new and much stronger narratives have become dominant 'behind our back', based on 'truths' that are so obviously constructed that they do not need any kind of analysis in order to be unveiled as lies⁶. We thus need to turn our attention to what Latour calls 'matters of concern', meaning matters that are crucial for our common future. Instead of avoiding normativity, scholars should contribute actively to the construction of new and alternative narratives and tools. He asks:

Can we devise another powerful description tool that deals this time with matters of concern and whose import then will no longer be to debunk but to protect and to care...? Is it really possible to transform the critical urge in the ethos of someone who adds reality to matters of fact and not subtract reality? (Latour, 2004, p. 232)

Following such thinking, the concern of interrogations is to protect and to care for the relationship between me as researcher and the project that I interrogate. In this way, I believe that research can become an act of ethics.

Theoretically I will connect to the position of the already mentioned philosopher Timothy Morton and his recent books Hyperobjects (2013), Dark Ecology (2016), and Being Ecological (2018). Morton is an exponent of a philosophical view called Object-Oriented Ontology (OOO, pronounced 'triple O'), coined by Graham Harman (2011, 2018). At the core of OOO is the recognition, borrowed from Heidegger, that being is not something that is reserved for humans, or that the being of humans is not different from the being of everything else: animals, plants, bacteria, rocks, plastic bags or pincushions. Like posthumanism and new materialism, OOO is thus based on a flat ontology, meaning that it does not accept the subject/object divide, but instead see all forms of existence, even those that are imagined, as having the same degree of being as any other form. In OOO a flat ontology means that all objects from molecules, chairs, dogs and humans to so called 'hyperobjects', such as global warming, exist independently of human perception and are not ontologically exhausted by their relations with humans or other objects (Bogost, 2012; Morton, 2013; Harman, 2018). Ethically speaking such ontologies demand recognition and thus respect and care for everything that exists, also things that we perceive as artificial, ugly, harmful and potentially damaging to humanity - for example global warming. It might sound like a paradox, but the fact is: global warming is here. We can try to limit the damage.

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but we also have to live with/in it as a being that we can only sense indirectly but that influences us with its temperatures, winds and waters (Morton, 2013).

Returning to the subject of Interrogations I will try to use my three tools of ethnographic field work, political concern, and Object-Oriented Ontology to interrogate an art project about the potentials of ecological awareness for arts and crafts education. Through this process, I hope to contribute to the ongoing process of exploring, not only what arts and crafts education can do, but also what arts and crafts education does already, when it comes to teaching students new ways to relate to other forms of being in our common world.

The way through the interrogations will go as follows: in the section, called Interlocutor, I will explore an art project that makes me curious in relation to ecological awareness in arts and crafts education. In the following section: Dialogue, I will use Morton's definitions of ecological awareness to enter a dialogue with the project to sharpen my understanding of the theme. Finally, in the concluding section: Arts and Crafts Education and Ecological Awareness, I will connect the answers from the dialogue to ecological awareness in contemporary arts and crafts education.

Interlocutor

The project Everyday Object. A Translation in Porcelain was realized by the Norwegian arts and crafts teacher Kristine Næss for her master's degree in design, arts and crafts at the University of South-Eastern Norway. My dialogue partner will first and foremost be Kristine's richly illustrated written thesis (Næss, 2016) and secondly my memories from my encounter with her master's exhibition. During her project period in 2014–2016, I was one of Kristine's two supervisors and I thus had privileged access to her creative processes, both of writing and of art production. However, in my interrogations for this essay I did not try to analyse or criticize the project, the way I did when I was a supervisor. Instead I asked for Kristine's permission to work with the project in my research, because I find the project interesting, both personally and artistically, and because I believe that a dialogue with this project can deepen my understanding of ecological awareness in art and crafts education.

Ethically speaking, one could argue that I instrumentalized the project for my own purpose. I would rather say that I continue Kristine's work of showing us 'potential histories in the making' (Tsing, 2015, p. 23). Using Kristine's own term, I 'translated' her project into yet another size, form and material, just as she did with her everyday object. To me this is a dialogue and thus the creation of something new, something third.

The Glass as Everyday Object

Everyday Object. A Translation in Porcelain is a project that explores the author's personal relationship to one single object: a small French Vereco drinking glass. In Scandinavia, this is a traditional glass for cold milk, now a retro classic that brings forth childhood memories to generations of adults.

⁶ The most obvious example is the more than 10.000 false or misleading claims made by US President Donald Trump in the period from when he assumed office to the end of April 2019 (Washington post, 2019). See also Latour (2018).



Figure 1. Vereco glasses. Photo: Kristine Næss

Although Kristine is familiar with such drinking glasses from her childhood, the particular glass that she worked with was found in a second-hand shop, meaning that it has been used over time by unknown others. Her reason for choosing it was first and foremost that to her, the Vereco glass represents the core values of the everyday object: functionality, humility, availability and durability. She writes:

This glass doesn't kick up a row or makes a big deal out of itself. It is a small everyday hero. Day in day out filled with cold milk only to be scoured in burning hot soap water. Almost unbreakable and always there (Næss, 2016, p. 28)⁷.

When researching Kristine's model of Vereco glass, named Lulli, I found out that it was probably produced in the sixties, before Kristine was even born. The producer was the big French company Saint-Gobain, who began manufacturing drinking glasses in 1939 and who registered the well-known brand Duralex in 1945. According to a post on the homepage of Vintage Vereco (2014), Saint-Gobain "at some stage" brought out the Vereco company, and for a period they produced drinking glasses of this brand alongside Duralex. Both brands are known for being very strong and durable. Through the use of a technique of tempering developed in the 1930s by Saint-Gobain, the moulded glass "is heated to 600C, then cooled very quickly, giving both transparency and an impact resistance of well over twice that of normal glass" (Watson-Smyth, 2010). In fact, the original publicity from the 1950s boasted that Duralex glasses could be used as hammers, such was the strength of the glass (ibid.). Another quality that made tempered glasses popular was the easy use (they are stackable, suitable for hot and cold drinks, chip-resistant and dishwasher-safe) and the affordability. Tempered glass thus experienced a boom in the post-war period in the 1950's to the 1970's where women, now assigned to kitchen duties, wanted better designed products that were easier to manage (Vintage Vereco, 2014).

Kristine chose the Vereco glass among different objects that, in her words, are all "kind of iconic", and that most people that she knows would easily recognize: hand crocheted pot holders, Bialetti moka pots in three sizes, a Thonet bistro chair and two milk glasses, a Picardie-glass by Duralex and the Lulli-glass by Vereco.



Figure 2. Iconic objects. Photo: Kristine Næss

She ended up choosing the specific glass because of the open, simple and approachable, but also distinct, form with diamond shaped facets, that both make the glass easy to grasp and gives it some associations to crystal glasses.

In the thesis Kristine makes a descriptive analysis of the particular glass in her hand:

The glass is quite small, hard and smooth. The lower part is covered by concave facets. It is relatively thick; it is a solid glass. Even if the surface is smooth it has been marked by many years of use. In some places the surface is opaque with tiny little scratches. The form is both severe and soft, soft at the border, severe where the facets are (Næss, 2016, p. 29).

Until now the glass has most probably had a life as a typical everyday object, an object that serves us and that we thus do not notice until we are made aware of it either because it breaks or because somebody picks it out from hundreds of other objects in a second-hand store.

The Translation in Porcelain

One of Kristine's intentions with the project is to honour the glass by making it noticeable in the eyes of fellow humans:

I want it to appear as the opposite. I want it to show, show to itself and show to us. Be unique, show itself as the stayer it actually is. I want to build it up, make it big and visible (ibid., p. 28).

Before she selected the glass, Kristine had already decided that she wanted to explore an everyday object by communicating its value through a translation in porcelain (ibid., p. 19). As material, porcelain is quite different from industrially made glass: it is delicate, the surface is soft and translucent, it has elegance, it is precious. When porcelain came from China to Europe in the 11th century it was called the 'white gold' and it was reserved for the very wealthy. The high content of the silicate mineral kaolinite makes it possible to fire it at very high temperatures leading to a total fusion of clay and glaze (ibid., p. 18). Like glass and ceramics, porcelain is

⁷ All translations from Kristine Næss' thesis are my own.

irreversible when fired. In the firing process the material is transformed into something completely new and it can never return to what is was before. In the thesis Kristine writes:

At the same time as fired clay is constant in its form, it is also infinitely fragile. I usually say to my pupils that when they work in clay they are producing something that might exist for centuries, think of that! While textiles are consumed over time or disintegrate and objects made out of tree can rot or burn, clay is something that is. If of course it is not broken along the road (ibid., p. 18).

The main part of the project, the translation process, is long and complicated: first Kristine made a plaster mould directly from the original glass, which allowed her to produce ceramic copies in exactly the same size and shape. She covered the ceramic glasses with pastel-coloured glaze and in her own words "the results became what I define as fine, they were easy to like" (ibid., p. 50).





Figure 3. Ceramic glasses with pastel-coloured glaze. Photo: Kristine Næss

Figure 4. Construction of the mould. Photo: Kristine Næss

Then she began to build a bigger form, an enlarged translation of the form of the glass made out of clay. It is a huge and slow work. First Kristine had to build up the outer form and then she had to cut out the diamond shaped facets one by one. When the clay translation was ready it was covered with plaster and the mould was produced. In order to separate the plaster mould from the clay, the clay model had to be destroyed.

The third and most prolonged step of the process is the work in porcelain. Kristine produced one translation after another trying to make different qualities appear. She produced eight of them. Some of them broke in the process, others survived. Some of them were glazed others were not. Each of them was an experiment, and in her thesis, Kristine described how her attention was directed at the process, at how to translate

her experience of the glass into the porcelain object. Like me, she defines her method as field work (ibid., p. 21). During the field work a key word for her is taking care:

The aim of my form was not to create a distance but to get closer to the content and to my relationship to the glass. I try to honor the thing by making it bigger than it is. And at the same time, I also want to contribute with my relations to the glass in the translation. To make this clear I have manifested it in the material, in tactility. By polishing and smoothing all facets and cavities I want them to continue to be part of the visual characteristics, and that the smooth feeling of cold glass against warm hands shall be recognizable (ibid., p. 65).

When Kristine began translation number eight she already knew that this was going to be the last one. She chose to take care of the raw qualities from translation number four, which was not glazed, but to create more traces of the work of her hands and other forms of elaboration. The lower part with facets was smoothened and the upper part was thinned and enlarged. All this work was made by hand after the porcelain clay translation was taken out of the mould but before the firing process. A translation of a translation.



Figure 5. Translation number eight. Photo: Kristine Næss

The result is quite unique: Translation number eight, the one that was exhibited in the final exam, was not at all big or monumental. Even if five times bigger than the original glass it appeared to me as small and in need of protection. It seemed nude and exposed on its pedestal. Although recognizable as a translation of 'the strongest glass in the world', it seemed fragile – even more humble than the everyday object. Kristine writes:

I will say that much of the value that I take with me from the glass – which is not about value in relation to use or to the material – I tried to make appear through the form. What I see now is that it has moved, not only through enlargement and a translation in material, but also in the way it has arisen, and in time. To work slowly and take time in the way of working, has for me now added an extra dimension. The form as construction, the form of the glass as a recognizable component and as my beholder of memories, and the work over time that is shown in the surface, contribute to give value to the new object of mine (ibid., p. 64).

— INTIMACY, SOLIDARITY, FRAGILITY —

Dialogue

So far, I have tried to approach Kristine's project through a translation of the most important parts of her master's project into a text of my own. Now it is time for dialogue and for trying to ask my questions. It is time to interrogate different aspects of the project in order to see what kind of answers I might get about ecological awareness in art education.

In order to keep focus, I will connect back to Morton's definition of ecological awareness:

Realizing that there are lots of different temporality formats is basically what ecological awareness is. It's equivalent to acknowledging in a deep way the existence of beings that aren't you with whom you coexist. Once you've done that, you can't un-acknowledge it. There's no going back (Morton, 2018, pp. 127–128).

Morton (ibid., p. 128) argues that objects, especially objects of art, "emit time" and that these nonhuman temporality formats have an impact on us, even if we usually try to ignore them. In fact, as modern humans, we tend to assume that animals, plants, paintings and plastic cups are living more or less in the same abstract and unified continuums of time and space as we are, and that their most important role is to function as tools or provisions for human needs. Consequently, we seldom try to tune our attention to things or surroundings as autonomous forms of being, and it is difficult for us to understand that they might relate to time and space in ways that are independent from human presence.

When I ask Kristine's project about how it relates to time, the first answers that I get are related to the human time formats mentioned explicitly in the thesis, for example time of memory (Kristine's personal relation to the glass from childhood memories), time of translation (the core of the project, time of exploration and handicraft, but also of thoughtfulness and dwelling), and time of narrative (related to the writing process). However, when I try to connect to the project as an object in its own right and to ask about temporality formats that are not related to humans, the challenges that I face are more troubling.

The main problem is that it becomes difficult for me to distinguish empirically between what happens as result of my human imagination and what belongs the object itself. According to the OOO-theory of Graham Harman (2018, pp. 78–80), the real object is per definition withdrawn, and what I can relate to is the sensual object, the object as it appears to me, and which will thus always be a correlate of my experience⁸. Yet in Harman's view (ibid., pp. 81–85) when we relate to objects of art these relations are capable of giving us experiences of closeness with the withdrawn reality of objects. This happens because art draws us towards formerly unknown ways of relating to things, ways that we perceive as poetic, estranged and somehow heightened. Although the real object *de facto* remains inaccessible, art is capable of connecting the viewer and the object in ways that make us experience the inwardness of things by actually connecting us to our own inwardness, our own object-being. Harman writes that through the use of metaphor, the withdrawal of the object is substituted by an experience of closeness which is real because it brings us closer to "the only RO [Real Object] that is not withdrawn from the situation: I myself, the real experiencer of the metaphor" (ibid., p. 84). When Kristine translates the glass into porcelain, not once but eight times, what she does could be viewed as exactly this: she connects to the real glass through the production of a series of metaphors which step by step bring her closer to 'the real glass'. Yet what the project actually gives to her, is not closeness to the real object, but closeness to her own reality as a person who is experiencing an object. A closeness to her own 'being object' among objects and thus to her own withdrawn existence.

Trying to follow this rather complex line of thought, my interrogation takes much of the same form as Kristine's translations: instead of approaching my object through critical analysis, I connect to it through the creation of a new, intermediate object – a text – which in Harman's vocabulary becomes a metaphor. The aim is thus to try to create a relationship between distinct, and indeed very different, forms of being without reducing one of them to an instrument for the other by considering Kristine's project both as my field and as my conspirator. I will present the results of this process through the unfolding in short texts of three modes of connection, which to me have been the most fruitful in relation to my interrogations about ecological awareness. The three modes are: intimacy, solidarity, and fragility.

Intimacy

When I read Kristine's thesis and look at the pictures, I imagine touching the smooth surfaces of the Vereco glass first and then of the object in porcelain. Through my imagination, I can almost feel what Harman (2018, p. 12) speaks of when he mentions the Heideggerian concept of withdrawal. Compared to my human temporality formats, objects made of glass and porcelain are 'eternal'; living forever through a smooth self-evidence that is completely different from my own way of being. By touching these surfaces, I sense how Kristine's project spins thin threads to non-human temporality formats, making them work somewhere in the corner of my human perception.

After a while, I begin to spend time with my own everyday glasses in a different way than what I am used to. I begin by slowing down, using my eyes, hands and lips to connect to the materiality of the objects, sensing them not as objects with a purpose but as bodies that are also sensing back, looking back, touching back. I sense what Morton means when he writes that ecological awareness is connected to a sense of intimacy "not a sense of belonging to something bigger: a sense of being close, even too close, to other lifeforms, of having them under one's skin" (Morton, 2013a, p. 139).

With a force of its own, the intimacy between me and the object is filled with a temporality format that I perceive as slow and dense. I feel that McKibben knows what I am talking about when he asks:

Can you imagine slower? Maybe so: the Slow food movement has spread

⁸ The sensual object can be related to the phenomenon of phenomenology.

steadily around the world for a decade. Now there is Slow Design, embracing the return of handwork; and the Slow City campaign. Our time has been marked by great ups and downs, booms with the occasional bust. Can you imagine steadiness? Can you make it work in your mind? (McKibben, 2010, pp. 103–104)

When I ask Kristine's project about intimacy, it tells me about how to tune to a more-than-human temporality format, which to my human perception is slow and sensuous. It makes me want to explore the world trough touch and to bring this form of exploration into arts and crafts education as one way of becoming ecological aware. How does a glass feel? A plastic bag? How is the feeling of soil? The feeling of dish soap? Of an iceberg?

Solidarity

When writing about aesthetic experience, Morton speaks of solidarity with what is given. To him, "solidarity in the artistic realm is already solidarity with nonhumans, whether or not this art is explicitly ecological" (Morton, 2018, p. 121). While intimacy is slow and close, solidarity is based on a bold recognition of difference. For example, the recognition of the apparently alienated and inhuman temporality format emitted by mass-produced and cheap everyday objects such as the Vereco glass.

When I try to tune to the industrial aspect of the glass, it appears to me as a symbol of modernity: serial, abstract, efficient, self-contained and self-sufficient. Being it-self a result of human power and control though machines⁹, I can feel how the glass controls me back. In an uncanny way it makes me think of the desirable subjectivity of neo-liberal discourses of schooling "attractive and enabling, and simultaneously prone to performativity and uniformity" (Hilt, Riese & Søreide, 2019, p. 394). With its self-contained and uniform way of being, the glass does not care about the particularities of my human individuality. And that is something that industrially produced objects can teach us: we are not important. We live briefly and our life depends on our relationship to non-caring objects.

Nonetheless, if we want to sense our being ecologically, we have to find ways to maintain careful solidarity and aesthetic awareness, also towards the immense amounts of industrial products, that exist across the world. If we see them and care for them, we might imagine that they will begin to care about us. We have to wash and repair even mass-produced things, not just to avoid buying new ones, but out of solidarity. Sensing and relating to the mystery of nonhuman forms of being that do not reach out to us might be crucial for an ecological awareness education, as much as sensing and relating to what we usually call nature.

Fragility

In contrast to the Vereco glass, the translation in porcelain is made by hand. Does that mean that the temporality format of the object in porcelain is closer to human temporality, than the object in glass? Not much; the translation is made in porcelain clay. It is partly moulded in a plaster form, it is fired in an oven and it is exhibited on a wooden pedestal in a concrete building, where it is experienced by humans only through sight. All these aspects, which have no direct relation to craftmanship, contribute to the making of the object. And they contribute with their own temporality formats.

Yet of course the translation bears traces of Kristine's hands. It is not only moulded, it is modelled. It asks for aesthetic attention, but is not demanding. It displays the humility of the everyday object combined with the uniqueness of the handmade object and the fragility of the semi-transparent material and tender appearance. It also helps us to get out of the utilitarian mode with objects and towards something different, a reality with twisted values. Even if we are aware that praising art for its exclusiveness is a dangerous path, we can still be curious about where the feeling of exclusiveness can lead us. Can it bring us closer to ecological awareness? Can it also be applied to non-art objects?

What I learn from Kristine's project is that it is directed at meeting the material halfway; listening to it and challenging it without pretending to dominate or protect it. What I also learn is that even if the Vereco glass might be said to embrace 'healthy' values of durability and confidence, these are not the values highlighted by the project of translation. On the contrary what I see are values like humility, insecurity, unstableness – unfinished, unfixed, but still there. Proudly existing on its own terms.

The move of art is the move of aesthetic experience, which Kristine's project tells me is not reserved to humans. It is the experience of the non-accessibility of objects together with the feeling that they are still communicating and that they have to be respected. Objects can become symbols of what we have to reach if we want to continue human life: some kind of taking care. "Art is thought from the future. Thought we cannot explicitly think at present. Thought we might not think or speak at all" (Morton, 2016, p. 1).



Figure 6. Final Master's exibition. Photo: Kristine Næss

⁹ Consider watching the Duralex video on YouTube (DuralexUSA, 2017), and you will see what you can already imagine, namely that the glasses are produced by huge and incredibly strong machines without ever being touched by human hands, and at a speed of (as far as I manage to count) approximately 150 glasses per minute, just for one model.

Art Education and Ecological Awareness

In the first pages of the thesis, Kristine reflects on her role as an *arts* and *crafts* teacher in relation to ethical questions of value-based choices. She writes:

As a teacher in a lower secondary school I am interested in the formative work that I am allowed to participate in as part of my job. To be able to influence and make conscious the future value-choices of pupils is a task that calls for my respect. At the same time, it is a challenge that I want to be part of, and it is my hope that this [thesis] will make my own values appear more clearly (p. 8).

When I connect my dialogue with Kristine's project to arts and crafts education, I find that it tells me about ecological awareness as a way to create new, substantial relationships between humans and nonhumans through artistic practices. I also see that this understanding of ecological awareness does not fit in with the definition of sustainable development in the present curriculum proposal for the Norwegian subject of arts and crafts. Kristine's project is not about innovation and problem solving in order to be able to go on as usual; it is almost the contrary, it is about deconstruction and destabilization in order to create a new understanding of what it means to live in a world where human and nonhuman forms of being meet on an equal footing. The matter of concern forwarded by the project is not about how to become more efficient and robust, it is about some sort of insistent transparency. Insistent fragility. Insistent uniqueness. Insistent aesthetics of the broken, uncomplete, childish, useless.

The translation from the sturdy and strong everyday glass into the unstable existence of the object in porcelain opens a new direction for arts and crafts as a school subject that is capable of embracing fragile forms of existence. In contrast to the present focus on being rational, enduring and self-contained, Kristine's project choses the opposite way by being process-oriented, explorative, and curious towards both the Vereco glass and towards her ongoing relation to the porcelain as material and as form. Typical of creative processes, her awareness is directed more outwards than inwards. It is directed at listening to the material and challenging it without pretending to dominate or protect it.

Looking at the project, I see that arts and crafts education might prepare us to live in difficult times, but rather that doing so by contributing further to human control it could contribute by teaching us different ways of relating to nonhuman forms of being, and through that to different ways of relating to ourselves. It actually shows me that arts and crafts education is already about living on the edge of things, and that the main problem is probably to acknowledge it and give it time. To slow down and dwell in the encounters.

Following my learning from Kristine's project I will try summarize some important insights that might guide future arts and crafts education for ecological awareness:

1. Intimacy. A persistent process-oriented focus on how we do things and how we relate to things. This explorative awareness towards relationships is a goal

in itself, which is both individual, social and environmental. By relating to objects through intimacy, we discover new ways to be with beings, or even *become* with beings. Art making processes are intimate relationships to the world through sensuous ecological perception.

- 2. Solidarity. Like humans and animals, objects have their own independent life. To relate to an object is to relate to a different temporality format. Solidarity with nonhumans is a feeling of respect that can be enhanced through artistic practice that includes and respects qualities emitted by objects.
- 3. Fragility. A concrete way of relating is through the creation of metaphors, for example by the creation of mimetic objects, situations or events. To translate objects like Kristine does, to copy art works, to copy gestures, to copy cloth. This form of working is an advanced form of communication through material practices. A fragile exchange among withdrawn objects. Almost a form of meditation.
- 4. The three modes of intimacy, solidarity, fragility could be of inspiration for how to tune to the world in a way that is different from the human control promoted by neo-liberal discourses on sustainable development. These are examples of the modes that should be explored by arts and crafts. We have to use art to connect to the temporality formats of nonhuman forms of being. What could be the temporality formats of a pen? A bird? An iPad? How can we inhabit alternative modes related to temporality formats such as slow, viscous, sticky and boring time? How can we inhabit slow?

Acknowledgments

I would like to thank Kristine Næss for generously allowing me to work with her project as partner for my interrogations. I also wish to thank my colleagues Monica Klungland, Lisbet Skregelid and Anna Svingen-Austestad for our inspiring collaboration on the development and presentations of alternative proposals for the Norwegian national curriculum of *arts and crafts*.

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How to Set the Table for Collaborations: Artistic Sensibilities and Methods

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ABSTRACT

Can artistic methods and ways of engaging with the environment have an impact beyond the artwork's effect as a tool of communication or as an object positioned within the art context itself? Based on experiences and mapping of artistic practices from the site-specific Oslofjord Ecologies and other collaborations, the meaning and aesthetic value of the artistic method has become an inherent quality of the art work. After a process of mapping artistic interests and sensibilities, four conceptions were formed. By thinking through these, materiality, sensuous experience, performativity and construction of narratives, I look for artistic qualities or sensibilities occurring in contemporary art practices. From an ecological point of view, the understanding and interpretation of artworks and specific artistic processes along with theoretical inspirations and references could make artistic practice relevant across transdisciplinary collaborations.

KEYWORDS: Oslofjord Ecologies, artistic method, turn to matter, sensuous experience, performative practice

Asking ourselves the unanswerable **what can art do?** we echo questions from many other fields of knowledge and professional expertise as we face the climate crises. I was curious about artistic thinking and methodology as a means to connect to a wider ecological context, not only looking for the specific and distinctive in eco-art or bio-art aesthetics. Can artistic methods and ways of engaging with the environment have an impact beyond the artwork's effect as a tool of communication or as an object positioned within the art context itself? This question arouse from working with diverse artistic fields and research interests in Oslofjord Ecologies, as well as from participation in the Renewable Futures network's activities and other artistic exchanges, research situations and meetings over the years. By taking an interest in a range of contemporary artistic practices as well as entering into transdisciplinary collaborations, I observed that the methods in aesthetic action and thinking might be as valuable in transdisciplinary communication as the artworks themselves. The implementation of an artwork, how and by what methods it is produced and presented, will be a layer in how the meaning is perceived. I found support in theory from different fields and examples from artistic works and practices. In the following, I will formulate some reflections from the perspective of a practising artist, curator and educator in an experimental art field. This article is an essayistic formulation of observations and ideas in the context of a specific environment, rather than a survey or an attempt at a general theoretical framework.

At a seminar on art and the climate crises, organized by BOA (Billedkunstnere i Oslo og Akershus), an artist's organization in Oslo, Dag O. Hessen professor of biology at the University of Oslo, suggested that art had an important function in formulating and disseminating content and topics in the ecological crises (BOA, 2017). Since the gravity of the situation is hard to grasp through scientific research information alone, artistic expressions might access and affect humans on an emotional level that could motivate people differently. This is hard to disagree with, however, I was left with an unsatisfied feeling as art was being conceived as merely another communication tool, however effective. I found support in Sacha Kagan's belief that art has the "potential to be the active process of interdependences between different dimensions of human crisis that draws us into the search for pathways to a post-fossil fuel age, and on to a new era of human development based on an aesthetics of sustainability" (Kagan, 2012, p. 7). Kagan, an interdisciplinary researcher in ecology, art and sustainability, PhD of social sciences, argues for the role of art in transforming our ways of behaviour to reach a more sustainable existence. Such a sustainable aesthetic in what he calls a culture of complexity brings forward an optimistic vision of art that include its processes, poetics and aesthetic thinking, not only its objects or functions as commodities. I will let Kagan's idea of aesthetic sustainability as a "sensibility to patterns that connect" (Kagan, 2012, p. 32) inspire a further look at artistic methods, susceptibilities and qualities in Oslofjord Ecologies.

Oslofjord Ecologies as a Site

Oslofjord Ecologies is a site-specific project, although this is interpreted more as characteristics of the area than a strict geographical delineation. A project comprising more than fifty workshop participants, among them twenty exhibiting or performing artists in two exhibitions, produced a lot of material and documentation. In thinking of the artistic qualities and their intersections as functions in different contexts, the genealogy of the site-specific offered by art historian Miwon Kwon in her seminal book One Place after Another (2002) is useful. Kwon suggests three instances of the site-specific. The first is the phenomenological, which is concerned with the physical and sensuous properties to be experienced in a site. Secondly, the social or institutional can be found in works that decode different sites and interests involved in the work of art, namely institutional critique. The discursive, which she poses as the third category, is linked to the present and to the two other categories. This entails how the art work relates to the actuality of a location (as site) and the social conditions of the institutional frame (as site). These are both subordinate to a discursively determined site that is delineated as a field of knowledge, intellectual exchange, or cultural debate. This may be created by the artwork itself or be a potential of the site that can be activated (Kwon, 2002). All three site categories can be found in Oslofjord Ecologies as intentions in the project lay-out and in the different artworks.

Oslofjord Ecologies' Mapping of Sensibilities

Through mapping interests and backgrounds in a pre-project, *Ecotones*, the following four artistic strands of qualities were suggested: **materiality**, **sensory experience**, **performative practice and construction of narratives**. These qualities intersect; they could also be seen as sensibilities or interests, but not as clear-cut categories. Even if *Ecotones* did not go further than a field trip and mapping, these strands have lived on in recurring projects. The attempts to name and describe some trajectories of contemporary artistic practices stem from a sense of relevance also to other areas, from the vernacular realm, to research and education in view of the ongoing ecological crises.

Materiality

Materiality is essential to the relationship between humans and their environments. Artists who joined the mapping of Ecotones and later worked with Oslofjord Ecologies underscored the physicality and tactility in interacting with our surroundings that we all depend on as humans. This is not understood as a purely technical relationship, the act of preparing a material to utilize it for a purpose, but also as an interaction of pleasure or sensuous experience with a material. Kneading bread dough is something you have to do to make bread by hand, preferred by many for the pure pleasure of it, even if you have the choice of using a kitchen machine to do the kneading. Material-based art practices have become more prevalent within the contemporary art scene in recent years. There is a new emphasis on contextual aspects that relates to experimentation, conceptualization and narrative elements – what can be described as materialized narrations in which the act of crafting represents ideas of time and labour. An expanded view on materiality, often coined as New Materialism is emerging across arts, humanities and social sciences. This turn to matter is characterized by social production rather than social construction, inspired by feminist, queer, post-colonial and post-structuralist positions (Fox & Alldred, 2019). Multiplicity and diversity replace the dichotomies of, for instance, nature and culture, mind and matter, humans and non-humans. According to New Materialism thought, the world and history are created by a range of material forces that extend from the physical and the biological to the psychological, social and cultural. New Materialism opens up a multiplicity and diversity in a critique of anthropocentrism.

Sensory Experience

Sensory experience is again frequently discussed in contemporary art theory and often actualized in relation to ecology and human experience of nature, after being less prevalent and maybe overshadowed by a conceptual turn since the 1960s. The direct connection between the original meaning of aesthetics (aesthesis – the senses) and the function of art, is perceived by the German philosopher Gernot

Böhme. Böhme envisions a renewed philosophy of aesthetics to encompass the sensory realm at large. By including both nature and the man-made, such as urban architecture, design and advertisement, all of the environment can be attended to (Böhme, 2008). The interest in sensory experience can be seen as a complement to the interest in audience participation and a rethinking of the sensory as including more than visuality and sound. In Oslofjord Ecologies, the Listening to the Fjord boat trip was an example of the experiential as a common base from where different references were taken and works emerged. The senses can inspire direct engagement with environmental traits to create awareness, appreciation or critique of qualities in a specific environment. It might also lead to engagement with social situations, living beings, objects or materials and interactions. Ethics of care are often based in a sense of embodiment, a connection that is felt as a sensuous or bodily connection to a physical site, a place, objects or situation. Elin T. Sørensen's research project discussed in the article The Blue Mussel's Voice formulates a concept of care as leading to interspecies co-creation.

Performative Practice

Performative practice is an approach in which we consider elements from the perspective of how they are acted out and have an effect in the world. In actor-network theory, all events occurring within the social and natural worlds are considered to be continuously generated effects of the webs of relations that they are located within. Instead of asking why something happens, actor-network theory asks how it occurs, and studies how occurrences arrange themselves. The performative addresses how the materials of the world (social, technical, documentary, natural, human, animal) get themselves done and on how they go on shifting and relating themselves in the processes that enact realities and knowledge (Law, 2008). From this perspective, performative practice is not only a typically human behaviour, expressing and reflecting the intentions of humans, but also collaborative relationships between heterogeneous elements such as organisms, objects and sites. The performative is also prominent in bio-art and techno-ecological genres where processes in living material are displayed or made visible or audible as they happen in time. The direct experience of bacteria as electricity producers in Rasa Smite and Raitis Smits work Biotricity. Fluctuations of Micro-Worlds is an interesting example as it also offers numerous mediations of the process through sound, image and time-lapse documentation.

Construction of Narratives

Construction of narratives entails practices of assembling and appropriating material. Often documentation of various phenomena and historical documents will be archived and collected as a basis for constructing new narratives. As the art historian Charles Merewether expresses it: "The archive, as distinct from a collection or library, constitutes a repository or ordered system of documents and records, both verbal and visual, that is the foundation from which history is written." (Merewether,

2006, p. 10) The critic and writer Hal Foster (2004, p. 5) underlines the constructed in the archive as a productive element in his analysis of art based on archival material when he writes: "[I]t not only draws on informal archives but produces them as well, and does so in a way that underscores the nature of all archival materials as found yet constructed, factual yet fictive, public yet private." (Foster, 2004, p. 5) From the Oslofjord Ecologies perspective, historical and cultural documents and items may be sources of information as well as material for artistic appropriation and storytelling. Gunhild Vatn's investigation of Norwegian oil aesthetics is an example of how historical material can be understood and contextualized to shed light on the ambiguous past and present of our fossil economy and its dissemination. In view of an uncertain time ahead, the narrative may also be a way to suggest a different future or imagine alternative solutions. The narrative strategy might also enhance, empower and give voice to living beings that are otherwise without a voice, as Sabine Popp's work with kelp and the discourses deriving from them does. Co-creating with other living beings, whether human or non-human is immanent in the art works and activities throughout Oslofjord Ecologies, and philosophical inspiration could come from influences such as Donna Haraway's term sympoieisis, or "making-with" (Haraway, 2016, pp. 58-98). Informed by developmental biology as well as conflicted indigenous life practices and contemporary art, sympoieisis underscores the creative entanglement and interdependencies between all beings (or critters in Haraway's language), but also the interdependencies of how our stories are told and knowledge is constructed. In Haraways words: "We relate, know, think, world, and tell stories through and with other stories, worlds, knowledges, thinkings, yearnings. So do all the other critters of Terra, in all our bumptious diversity and category-breaking speciations and knottings." (Haraway, 2016, p. 97) This short summing-up of complex relationships can also provide a perspective on how ecology and art may come together in a more general sense. Sympoieisis points to qualities to be aimed at in artistic practices as well as in daily life. Through Oslofjord Ecologies conversations a metaphor for art's role in the transdisciplinary was suggested: to set the table as a host and facilitate others to work with us. This potential of instigating sympoieisis seems to justify or support the optimistic belief of Sacha Kagan in "a new era of human development based on an aesthetics of sustainability", which I leaned on in the introduction.

The interests or sensibilities mapped at the outset of this essay: **materiality**, **sensory experience**, **performative practice and construction of narratives**, can all be ingredients in artistic methods, as well as constituting part of other practices within research, professional realms or the everyday. Artistic practice can accordingly be characterized by methods invented by the artist while referencing other artistic practices, research paradigms and other aesthetic, theoretical and professional perspectives. The method carries meaning and contributes new layers of interpretation and reception to art as well as facilitating production in new ways. By allowing for inherent or possible production of meaning in the context of a site, artistic methods are open to interpretations. It might be that the methodological flexibility and inherent transdisciplinary openness are among the components artists can bring to the common metaphorical table. Throughout the Oslofjord Ecologies, the rhetorical ring and totality of **what can art do?** is a conversation starter and motivator across disciplines, while at the same time inquiring into the singularities of art. By changing the question to **how does art do (something)**, we seem to activate an array of suggestions and practical links to other fields of knowledge.

See the Author's Biography and correspondence contact information on page 20.

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2

ALBUM. OSLOFJORD ECOLOGIES EXHIBITIONS, PERFORMANCES AND ACTIVITIES

The workshop Oslofjord Ecologies was conducted in November 2016. It was structured in three main themes suggested by participants: (Art)Education was the first, Artistic Research the second, The Everyday: Action and Agency was the third theme. The themes fed into each other and were prepared as sessions of presentations. The format of the presentations differed, and ranged from academic papers to artistic presentations and actions. An activity program complemented the workshop.

Program and participants: (Art)Education

Presenters: Helene Illeris, Charlotte Blanche Myhrvold, Nina Vestby, Edita Musneckiene, Anneke von der Fehr, Tona Gulpinar, First Supper Symposium (Camilla Dahl with Gidsken Braadlie), Christina Ellingsen, Mamdooh Afdile, Tenthaus (Stefan Schröder, Ebba Moi and Helen Eriksen)

Artistic Research

Presenters: Gunhild Vatn, Kirsty Kross, Hanan Benammar, Merete Røstad, Kristin Bergaust, Rasa Smite, Ingebjørg Torgersen, Biljana Fredriksen, Nina Vestby, Concerned Artists Norway (Elisabeth Medbøe), Sabine Popp, Elin T. Sørensen, Ellen Røed, Boel Christensen-Scheel, Oslofjord Biological Diversity by biologist Eli Rinde The Everyday: Action and Agency

Flatbread Society, presented by Mads Pålsrud; Gentle Actions and Resilience presented by Eva Bakkeslet;

Langøyene Free Camping storytelling by Cathrine Constanse Gjelsnes.

Activities

- Listening to the Fjord. Hydrophonic Listening with Siri Austeen, Eli Rinde and others
- REPAIR Galleri ROM exhibition tour, Gallery
 Opening TENTHAUS
- Artistic Method Workshop with Merete Røstad
- Voicing and Sounding workshop with Tony Valberg
- City Walk performance to Bjørvika with Kafé Barbara (Gunnhild Bakke and Annabeth Kolstø)
- Kelp workshop and meal with Zoe Christensen at the Flatbread Society Bakehouse in Losætra, a project by Future Farmers and a meeting with project leader Anne Beate Hovind
- Bio-Art workshop with Hege Tapio
- Mini-exhibition by participants



Rasa Smite presenting at the Atelier Nord workshop venue. Photo: Oslofjord Ecologies





Walking performance Kafé Barbara: Gunnhild Bakke and Annabeth Kolstø. Photo: Oslofjord Ecologies





Kelp workshop with Zoe Christensen of the Northern Company at the Flatbread Society Bakehouse Losætra

Bio-Art workshop. Extracting DNA with kitchen chemicals with Hege Tapio. Photo: Oslofjord Ecologies



From Langøyene Storytelling by Cathrine Constanse Gjelsnes at the closing event. Photo: Frode Sten Jacobsen

Listening to the Fjord Boat Trip

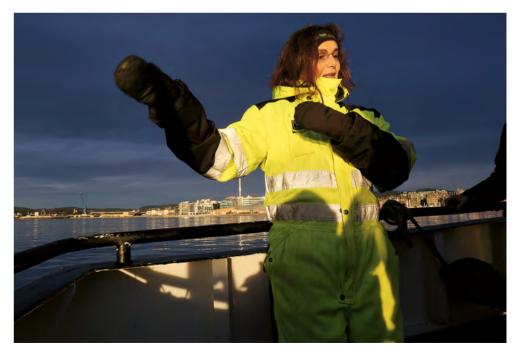
As part of the Oslofjord Ecologies workshop in November 2016, the musician, artist and participant Siri Austeen organized "Listening to the Fjord", a boat trip to listen to the fjord through hydro-phones, and to feel the weather and atmosphere of the Inner Oslofjord. This trip in a rented boat was a very productive part of the Oslofjord Ecologies project. We were fourteen passengers equipped with some hydrophones and headsets and various recording devices. Travelling the inner Oslofjord, we listened to animal life in the sea as well as the underwater noise of the big ships. Biologist Eli Rinde helped us understand the animal sounds, and the skipper showed us the echo sounder images of what we were listening to. We observed the building activities along Oslo's shoreline, the largest urban development ever undertaken in Norway, and the industrial harbour outside the city centre.



Inner Oslofjord. Photo: Ellen Røed



Kristin Bergaust and Elin T. Sørensen. Photo: Ellen Røed



Biologist Eli Rinde. Photo: Ellen Røed

Ecological Rorschach: Pacific Oysters – Crassostrea Gigas on a Rock Siri Austeen

Following the "Listening to the Fjord" field trip, Austeen used some of the recordings in a sound installation accessible to the audience through head-sets presenting Pacific oysters, an invasive species, on a rock. For the Oslofjord Ecologies Experience Austeen presented two sound works: "Fog Fjord" (05:57 min): Imaginary, documentary and remembered sounds, sonic reflections on a fjord landscape; and "We Are Earth Others", vol. 2. (08:41 min): Composition / vocal work based on the poem Drinking (Abraham Cowley, 1618–1667).

For Oslofjord Ecologies Extended, Austeen developed this work further into "Sonic Re-flections on Water" (07:03 min): Composition based on submarine sound recordings from the Inner Oslofjord. Siri Austeen (1961) is a Norwegian sound artist based in Oslo. Austeen's artistic practice is based on field recordings, site-specific installations, participatory projects, musical productions, performance and commissioned art projects. Austeen is concerned with the relationship between sound, place and identity at the intersection of audio and visual art.

She highlights the impact listening strategies have on our reception of reality and the personal experience of an investigative and sensory self. In Sonic Propagation, transducer technology is used to transmit sound by various physical materials used as membranes, allowing her to explore new approaches towards sound, place and reality.

In 2020 Austeen is a participant in the Praksis Oslo Project: Climata: Capturing Change at a Time of Ecological Crisis.



Ecological Rorschach: Stillehavsøsters (Pacific Oysters) – Crassostrea Gigas on a Rock. Photo: Alexis Parra Pucho



Siri Austeen operating the hydrophone during Listening to the Fjord 2016. Photo: Ellen Røed

Underwater in the Oslofjord Kristin Bergaust

The animation CRUISE (2:07 min) relates the story of how in 2016 the Oslo harbour authorities removed underwater reefs to increase the depth of the fjord from 11 to 14 meters to facilitate easier access for cruise ships to Oslo harbour. These reefs were also important spawning grounds for cod in Skagerak, the strait between the south of Norway and Denmark. CRUISE was made right after it happened in 2016, and speculates about the situation and its possible consequences. Now in 2020, the cod population has declined to an alarming degree. Fishing for cod is prohibited in the whole of the Oslofjord, and off the south-east coast of Norway. There may be complex reasons for this situation, but the removal of the spawning grounds cannot have been a sound way to safe-guard the existence of cod in the Oslofjord.

See the Author's Biography on page 20.







Screenshots from Cruise by Kristin Bergaust, 2017

The minimum depth was increased from 11 to 14 meters

Screenshots from Cruise by Kristin Bergaust, 2017



HAV Exhibition Elin T. Sørensen

HAV is an exhibition orchestrated by artist and landscape architect Elin T. Sørensen as one part of her doctoral project *Making Space for the Urban Blue*, carried out at the Norwegian University of Life Sciences, NMBU. Sørensen's article in this volume, The Blue Mussel's Voice is also part of this doctoral project. HAV is curated by Annike Flo and is being staged at the Norwegian BioArt Arena Vitenparken Campus Ås in 2020.

By imitating the spatial qualities of the natural rocky shore, humans too can create diverse residential areas along urban developments. Providing new marine housing is one way of repairing erased tidal landscapes. The photo documentation shows the process of developing marine housing based on the upcycling of industrial porcelain wreckage from Norwegian Technical Porcelain NTP Fredrikstad, January 2020.



An electrostatic precipitator in the process of being upcycled to facilitate marine settlers. Photo: Karin Beate Nosterud, 2020

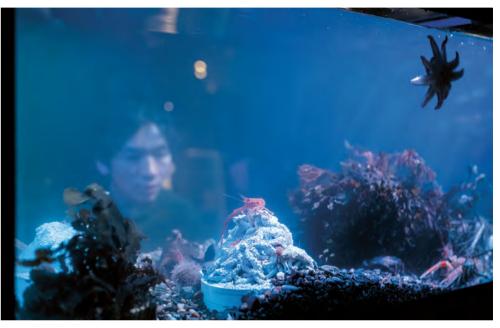


Knotted wrack (*Ascophyllum nodosum*) dipped in liquid porcelain. Photo: Karin Beate Nosterud, 2020

HAV is an immersive art installation evoking the spatiality of the undersea landscape together with the colours and lifeforms within this hidden, fluid realm. Hence, HAV has many co-creators: barnacles and marine biologists, porcelain, sugar kelp, saltwater, ceramicists, crabs, clay, brush worms and many more. In the centre piece, the saltwater aquarium, the lead roles are played by native Oslofjord creatures such as shore crabs, hermit crabs, the eelpout and shorthorn sculpin living in and amongst rocks and porcelain houses.

HAV is dedicated to the legacy of Rachel Carson; created in- and by a state of wonder.¹

See the Author's Biography on page 60.



Saltwater aquarium with animals from Drøbak Akvarium at the HAV exhibition. Photo: Joe Urrutia, 2020



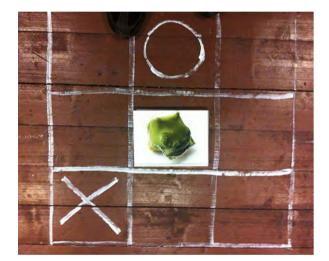
From HAV. Photo: Joe Urrutia, 2020

 Carson, R. (1965). The Sense of Wonder – A Celebration of Nature for Parents and Children. HarperCollins Publishers Inc. 2017.

Agential Matter (Invisible Landscapes) Sabine Popp

Sabine Popp's "Agential Matter (Invisible Landscapes)" project as an artistic research fellow at the University of Bergen, is an investigation of kelp, or sea-grass. In her article for Oslofjord Ecologies, pro.vocations (for a not yet fully articulated time), Popp describes her many angles to what she calls the *thing*, kelp. The term provocation is here to be understood in Bruno Latour's literal meaning: the production of voices. The question is how to give a voice to things which have been regarded as having no speech? Kelp is not only a versatile, natural edible material of many uses, but also an area of discourse and possible conflict. Her artistic work seeks to activate these discourses in the audience, who can then engage with her findings, a collection of images drawn from research on the internet, in books, in the studio and in the field – following marine biologists in their various tasks in their effort to give speech to algae and those who form their wider community. The work has been presented both as a floor puzzle and as a card-game.

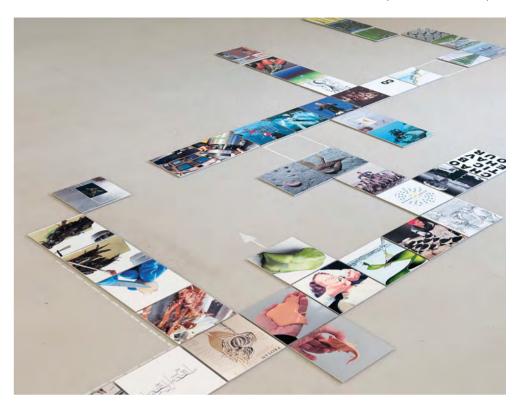
See Author's Biography on page 78.



Kelp object, experiment at an Oslofjord Ecologies workshop. Photo: Oslofjord Ecologies



pro.vocations (for a not yet fully articulated time) – iteration of a card game performance at Oslofjord Ecologies Extended, Aalto University, 2018. Photo: Pavel Arkharov





pro.vocations (for a not yet fully articulated time) as a floor installation at the Oslofjord Ecologies Experience Oslo 2017. Photo: Sabine Popp

Biotricity. Fluctuations of Micro-Worlds Rasa Smite and Raitis Smits

Biotricity is one of many experiments with mud batteries developed by Rasa Smite and Raitis Smits over the years. The batteries are fuelled by bacteria living in the bottom of a pond, lake, swamp or sea. By sonic rendering, real-time visualization and data interpretations, the Biotricity inspires our senses and emotions to connect us to the invisible living environment around us. Transforming energy through a poetics of ecology, awarding visibility and expression to what is otherwise unseen and unheard by humans could lead to new concepts in aesthetics.

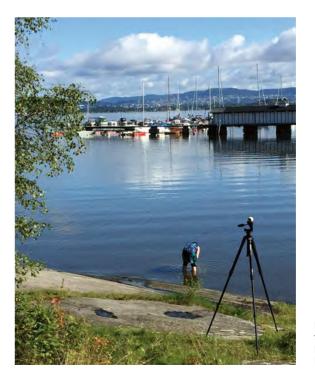
Rasa Smite and Raitis Smits are pioneering media artists, cultural innovators, curators and educators working with cross-disciplinary and emerging media since the mid-90s. They are co-founders of RIXC Center for New Media Culture in Riga (Latvia), the curators of its annual festival, and the editors of the Acoustic Space publication series. They also work as researchers and educators in Latvia and Europe; currently they are visiting lecturers at MIT Art, Culture and Technology Program in Boston, USA. In their artistic practice, Smite and Smits work together as an artist duo, creating visionary and networked 'techno-ecological' artworks. Over the years Rasa and Raitis have received numerous awards such as the PRIX Ars Electronica. http://smitesmits.com



Biotricity installed in RAM Galleri 2017. Photo: Alexis Parra Pucho



Biotricity detail in RAM Galleri 2017. Photo: Alexis Parra Pucho



Rasa Smite collecting mud for battery in Ursvik at Nesodden, Oslofjord 2017. Photo: Kristin Bergaust

Energy Catcher Alexis Parra Pucho

By letting the sun capture ephemeral images of plants in his garden by the Oslofjord, Alexis Pucho makes visible the movement and the energy of the sun and plants. Different from a traditional photographic contact copy on a light sensitive surface, these images are done on the site, the plants are alive and moving. Alexis Parra Pucho was born in Havana in Cuba, but has lived in Norway since 2006. He has broad experience as a printmaker in silkscreen and lithography, as well as in public actions. Pucho has exhibited extensively in Cuba and elsewhere. His recent artistic work is often more sculptural or object based and reflects an interest in ecology in a wide sense. By creating experiences and making visible natural processes as well as characteristics of objects and tools, his experience in moving between cultures is often also a reference.



Energy Catcher from the outside of the RAM Galleri. Photo: Alexis Parra Pucho



Production of the screens in the garden. Photo: Alexis Parra Pucho



Energy Catcher in the gallery. Photo: Alexis Parra Pucho

Charging the Batteries in the Tragedy of the Commons Cathrine Constanse Gjelsnes

Cathrine Constanse Gjelsnes' work for Oslofjord Ecologies looks at the tradition of free camping and holiday making in the islands of the Oslofjord. In 2017 she did a lecture-performance entitled The Tragedy Of The Commons, to speak about Langøyene and its people. Langøyene is formed by two islands connected by a landfill on top of a former municipal dumping ground for garbage. The tragedy of the commons was first coined as a concept by Garrett Hardin, professor in human ecology, in 1968, and is used in economics and environmental science to describe how people who while acting independently and rationally according to their individual self-interest are behaving contrary to the best interests of the whole group by depleting common resources. At Oslofjord Ecologies Extended in 2018, Constanse's lecture was transformed into a performance walk across the island, presented

in the exhibition as a video work: In Charging the Batteries (camera and editing by Frode Sten Jacobsen). Constanse lead us from her hammock hung among the trees with a view to the fjord, on a path across the island, where we meet diverse neighbours along the way, to end up at the toilet where the only electric socket for charging mobile phones is available; a glimpse of what it means to share scarce resources in a diverse, social community.

Cathrine Constanse Gjelsnes works with video, installations, objects, performances, relational aesthetics, institutional critiques, actionism, and her alter ego – an older woman called Fru Felgen. She was one of the artists in the artist-run gallery G.U.N Oslo (1994–2003). She initiated Gallery 69 and has curated it since 2004. She has some hundreds of exhibitions on her conscience as a curator and an artist.



Charging the Batteries (Gjelsnes/Jacobsen) shown at Oslofjord Ecologies Extended. Photo: Pavel Arkharov



What is the tragedy of the commons?

- The tragedy of the commons is an economic problem in which every individual try to reap the greatest benefit form a given resource.
- As the demand for the resource overwhelms the supply, every individual who consumes an additional unit directly harms other who can no longer enjoy the benefits.
- Generally the resource of interest is easily available to all individuals; the tragedy of the commons occurs when individuals neglect the wellbeing of society in the pursuit of personal gain.

Definition of The Tragedy of the Commons. Screenshot from the lecture performance

Guest getting ready for the sea. Photo: Cathrine Constanse Gjelsnes



Constanse in her hammock with a view of the fjord. Screenshot from the Charging the Batteries video (Gjelsnes/Jacobsen)

Ocean Viking Gunhild Vatn

Gunhild Vatn presents her work with Norwegian oil aesthetics in her article *The Ambivalence of Oil Aesthetics*. Historical photos of *Ocean Viking*, the first Norwegian oil platform being manufactured at Aker's Mek. from 1966– 1969 in the inner Oslo Fjord, right in front of

Oslo City Hall, were captured and celebrated on 9 porcelain plates, reminiscent of the traditional visuality of commemoration and celebration plates.

See the Author's Biography on page 95.



Ocean Viking. The first oil was found in the Ekofisk-field, Norway in 1969. Photo: © Connoco/Norsk oljemuseum



Gunhild Vatn. "Ocean Viking" Detail. Porcelain plates, Trøndelag Center of Contemporary Art, Trondheim. 2019. Photo: © Susann Jamtøy



Following the reflections on oil aesthetics, Gunhild Vatn developed the "Propaganda" poster installation, with replicas of old advertising and propaganda posters aimed at the consumer. Once the source of prosperity and equality, oil extraction in the North-Sea now contributes to political disagreement across generations and between political movements.



Gunhild Vatn. "Propaganda" Poster Installation, "Ocean Viking" and "The Dance around the Golden Calf". Trøndelag Center of Contemporary Art, Trondheim, 2019. Photo: © Susann Jamtøy



Gunhild Vatn. "The Dance around the Golden Calf" Porcelain sculpture. Porcelain bull with golden glaze, steel and concrete, golden wall paint. Trøndelag Center of Contemporary Art, Trondheim, 2019. Photo: © Susann Jamtøy

Be Extended: Oslo Tona Gulpinar and Anneke von der Fehr

Tona Gulpinar and Anneke von der Fehr present their process of this project in their article *Be Extended: Oslo.* Their white, soft textile sculptures started as research on children's experiential and social use of the amorphous shapes reminiscent of old-fashioned rag doll torsos. The last iteration of the project is a public sculpture in white concrete overlooking the City Hall Square.

For Oslofjord Ecologies, Be Extended flexible sculptures have functioned as meeting places for audiences and artists.

See Author Biographies on page 105.



Be Extended concrete sculpture overlooking the City Hall Square and piers towards the Oslofjord. Photos: Line Lyngstadaas



Be Extended textile sculpture at Notodden in 2017. Photo: Be Extended



Being water... Ingebjørg Torgersen

Water and sanitation is United Nations Sustainable Development Goal number 6.

Is it possible to achieve this goal? A tired ballerina in a white, protective suit tries. Included are Akerselva, two water-taps and a cup of tea.

Being Water was the opening performance and video at the Oslofjord Ecologies Experience, Galleri RAM 2017. By connecting to water as a circulatory system, the global water situation was highlighted at the opening of Oslofjord Ecologies Experience.

Ingebjørg Torgersen (Norway) has studied agriculture and graduated from the Danish Film School. She works in the visual arts, performing arts and film. She has been affiliated with several performance groups and art spaces: The Heartists, Fakta Morgana, Gorgon produksjoner, Gallery GUN and Sound of Mu. Her works are narratives and she is particularly concerned with the intersections of politics, science and art. She runs a forest and a small production company Film, Teater & Trær (Film, Theatre & Trees).



From the opening performance *Being Water.* Photo: Kjersti Gürgens-Gjærum

Props for *Being Water* in the exhibition. Photo: Alexis Parra Pucho



From the opening performance Being Water. Photo: Kjersti Gürgens-Gjærum

Eutopia Nina Vestby

Nina Vestby's project is presented in her article *Eutopia – Where the Heart Matters.* The deprived and under-privileged neighbourhood of Tøyen has been affected by urban developments such as that which led to the decision to move the Munch Museum away from Tøyen to be part of the Fjordbyen on Oslo's waterfront. The loss of the main cultural institution in the area led to an action research project with the aim of enhancing living environments in an inclusive neighbourhood. Providing safe childhood environments and social meeting-places and encouraging participation to further health and social inclusion were among the aims. Nina Vestby's Eutopia project evolved from this situation in her neighbourhood. By turning a visual research tool called SPLOT (an acronym for Space, People, Learning, Observation, Track) into a device for collective art making, Vestby asked the question: Where do you feel good? Starting in Oslo's inner city, continuing to Moss, a post-industrial town alongside the fjord, later moving on to New York's 'hoods, the method of transferring a simple, amorphous SPLOT, encompassing what is important in your life, into needle craft and conversation has developed into a social tool with expressive gualities.

See the Author's Biography on page 120.



In 2016, at the Oslofjord Ecologies workshop, Nina Vestby explained the SPLOT method which was then being developed. At Oslofjord Ecologies Experience in 2017, Nina Vestby conducted a workshop and presented documentation and material in the exhibition. Photo: Nina Vestby



Transfer from language and drawing into coloured threads, signs and symbols. Photos: Nina Vestby

Le Remords (The Remorse) Re-Enacted Hanan Benammar and Camilla Dahl

Inspired by the short film *Le Remords* (The Remorse) by René Vautier, the first French anti-colonialist film maker, Hanan Benammar and Camilla Dahl performed a re-enactment of the situation where the artist is an accidental witness to a crime – a police-beating of an Algerian immigrant asking for directions. The artist is confronted with the choice between



immediate action or reflecting on the situation as an impulse for art production. This raises questions about the position of art and artists in times of crises and invites a self-critical perspective on what art can or cannot contribute. Later in 2017, Benammar suggested screening the film in Cinemateket Oslo as part of Algeria (Extract of perfumes).

Hanan Benammar (b. 1989) is an Algerian/ French artist, based in Oslo. She works conceptually between geopolitical, environmental, and societal issues. She also organizes and curates art projects as a part of her practice. Benammar was educated at the Academy of Fine Art Oslo (MFA) and the Dutch Art Institute (MFA) in the Netherlands. She has exhibited and performed in various locations; recent venues include the Black Box Theater (Oslo), Le Cube (Rabat), Kunstnerforbundet (Oslo), Lofoten Sound Art Symposium (Svolvær) and Radikal Unsichtbar (Hamburg).

Documentation of the performance *Les Remords* shown at Oslofjord Ecologies Extended, Aalto University 2018. Photo: Pavel Arkharov



From the performance Les Remords outside RAM Galleri for Oslofjord Ecologies Experience 2017, Oslo. Photo: Kristin Bergaust

Aalto Amphi Experimental Lab Camilla Dahl International

Opening performance of Oslofjord Ecologies Extended at the Renewable Futures Hybrid lab conference.

Ten performers were placed among the audience in the outdoor amphitheatre designed by Alvar Aalto for the former Technical University. These ten slowly started moving their bodies, licking and kissing the surfaces of the red brick stairs and walls, engaging with the architecture where the audience were seated at the opening ceremony. The Finnish artist Juhani Räisänen performed alongside, improvising on his self-constructed sormina, a musical instrument invented through Juhani's PhD thesis at Aalto University. Camilla Dahl expressed the meaning of the performance as follows in the open call to participants:

Desiring the Aalto Amphi with our bodies and tongues, we will obtain sensory knowledge of the amphi's structural and material qualities. Our aim is to sensually investigate the educational institution by absorbing the perspiration of modernist architecture and disrupting the traditional academic use and purpose of the space. (Dahl, 2018)



Aalto Amphi Experimental Lab. Overview of the Amphi. Photo: Pavel Arkharov

Camilla Dahl works with the notion that artistic practice and research are tools for creating new languages, knowledge and collective realities. With performance, installation, actionism and curatorial work, she aims to develop new strategies for artistic impact in society. Dahl part-initiated/curated "Karnevalet" in Oslo in 2019 and is a member of the artist collectives Der Strich and First Supper Symposium. In 2017–2018 she participated in the art&research project Oslofjord Ecologies. Selected exhibitions: Intercultural Museum, Schirn Kunsthalle, Temporäre Kunsthalle Berlin, ZKM, Stenersen Museum, Haugar Art Museum, Deste Foundation, Kunsthalle Mannheim and OK Center of Contemporary Art Linz.



Aalto Amphi Experimental Lab. Performers. Photo: Pavel Arkharov

browsing beauty Sigi Torinus, Andrea Sunder-Plassmann, Brent Lee

browsing beauty capitalizes on the dialogues and unsuspected relationships that emerge when formal and unfamiliar conceptions of beauty are juxtaposed in time and space. browsing beauty seeks to match the multi-sensorial nature of beauty with the way we work with media, keeping us rooted in the visceral, a reminder of the interconnectedness of all.

browsing beauty is site-sensitive and at times interactive, developed anew according to each new context: for Oslofjord Ecologies the work focused on the intersection of beauty and sustainability to conjure seedlings for an environmental ethic; an aesthetic experience to promote transformative attitudes toward the environment.

http://browsingbeauty.com

Andrea Sunder-Plassmann works with photography, film/video and installation. She is based in Berlin and works as a professor at Alanus University of Arts and Social Sciences in Alfter, Germany. As a visual artist she counterbalances the esthetics of media with the esthetics and psychology of sensorial awareness. With Sigi Torinus she co-created the ongoing *browsing beauty* project. She also co-created the German-Cuban artistic research project sense-LAB with Dr. Wohler and Frency Fernandez. Sigi Torinus creates new media works that include site-specific installations and improvisatory interactive live-video performances. Her work explores our perceptions of the migratory journey, through time and space, in physical, ephemeral and digital worlds. She co-created browsing beauty with Andrea Sunder-Plassmann and teaches at the University of Windsor in Ontario, Canada, where she co-directs the Noiseborder Multimedia Performance Lab with Brent Lee.

http://sigitorinus.com

Brent Lee is a composer, media artist, and musician whose work explores the relationships between sound, image, and technology, especially through multimedia performances. His most recent project is entitled Homstal, and brings together composition, improvisation, saxophone performance, videography, and Max programming. He teaches at the University of Windsor in Ontario, Canada. http://homstal.com



browsing beauty. Oslofjord Ecologies 2017. Photo: Sigi Torinus





browsing beauty. From performance in RAM Oslofjord Ecologies 2017. Photos: Nami Sah

Exhibitions Oslofjord Ecologies Experience Galleri RAM August 2017

Oslofjord Ecologies is an art and research project on cultural and environmental sustainability in a site-specific context. We understand ecology as a manifold principle where environmental, social and mental equilibria interconnect and interact. Sensibilities and competences from contemporary art are complemented by technology, radical pedagogy, biology and explorations of cultural heritages to enhance innovative art productions of an experiential and performative nature. Based on the Oslofjord Ecologies workshop and collaborations in the Renewable Futures and Hybrid Labs international projects, the exhibition was accompanied by a program of performance and workshops open to the general public, and offered to students and young people through educational institutions.

Curator: Kristin Bergaust Gallerist: Madeleine Park Design and production: Alexis Parra Pucho OSLOFJORD ECOLOGIES EXPERIENCE

Siri Austeen Kristin Bergaust Anneke van der Fehr Tona Gulpinar Alexis Parra Pucho Sabine Popp Rasa Smite and Raitis Smits Elin T. Sørensen Gunhild Vatn

PERFORMANCES and WORKSHOPS Hanan Benammar Camilla Dahl Cathrine Constance Gjelsnes Brent Lee Andrea Sunder-Plassman Ingebjørg Torgersen Sigi Torinus Nina Vestby

DOCUMENTATION of projects by: PAO@Steilene "Eco Echoes" Andrew Gryf Paterson Andrea Sunder Plassman Nina Vestby



Watching project documentation at the Oslofjord Ecologies Experience. Photo: Kjersti Gürgens Gjærum

Oslofjord Ecologies Extended Aalto University School of Art, Design and Architecture, Espoo Finland May–June 2018

Oslofjord Ecologies Extended was a version of the exhibition assembled for the Hybrid Labs Symposium, the Third Renewable Futures Conference at Aalto University.

Curator: Kristin Bergaust Design: Alexis Parra Pucho Production: Alexis Parra Pucho and Aalto University Thanks to Lily Diaz-Kommonen, Saara Mäntylä and Juhani Tenhunen of Hybrid Labs Siri Austeen Kristin Bergaust Tona Gulpinar Anneke von der Fehr Alexis Parra Pucho Sabine Popp Rasa Smite and Raitis Smits Elin T. Sørensen Gunhild Vatn Hanan Benammar Brent Lee Andrea Sunder-Plassman Sigi Torinus Performance: Camilla Dahl International





Oslofjord Ecologies Extended at Aalto University, Espoo Finland 2018. Photos: Pavel Arkharov

— "Oslofjord Ecologies" marks the tenth anniversary of the Renewable Network – a Baltic-Nordic collaboration focusing on artistic practices that offer new ideas to overcome the crises of the past and present, working with science and 'techno-ecologies', and developing new models for more sustainable and imaginative ways of life. "Oslofjord Ecologies" is the third issue of "Renewable Futures", a special Acoustic Space series, presented by guest editor Kristin Bergaust, artist and professor from Oslo Metropolitan University.

The articles and visual representations in this book are attempts to communicate our experiences and develop questions and concerns following our engagement with Oslofjord Ecologies. The contributors are artists who have presented ideas and developed works in the project exhibitions and activities, as well as authors engaged in transdisciplinary discussions on art and ecology.

Authors of the research papers: Venke Aure, Kristin Bergaust, Boel Christensen-Scheel, Tona Gulpinar and Anneke von der Fehr, Helene Illeris, Sabine Popp, Merete Røstad, Elin T. Sørensen, Gunhild Vatn, Nina Vestby. The album visually presents the Oslofjord Ecologies exhibitions, performances and activities by participating artists.

ISSN 1407-2858 ISBN 978-9934-8434-8-8

