

PO-FO READER

Post-Fossil Transition Project

2018-2020

helsinki.
international.
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programme.

HIAP 2018-2020

POST FOSSIL TRANSITION

POST FOSSIL TRANSITION READER CREDITS

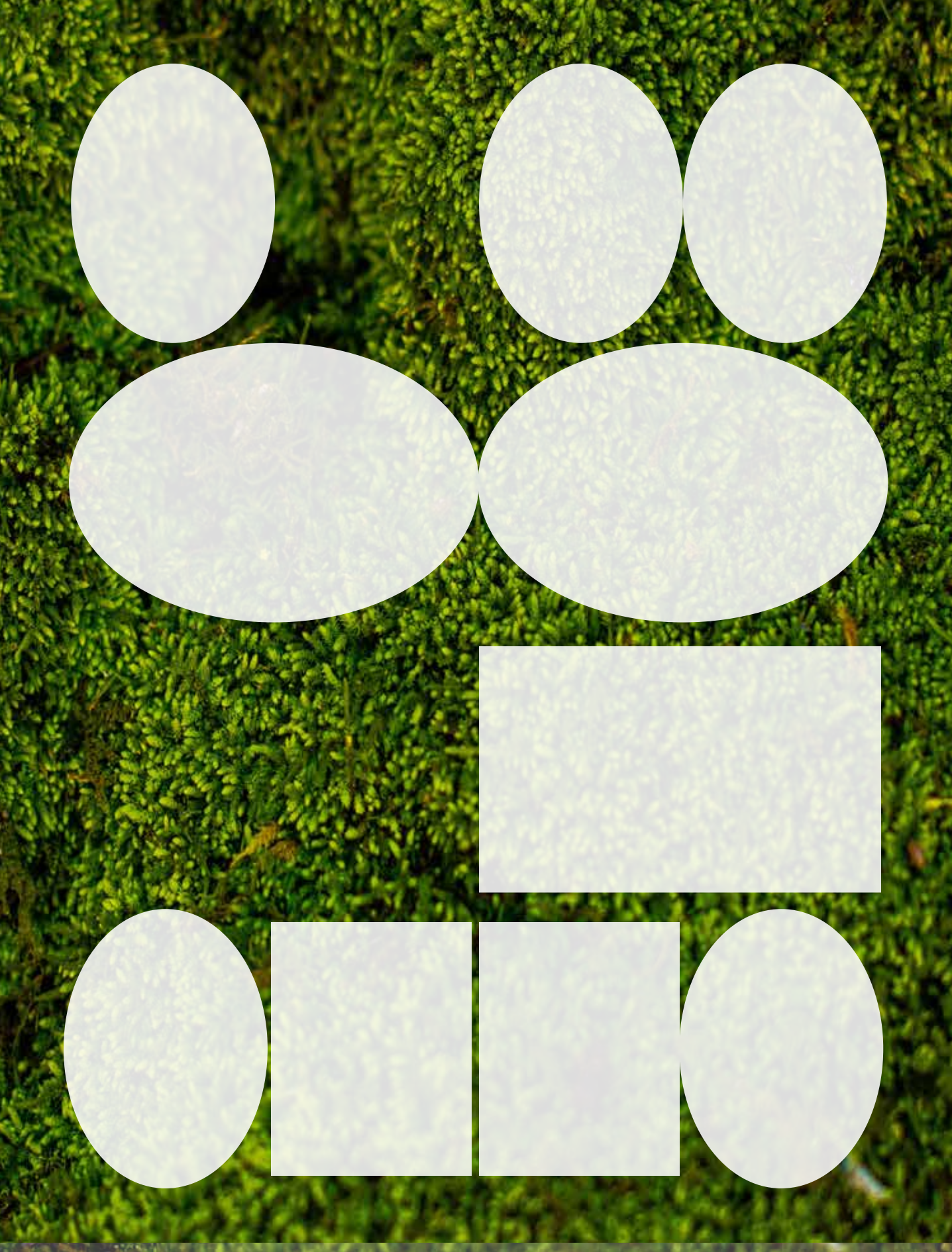
Editors: Juha Huuskonen & Dana Neilson

Graphic Design: Dana Neilson

Visual Identity: Tsto

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Post-Fossil Transition

A rapid transition from the infrastructure and cultural practices reliant on fossil energy sources towards post-fossil solutions is essential in order to slow down climate change and reach the goals of The Paris Agreement. The post-fossil transition is a major cultural paradigm shift cutting through all spheres of life.

Post-Fossil Transition is a three year (2018-2020) collaborative project of Mustarinda and HIAP for mapping out interests and concerns together, forming alliances, finding ways to share the post-fossil practices and putting them into action on a daily basis. The project was initiated as HIAP was preparing for its 20th anniversary. Instead of arranging a retrospective of the last two decades, the aspiration was to look to the future with an initiative that would be relevant two decades from now. From this perspective it seemed critically important to seriously tackle the issue of climate change.

The agenda of the Post Fossil Transition project contains a paradox. On the one hand it wants to put focus on numerical measurement of carbon emissions and the practical acts to curb them. On the other hand, it wants to emphasise that this type of narrow numerical approach can also be deceiving and even counterproductive towards the fundamental cultural shift that is needed in post fossil transition.

The central themes of the Post-Fossil Transition project in the ecological transition have been Travel, Food and Energy. The biggest changes that were made at HIAP were related to travel. During the period 2018-2019, HIAP managed to reduce the emissions of HIAP staff's travel by 86%. We also compiled an information resource of slow and ecological

travel centered on traveling from and to Helsinki. Regarding the food theme, HIAP shifted to offering only plant based food and drinks in events. At HIAP Suomenlinna we shifted the electricity contract to wind generated electricity, and are in the process of installing a smart heating system to HIAP Suomenlinna studios. Throughout the reader you can find three posters which summarise the changes that HIAP has made regarding the three key themes. We hope that these can act as an inspiration for organisations and individuals alike.

The Post-Fossil Reader features thematic articles as well as introductions to artworks, projects and artists in residence.

The project was developed over the three years in regular discussions among HIAP staff, Mustarinda members and other invited people. The contributors include: Michaela Casková, Paul Flanders, Saara Hannula, Alma Heikkilä, Tiina Arjukka Hirvonen, Juha Huuskonen, Paavo Järvensivu, Aleksandra Kiskonen, Saara Karhunen, Saara-Maria Kariranta, Saara Korpela, Pauliina Leikas, Antti Majava, Markku Mertanen, Dana Neilson, Marina Valle Noronha, Ki Nurmenniemi, Riitta Nykänen, Antti Salminen, Stephanie Roiko, Eleni Tsitsirikou, Hanna Kaisa Vainio, Annu Webb and several others for being involved.

The Post-Fossil Transition project is supported by Kone Foundation.

Po-Fo Timeline



HIAP & Mustarinda Post Fossil Transition Kick-Off Event, 6 April 2018

2017

May:

HIAP prepares for its 20th anniversary celebrations in 2018. HIAP decides to focus on looking into the future and initiating something that would seem meaningful in 20 years time, in the year 2038. HIAP decides to make a commitment to post-fossil transition.

September:

HIAP and Mustarinda put together a plan to collaborate in post-fossil transition and to focus on three topics: Food, Travel/Transport and Energy (heating and electricity). An application is sent to the Kone Foundation. #food #energy #travel

December:

A positive funding decision from Kone Foundation for Post-Fossil Transition Project, 2018-2020.

2018

February:

The first contact was made with Suomenlinna Governing Body regarding changing the thermostats in HIAP Suomenlinna studios. Antti Majava from Mustarinda is working on a thesis related to the topic, the change of the energy system could provide important source material for his research. #energy

The first internal meeting between HIAP & Mustarinda, Mustarinda introduces some of their work in the context of post-fossil transition. #meeting

HIAP decides to contribute to the Helsinki Art Institutions for Equality initiative. The first meeting is held to start preparing our manifesto. It becomes evident that ecological sustainability is intrinsically tied to the organisation's sustainability in general. #meeting

March:

In several internal meetings HIAP staff discusses the topics of food and decides to make some concrete changes. It is decided that HIAP will start serving plant based food, will join the Elävä Maa food circle and will apply to get a gardening box in Suomenlinna. #food #meeting

Several planning meetings are held to prepare the first public event in April. #meeting

April:

The first public brainstorming session at HIAP Suomenlinna. Approximately 100 people show up in Suomenlinna on Friday evening to discuss ideas and activities related to the key topics of the Post-Fossil Transition project.

#event #blog

<https://www.hiap.fi/event/>

[hiap-mustarinda-post-fossil-transition/](https://www.hiap.fi/notes-from-the-kick-off-event-of-the-hiap-mustarinda-collaboration-)

<https://www.hiap.fi/notes-from-the-kick-off-event-of-the-hiap-mustarinda-collaboration->

post-fossil-transition/

Several meetings are held to word on the text for the Helsinki Art Institutions for Equality initiative. #meeting

May:

HIAP staff spends an afternoon preparing the gardening box, making nettle fertilizer and planting salad, basil, rosemary, parsley, spinach and carrots. #food #event
HIAP's contribution to the Helsinki Art Institutions for Equality project is published online. Suomenlinna Governing Body is contacted again regarding changing the thermostats at HIAP residency studios. #energy
Helsinki Art Institutions for Equality:
<http://www.artforequality.fi/>

June:

A 3-month residency of artist Nestori Syrjälä begins. #residency
<https://www.hiap.fi/resident/nestori-syrjala>
A blog post on the progress of the Post-Fossil project #blog
<https://www.hiap.fi/where-are-we-now-with-hiaps-post-fossil-transition/>
HIAP and Saari Residence organise a 2-day symposium 'Life + Art – Thinking the Present'. The participants are mostly from various international residency organisations who are on their way to the Res Artis seminar in Rovaniemi. Ecology is one of the key themes of the symposium - the participants are introduced to both Frontiers in Retreat and Post-Fossil Transition projects, and visit the residency studios of Nestori Syrjälä and Raimo Saarinen. Other presenters of the symposium include researchers Tuija Kokkonen, Jessyca Hutchens and Nick Balcom Raleigh. #event
The opening of Mustarinda's summer exhibition If I change something, what is being moved? Mustarinda Association has invited feminist curatorial duo nynnyt to curate an

exhibition at the Mustarinda house and its surroundings in the summer of 2018. The featured artists are Camille Auer, Niran Baibulat, Nayab Ikram and Jaana Laakkonen. #event #exhibition
<https://www.mustarinda.fi/program/mustarinda-2018-exhibition-curated-by-nynnyt>

July:

Pauliina Leikas from Mustarinda takes part in the art & swamp restoration camp event in Lestijärvi, organised by Hiilipörssi (Carbon Market) project #event

August:

A 3-month residency of artist Egle Oddo begins. #residency
<https://www.hiap.fi/resident/egle-oddo/>
The first HIAP & Mustarinda reading circle gathering, with focus on Antti Salminen's book Elo ja anergia. #meeting #energy
<https://netn.fi/kirjat/elo-ja-anergia>
The gardening box is not in great shape after the summer break, but some plants have survived. Also taking part in the food circle turns out to be challenging (it's difficult to find use for the ingredients in HIAP's weekly activities). #food
HIAP, Frame Contemporary Art Finland and Mustarinda hosted a visit of the participants of the Curatorial Programme for Research trip in Nordic countries. Ecology and post-fossil practices are among the key topics of the trip. The participants of the programme are Paulina Ascencio (Mexico), Irene Campolmi (Denmark), Marten Esko (Estonia), Alessandro Facente (Italy/United States), Siân McIntyre (Australia), Vanina Saracino (Italy/Germany), Lea Vene (Croatia), Nina Wöhlk (Denmark) and the coordinator was Emily Crain (United States). HIAP hosted a special food event prepared by Egle Oddo & Louise Waite and a discussion with Antti Salminen. #meeting #event #food

2019

February:

The 11-month residency of Antti Salminen & Saara Hannula begins. #residency
<https://www.hiap.fi/resident/antti-salminen-saara-hannula/>
The first Post-Fossil Transition Learning Circle event, focusing on the law proposal to ban the use of coal for energy production in Finland starting from the beginning of the year 2029. The law proposal was read out loud by artist/playwright Sinna Virtanen. #event #energy
<https://www.hiap.fi/event/lakiesitys-hiilen-energiakayton-kieltamisesta>
Eveliina Tuulonen starts her internship at HIAP, with a focus on Post-Fossil Transition project. The negotiations about changing the thermostats at HIAP studios in Suomenlinna are restarted. #energy
Arttu Merimaa & Miina Hujala (curators of HIAP Connecting Points programme) receive a grant from Finnish Cultural Foundation for developing ecological travel in the Finland-Russia exchange project, as well as for arranging a special trip via the Trans-Siberian Railway. #travel

March:

A 1-month residency of Susanne Winterling begins #residency
<https://www.hiap.fi/resident/susanne-winterling/>
The second Post-Fossil Transition Learning Circle event, focusing on Cultures of Energy podcast episode with author Matthew T. Huber. #event #energy
<https://www.hiap.fi/event/post-fossil-transition-project-learning-circle-2-2019>
HIAP & Mustarinda meeting, discussion about which thermostats to use in Suomenlinna, discussion about ecological travel (Antti Majava from Mustarinda is advising Frame

Contemporary Art Finland to develop ecological travel practices). #meeting #energy #travel

A blog post by Miina Hujala & Arttu Merimaa about Trans-Siberian train travel with many practical travel tips.
<https://www.hiap.fi/slow-travel-tips-connecting-points/> #blog #travel

April:

A 1-month residency of Marjolijn Dijkman begins #residency
<https://www.hiap.fi/resident/marjolijn-dijkman/>
The third Post-Fossil Transition Learning Circle event, hosted by HIAP resident Marjolijn Dijkman and HIAP Associate Curator Jenni Nurmenniemi. The event focused on several topics: the historical Lunar Society and its relevance to how we perceive questions that concerned this 18th-century group at present, the collaborative research project 'On-Trade-Off', initiated by Enough Room for Space and Picha (Lubumbashi, D.R. Congo) and Solarpunk literature. #event #energy
<https://www.hiap.fi/event/post-fossil-transition-project-learning-circle-3-2019/>
Marjolijn Dijkman's artist talk event at Publics #event
<https://www.publics.fi/calendar/navigating-polarities/>
Representatives of Fourdeg visit Suomenlinna studios and more detailed plans are made regarding installing their thermostat system in them. #energy #meeting

May:

A slow and ecological travel to Venice Biennale by HIAP Director Juha Huuskonen and HIAP Connecting Programme Curators Arttu Merimaa & Miina Hujala. Also HIAP alumni artists Nabb & Teeri (who were featured in the Nordic Pavilion in Venice) traveled to Venice via land.

#travel #blog

<https://www.hiap.fi/slow-travel-from-helsinki-to-venice/>

HIAP Open Studios Spring 2019 event, featuring work-in-progress by Saara Hannula & Antti Salminen #event

Negotiations related to changing the thermostats in HIAP Suomenlinna studios continue #energy

June:

A 3-month residency of Mustarinda members Michaela Casková & Robin Everett begins.

#residency

An interview of artist Egle Oddo by Athanasia Aarniosuo. #residency #blog

<https://www.hiap.fi/egle-oddo-knowing-the-land-palm-by-palm/>

Negotiations related to changing the thermostats in HIAP Suomenlinna studios continue #energy

The opening of Mustarinda's exhibition Polku/Trail, featuring work by artists Tuike & Simo Alitalo, Corinna Helenelund, Harrie Liveart, Jonna Salonen, Hanna Kaisa Vainio and Kimmo Ylönen #event

August:

The opening of the Reclaiming Vision exhibition in Levyhalli, Suomenlinna. Reclaiming Vision is a cinematic artwork by Marjolijn Dijkman and Toril Johannessen which stars aquatic microorganisms that are invisible to the human eye without technical aid. The microorganisms featured in the film were sampled from the brackish waters of the inner Oslofjord in Norway. The exhibition was curated by Ki Nurmenniemi. #exhibition
Finnish Cultural Foundation announces a special travel grant which enables the residents of the foundation's residency programme to travel ecologically via land or sea. HIAP acts as the advisor in the development of Finnish

Cultural Foundation's residency programme.

#travel

HIAP Open Studios Summer 2019 event, featuring work-in-progress by Saara Hannula & Antti Salminen and Michaela Casková & Robin Everett. #event

HIAP Director Juha Huuskonen gives a presentation of the Post-Fossil Transition project in Kone Foundation's grant information event. #event

HIAP staff members Juha Huuskonen, Eleni Tsitsirikou, Stephanie Roiko and Paul Flanders make an ecological (ferry + bus) trip to Nordic Culture Point's Residency Circle meeting in Riga, Latvia. Based on HIAP's initiative, the organisers allow a more flexible use of travel money so that also other participants of the event can travel via ecological means. Post-Fossil Transition is presented in the event's seminar programme. #event #travel

September:

Rehearsing Hospitalities event by Frame Contemporary Art Finland brings dozens of contemporary art professionals to Helsinki. The event features a presentation by Marjolijn Dijkman, a visit to Reclaiming Vision exhibition in Suomenlinna as well as a premiere Wetcode, of a sound work by Myriagon (Ki Nurmenniemi & Tuomas A. Laitinen) #event

October:

IHME Helsinki decides to hire an eco-coordinator who could focus on developing the organisation's sustainability. HIAP, Mustarinda and Frame Contemporary Art Finland decide to join the initiative, so that the eco-coordinator can work full-time for the four organisations. An open call for an eco-coordinator is sent out.

November:

Saara Korpela is chosen as the eco-coordinator. Regular meetings between the

eco-coordinator and the 4 organisations (HIAP, Mustarinda, IHME and Frame) begin. #meeting
HIAP Open Studios Autumn 2019 event featuring work-in-progress by Saara Hannula & Antti Salminen #event

Other activities and developments during 2019:

Mustarinda hired an art education professional to develop additional events alongside the summer exhibition. Mustarinda also installed a new compost toilet, published a blog, realised an ecological travel support program for the residents and gave presentations about Mustarinda's activities in various events in Finland, Estonia, Sweden, Norway and Russia.

2020

March:

A 3-month residency of Elina Vainio begins.

#residency

Dana Neilson starts to work as a project coordinator. Eco-coordinator Saara Korpela is working with HIAP, Mustarinda, IHME Helsinki and Frame Contemporary Art Finland to gather information about each organisation's ecological footprint.

May:

HIAP publishes a poster related to topic Travel which describes the changes that HIAP has made in its organisational practices. The reduction of emissions related to HIAP staff travel between years 2018-2019 was approximately 86%. #travel

HIAP Open Studios Spring 2020 event featuring work-in-progress by Elina Vainio. The event was exceptionally organised online. #event

June:

HIAP publishes maps and an information kit related to ecological travel with a focus on Helsinki as a travel destination. This information kit is available at <https://www.hiap.fi/ecotravel> and is actively updated throughout the year. #travel

The negotiators of changing the thermostats in HIAP Suomenlinna studios are restarted by eco-coordinator Saara Korpela. #energy

July:

Mustarinda's working group Suomaalaiset arranges Suovastaanotto - Mire Reception event together with Hiilipörssi (Carbon Market) initiative at Kempas mire. #event

August:

The launch of Mustarinda's 10-year anniversary celebration event Jäkäläfest which was

arranged as an online event. #event
<http://mustarinda.fi/jakalafest>

September:
Article ‘Combustive Art’ by Ki Nurmenniemi posted on HIAP website. #blog
<https://www.hiap.fi/combustive-art/>

October:
The opening of The Post-Fossil Show exhibition, HIAP’s main concluding event of the Post-Fossil Transition project. The exhibition presented the results of the project in the form of posters and the first draft of Post-Fossil Reader publication. The exhibition featured artworks by Saara Hannula & Antti Salminen, Laura Harrington, Saara-Maria Kariranta, Riikka Keränen & Hanna Kaisa Vainio, Bitä Razavi ja Elina Vainio. As well as Po-fo Mobile created by HIAP team members Dana Neilson and Paul Flanders. As a historical reference, the exhibition presented material from the seminal Suomenlinna 1968 seminar, which featured speakers such as Buckminster Fuller and Victor Papanek. The presentation of the seminar was based on material from researcher Kaisu Savola and the seminar’s organiser Yrjö Sotamaa. #event
<https://www.hiap.fi/event/post-fossil-show>.
The exhibition was curated by Juha Huuskonen and Dana Neilson.
Philosopher Antti Salminen and artist Saara Hannula arranged a 3-day gathering at HIAP Suomenlinna. The gathering brought together people who had been working on the post-fossil topic over the past decade to reflect on the topic and look towards the future. The participants were Juha Huuskonen, Paavo Järvensivu, Saara-Maria Kariranta, Pauliina Leikas ja Antti Majava, Kaisa Kortekallio, Taru Elfving, Ki Nurmenniemi, Tere Vadén and Anna-Kaisa Koski. #event
HIAP publishes a poster related to topic Food

which describes the changes that HIAP has made in its organisational practices. Since the first year of the project HIAP shifted to serving only plant based food and drinks at HIAP events. #food
A text reflecting on the work Eftervärd by Elina Vainio by Ki Nurmenniemi is published #blog
<https://www.hiap.fi/afterthoughts-on-eftervard-by-elina-vainio> #blog

November:
HIAP, Mustarinda, Frame Contemporary Art Finland and IHME Helsinki organise a one-day seminar Environmental Crisis – From Words to Deeds in the Field of Art. The seminar featured a contribution by Minister of the Environment Krista Mikkonen and keynote talks by Mari Pantsar (Sitra) and Graciela Melitsko Thornton (Julie’s Bicycle). The seminar also presented the results of the Post-Fossil Transition project as well as the results of the work by eco-coordinator Saara Korpela. The event wrapped up with workshops which allowed the participants to further discuss the seminar content and share thoughts about future plans. The seminar took place online, with the Helsinki Art Museum seminar room as the venue in which most of the presentations were given. #event
The thermostats at HIAP Suomenlinna studios are changed into smart thermostats which can be controlled by a system by Finnish company Fourdeg. The system makes it possible to maintain a more steady temperature in the apartment and thus save energy. #energy
HIAP changes the electricity contract in Suomenlinna to a contract based on wind power. #energy

Other activities and developments during 2020:
Mustarinda realised a summer exhibition related to their nature trail and arranged winter & summer school events as well as various

training sessions. Mustarinda also worked on a system to follow the changes in the production of solar and wind energy. Articles of Mustarinda’s energy system and ecological footprint were published in Mustarinda blog. HIAP’s 10-year’s anniversary publication Huoltaa/ Maintain was produced during the year and published in late 2020.

The Post-Fossil Transition at HIAP

THREE TRAVEL GOALS FOR POST FOSSIL TRANSITION:

1. TRAVEL SLOW

HIAP has committed to travel by sea or land

HIAP encourages artist in residence to travel by ecological means and provides travel recommendations

2. TRAVEL LESS (& stay longer)

HIAP has switched from hosting 1 month residencies to hosting residencies 3 months in length

3. TRAVEL CLOSE

HIAP is working on strengthening and forging new connections closer to Helsinki

THREE FOOD GOALS FOR POST FOSSIL TRANSITION:

1. EAT MORE PLANTS

HIAP serves plant based food and drinks

2. CHOOSE CONSCIOUSLY

HIAP prioritises buying seasonal, local, organic food

HIAP keeps up to date on climate-smart food practises

3. MANAGE FOOD WASTE

HIAP sorts and recycles all possible food related waste

HIAP buys low waste food products

THREE ENERGY GOALS FOR POST FOSSIL TRANSITION:

1. USE LESS ENERGY

HIAP has installed a smart heating system in HIAP Studios on Suomenlinna

HIAP encourages artist in residence to be conscious of their energy consumption and provides energy saving recommendations

2. SUPPORT RENEWABLE ENERGY

HIAP Suomenlinna has switched to a wind power electricity contract

HIAP is negotiating for renewable energy electricity contracts at all of its locations

3. RETHINK ENERGY CULTURE

HIAP questions common norms, ideas and practices related to energy use

HIAP advocates sustainable energy policies

Afterthoughts on 'Eftervård', the smouldering incense installation by Elina Vainio

In the final days of the COVID-19 lockdown in Finland, I got to experience an ephemeral artwork under very special circumstances. By the invitation of HIAP and the artist Elina Vainio, I participated in the private burn event of 'Eftervård', Elina's new incense-based sculptural installation. The event, which was held on the Suomenlinna island off the coast of Helsinki and attended by just the artist and myself, left me in awe and longing for more encounters as intimate as this with contemporary art.

Experiencing the work started as soon as Elina and I hopped onto the ferry. Swayed by the gentle waves of the Baltic Sea, we discussed the process of making this piece that emerged both in response to the intertwined botanical and human histories of Suomenlinna fortress island as well as the unnerving unfurling of the present.

In the spring months, Elina had a studio on the island as part of HIAP's residency programme. Whenever she could come to work there, she would embark on long, meandering walks. These were for her a method of attuning to the environment and its seasonal changes. Her attention was captured by the architectural features of the sea fortress as well as its plant life, and she learned how both of these tell volumes about shifting political dynamics over the nearly four centuries of its existence. Suomenlinna's sturdy rock fortifications were built with the local stone by the Swedes in the 18th century. Most of the red brick buildings were constructed by the Russians in the 19th century – and both Swedish and Russian occupants brought along a variety of plants. Vegetation arrived at this previously barren place from other corners of the world as well. The myriad of international influences and migration paths are still present in the rich



botanical life of the islands, which differs significantly from the flora of the neighbouring islands and the mainland.

The island's human inhabitants made their marks in stone: The carved plates at the King's Gate especially caught Elina's eye. It was here that the foundational stone of the fortress was laid. The word 'Eftervård', old Swedish referring to the afterlife, begins a message for the generations yet to come: Stand your ground. For Elina, whose oeuvre is marked by curiosity towards the plurality of meanings and the continuous evolution of language, 'eftervård' alludes to the traces of the past alive in the present. She began to ponder how the human and botanical histories of the island are entangled and how the plants are, in many ways, a living form of an afterlife of the island's human habitation.

As the spring progressed, with the Suomenlinna chief gardener's permission, Elina started to gather various plants during her walks. Her intention was to dry them and grind them into powders she would use to form incense sculptures. Her inspiration for working with incense traces back to the workshop led by Dambi Kim, the Seoulite tea and incense artist, which I curated for the Fiskars Village Art and Design Biennale in 2019. In the session, Dambi explained the various uses of this beautiful tradition and taught the participants how to use different types of plants to make our own incense sticks and cones. After the workshop, Elina started to learn more about incense-making and burning. She didn't settle with the more traditional stick and cone shapes, but decided to use the King's Gate's 'Eftervård' carving as a mould to make letter-shaped forms.

Coming up with beautifully burning incense letters involved trial and error – the most

attractive violet plants, for instance, turned out to be poisonous and not suited for safe burning. After some incidents involving improvised use of an unexpected binding agent, when the time came for the first burn of the work at HIAP Open Studios, 'Eftervård' smouldered as intended, filling the gallery space with its subtle aromas. The site, a former prison – and probably one of the worst places to find oneself in the aftermath of the Finnish Civil War (1918–) – definitely benefits from a thorough smudging. The building was my workplace for many years, and so I am all too familiar with the unsettling stories and the strange occurrences associated with it.

The first burn, attended by some dozen people and beautifully documented on video in complete silence, happened a few days before it was my turn. As Elina and I reached the gallery and entered the exhibition hall flooded with natural light, I could still sense the subtle fragrances and soothing new energy lingering in the space. Using tiles found from the nearby tunnels, Elina had constructed a perfectly balanced foundation for the incense. The letters that still remained were standing in a rusted metal chute filled with fine sand and ash from the previously burned letters. As we came closer, we became quieter and I sat down on the floor as Elina lit up the letters.

I was mesmerized by the letters turning into the finest swirls of smoke. They reached for the ceiling before slowly dissolving into the light. Their subtle scents mixed harmoniously with woody and fresh notes. There was something extremely fragile, tender, and caring about this small ritual. All of a sudden, I caught my thoughts whirling around something heavy and hard. A tightness in my chest hinted that I was perhaps being offered a moment for mourning, purification and healing – something



that I hadn't really allowed myself, or even realised I needed, during the past three months spent in physical isolation. This also felt to me like a shared ritual for Elina and myself to renew and reinforce the friendship that began in Suomenlinna in the summer of 2014 and has taken us to work together as far as at the Mugaksa temple in Gwangju in 2018.

After about half an hour of meditative appreciation of Elina's artwork, and silent reflection of the array of emotions it evoked in me, the incense had burned and it was time to

dismantle the installation. Elina explained to me where she had gathered its different parts and where they would eventually be returned. The cyclical thinking, ephemerality, and the careful combining of preciseness with chance, that all characterize her artistic thinking are something that I am very deeply drawn to. As strongly as I desire to experience this kind of one on one ritual again, I wish that that next iteration of this work, planned for October, can be enjoyed by many.

Laura Harrington and Linda France

The Spirit of Moss Flats

Between March 2014 and August 2015 I visited Moss Flats, a rare peat flat in the North Pennines, northern England, UK. On counting it transpires I have been there 23 times and have experienced it overnight, in snow, hail, fog, wind, sun and stillness. During this time I have intimately studied the surface topography, learnt about it scientifically, attempted to understand the different processes present through conversations with physical scientist Jeff Warburton, and filmed many different elements of the site and the energy it contains. I have listened with sound recordists Lee Patterson and Chris Watson, sang with others, carried my 15 month old son up there, invited local poet and shepherd Josephine Dickinson to respond through words and shared thoughts with friend and poet Linda France.

Linda France: Sitting at my desk looking out onto the windswept fell of Stagshaw Fair, a landscape I've been held by for the past twenty years, I can't help being aware some places have a power – their *genius loci* perhaps – that draws us in their direction at particular times in our lives. We like to say we chose to go there, but I wonder if in any sense Moss Flats chose you? What was it that took you to this remarkable place and made such an impression you

kept going back?

Laura Harrington: The rawness, the presence of loss at Moss Flats instantly drew me to it. At first, this site might be thought of as akin to a lunar landscape – barren and stripped of life – but as one finds a way in, it quickly becomes a rich medley of energy and activity. It is this paradoxical feeling of loss – a sense of emptiness that comes from its openness – and uncertainty alongside strength and acceptance that excites me and drives my curiosity. Moss Flats is a flatland, referred to scientifically as a bare peat flat – approximately three hectares of relatively level, sparsely vegetated peat, at an altitude of around 800 metres, lying within the vast amounts of blanket bog of Moor House Nature Reserve in the North Pennines and Upper Teesdale. It is a landscape predominantly generated and shaped by a southwesterly wind, intricately carved by the elements. The openness of the site and absence of vegetation offers an insight into the substance, depth, movement and morphology of peat. Imagine it like an open wound that is still healing.

My first introduction to Moss Flats was with Dr Jeff Warburton, my collaborator at Durham University during a Leverhulme Artist Residency. He has been monitoring at Moss Flats

for the last twenty years, a project which builds on other physical scientists' interest in this site as a representation of activity and process in the erosion of peat. He invited me to Moss Flats as part of his field work, as a place he thought would have some resonance for me, given the peatland landscapes I had portrayed in my 16mm film *Layerscape (peat bogs)*. It became clear, quite early on, that this site offered an opportunity to engage deeply with a specific eroding landscape that exists on both a micro, meso and macro scale. As Jeff and I explored this landscape, both together and separately, from the perspectives of artist and scientist, we were learning about its intricacies and secrets. Moss Flats became the focus of my residency, through our different approaches, it will not only be a mass of data that will be gathered, but the essence and spirit of the place too. It felt timely to be engaging with Moss Flats now – in twenty or so years, this wound could well be healed as the vegetation recolonises the site.

Linda: It is certainly a very remarkable landscape. I remember the day you took me up there, in August – there was a rare stillness and the sun shone so the wind didn't feel like the dominant element. The peace in the air let me look at things undisturbed, undistracted. I am used to open landscapes but this was something else. No visible sign of human habitation once we'd made the slow, high journey to the north west. I felt as if I'd travelled a very long way. This was alien territory, as strange and unreadable as anywhere I've experienced on other continents.

Laura: A bare peatland landscape can indeed seem very alien territory. This is partly why I find them so intriguing. By my third visit, the walk to Moss Flats itself started to feel like a secular pilgrimage, a journey with a certain pace, rhythm and depth. The stopping and

starting to open the gates along the dirt track and the sounds of the bubbling water along Rough Sike coming in an out of earshot – these are all elements in the process.

The walk involves hopping over and walking through the sike and passing sections of revealed and smoothed limestone, parts of the Whin Sill, a variety of fauna and flora, from lizards to ferns, and remnants of ambitious human interventions, including culverts and systems for containing water, and the bothy at Moor House. Precipices of bouncy peat, soft beneath my feet, feel vulnerable with the weight of the body. Some sections are no longer there, reflecting the constant changes in these higher reaches, exposed to continuous fluctuations in weather. It is reasonably sheltered until you reach a plateau leading to Moss Flats – from this moment you are exposed to the elements and, more often than not, relentless wind.

Linda: It was fascinating to witness the effect of the wind, in a landscape entirely shaped by the wind, on a day with hardly any wind blowing. An unusual occurrence. But everything about Moss Flats felt unusual. As you say, it's like being on the moon.

Laura: The winds that buffet these uplands produce beautiful shifting patterns across this landscape. How Moss Flats has been formed over time, by the predominance of wind with rain from the South West, is striking, clearly manifest in its complex topography – from the asymmetrical forms of eroding hags to the formations of toothed surfaces and tiered terraces, reminiscent of an amphitheatre's tiered seating surrounding the central performance area.

Sound recordist Chris Watson visited Moss Flats with me in November 2014 to assist

with some ambient recordings. Our original intention was to record wind energy and rain – two very complex elements to capture, and two very likely situations for that time of year. However, there was no rain or wind that day – not even a blade of cotton grass moved. This paradoxical situation, which felt disappointing at first, quickly became a very special moment. It allowed us to listen from a fresh perspective, giving time to consider the transformation of energy of Moss Flats in multiple ways.

In response to your *genius loci* reference, I wanted to say something about the incredible hags at Moss Flats. The eroded forms left like standing stones held together by dense root structures and vegetation on their top surface. The living energy and decay of Moss Flats is characterised by the anthropomorphic forms of tussocks and hags, that hold a sense of the unknown and the mystical. The largest of them is at the front, sheltered from the slightly higher ground and standing proud like the leader in a battle of the elements, protecting the young and the more vulnerable. I remember a conversation, with a friend on a peaty walk, about my interest in these forms, which I see as rather like spirit creatures, reflecting the conditionality and interconnectedness emphasized by Japanese animator Hiroyo Miyazaki. I said 'If we disrespect the bog, bad things will happen, but if we appreciate them, we will be looked after'. This intimation has remained important in sharing my artwork from Moss Flats with an audience.

Linda: That aspect of responding to a place and the natural world, finding a way to transform one's experience of it to communicate something fresh and meaningful to a wider audience, is part of your practice as an artist. As a writer, I have been looking at flowers, both wild and cultivated, and trying to find

the words in them, excavating their layers of meaning, for several years now. Botany has its own lexicon, as does poetry. I have enjoyed being introduced by you to words like hagg and many spectacular varieties of moss (classified as 'lower plants' in the botanical hierarchy) at Moss Flats. But there is also something beyond words in this place that seems better suited to a visual artist's eye. I wonder if you could say a little about how you've translated your visits and explorations into the work you've made.

Laura: To answer this it is important to consider Moss Flats within my wider relationship with Moor House and its position in the uplands of the North Pennines. This is where I began filming *Layerscape (peat bogs)* in 2011 and where my journey into peat as an ecosystem and substance began. I would spend many long days and evenings exploring its blanket bogs. I built a small cinema in the storage shed next to a bothy for the 2012 AV Festival and screened *Layerscape* in all its 16mm glory. That year the theme was *Slowness* and I invited an audience of approximately a hundred people to come and share this landscape with me through the work and a contemplative walk led by Natural England, who manage the site.

Two of England's great rivers begin their journey to the sea from here – the South Tyne and the Tees. This physical and relational connection interests me – a connection back to what is sustaining us, a feeling of being both very far and very near. This sense of intimacy with the land expanding points of consciousness is something I have been pursuing, an idea I refer to as upstream consciousness. By which I mean a way of thinking which connects us to what sustains us, even though it is upstream and out of sight.

The remoteness, lack of access and people, the time and commitment required to approach it, its scientific and sociological history are all reasons why Moor House has such a pull on me. It has been well documented, analysed and studied by key scientists, including W. H. Pearsell and climatologist Gordon Manley. It is recorded as one of the most well-understood uplands in the world. Data collection into climate has been going on at Moor House for the last seventy years. Working alongside Jeff, a geomorphologist who understands these processes scientifically and how and why a landscape changes over time, offered an important starting point in which to think about how to morph this 'site' into a 'place'.

Jeff talks about his work as a physical geographer being firmly rooted in the present, concerned not just with the historical record of these peatland landscapes, which forms a backdrop to the contemporary monitoring, but what aspects and systems are affecting and changing them now. I was interested in finding the core and raw essence of Moss Flats through sound, image, object and words. I have been thinking about nature itself as a material for exploration and how the idea of nature can be transformed within an artistic process. Understanding the nature of peat as a dynamic substance and its capabilities as a non-human force. Thinking too about the potential acoustic properties of peat. A seemingly dead matter, an incredibly low-density material and therefore not surprisingly, holding very low frequency sounds. How the physicality of sound can be realised into something new. Working with Lee Patterson at Moss Flats has allowed new readings of its sonic textures. Lee describes how the 'same climatic conditions that made working at Moss Flats such a challenge also provided the energy necessary to activate the site sonically. Both observing and

listening to how the wind and rain played the skin of the bog – how their energies transferred from one form into another, allowed a way into understanding how the elements have saved the exposed peat flats and weathered hags in this upland area.'

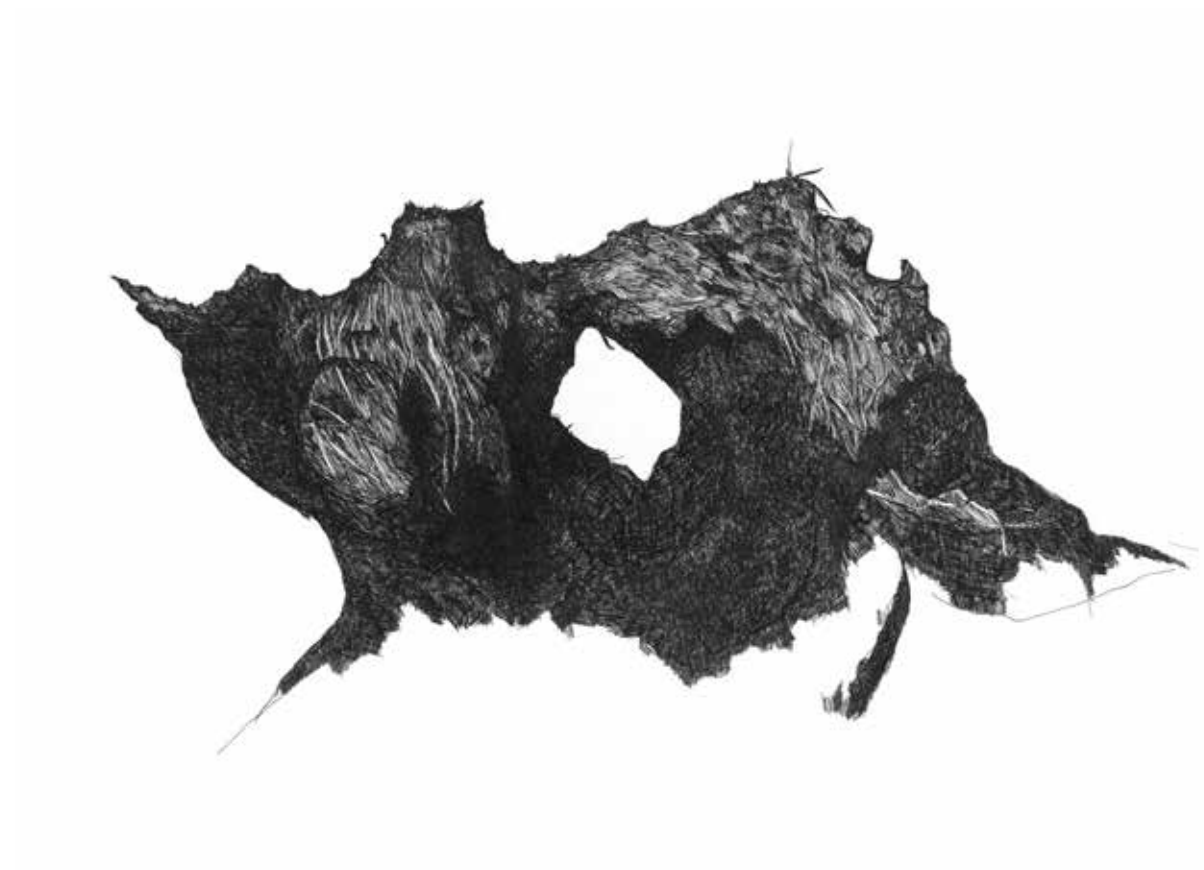
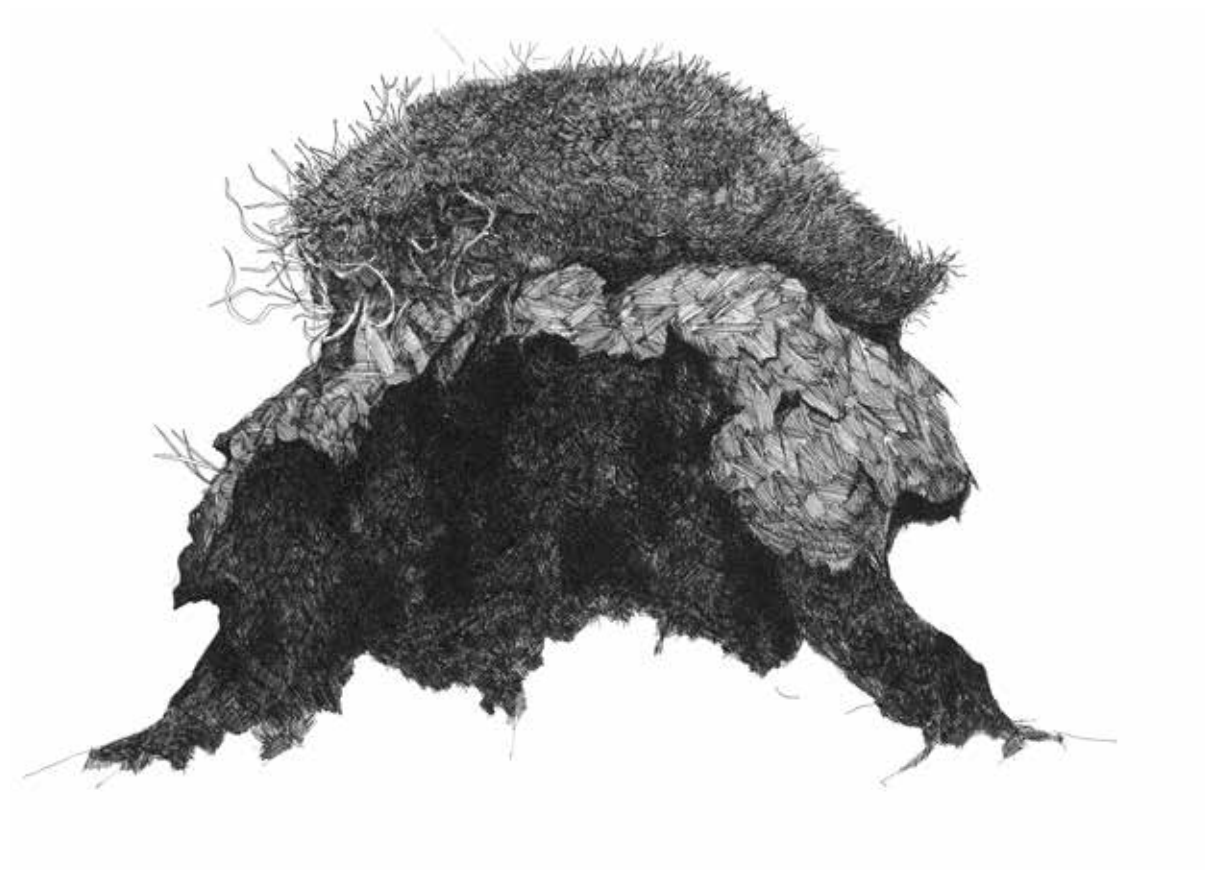
I began my residency by burying rods of varying lengths housing unused film footage of *Layerscape (peat bogs)* in the peat at Moss Flats. At the back of my mind there were questions of whether it would be possible to see a change from the different depths and climatic effects over time; but more importantly it was about merging my previous work at Moor House with this new chapter. Similar to Jeff's monitoring equipment, I wanted to leave something for a period of time to absorb elements of this landscape. As I travelled back home I often thought about the film in its new position. The material is now imbued with the physical presence of Moss Flats and forms part of a new body of work.

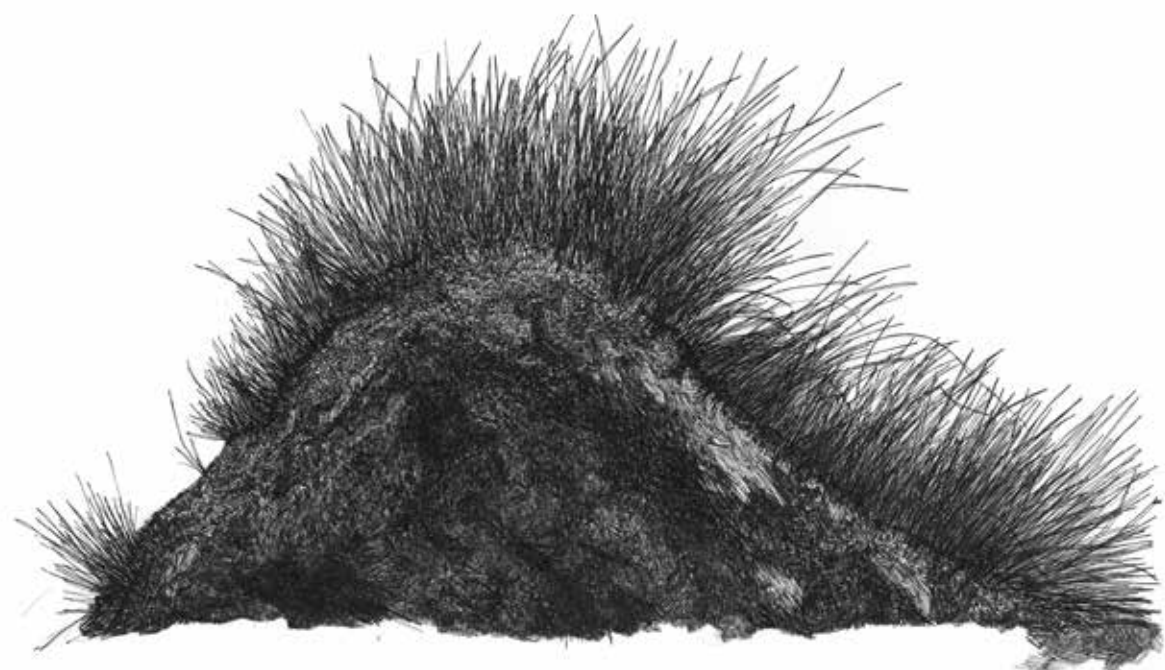
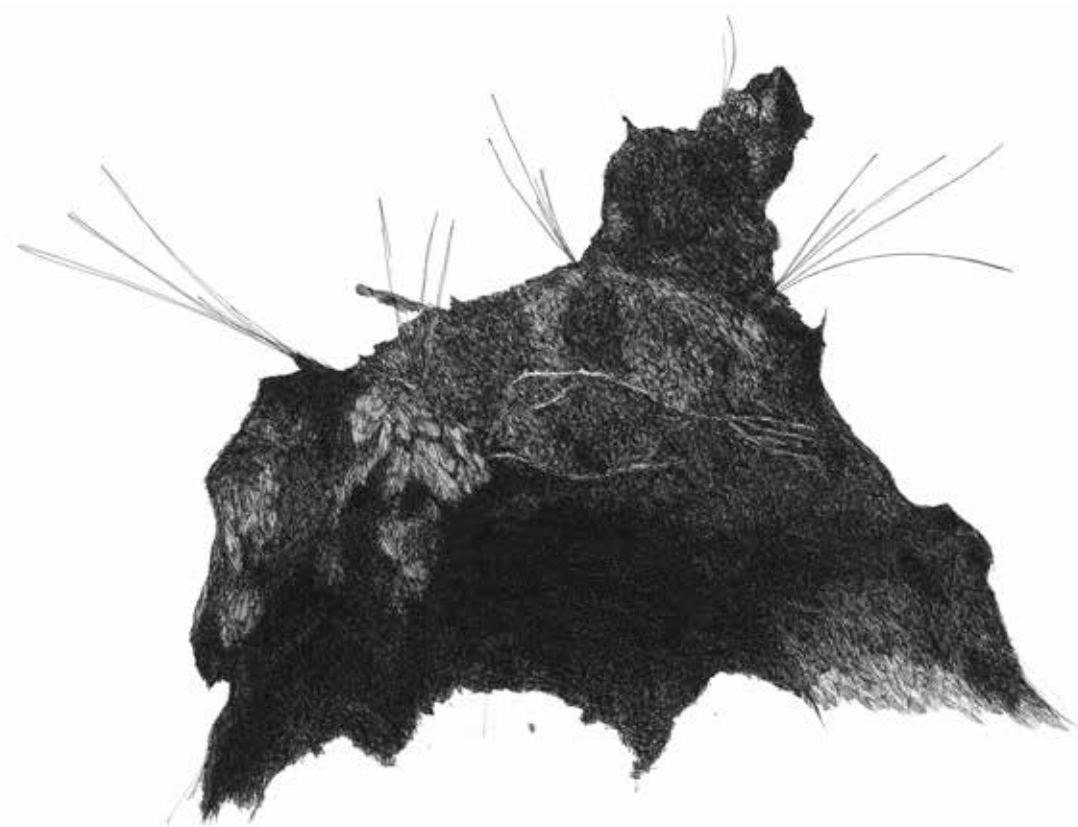
Liveliest of Elements, 2015 is a moving image work that explores the nature of Moss Flats through image and sound. The supposed nothingness revealed in its entirety.

dis/sonance is a four channel sound installation consisting of five voices recorded at Moss Flats. The work aims to capture the movement and rawness present on the surface of the site, translated through one of the most primitive and pared down instruments we have – the human voice. Four voices individually represent north, south, east and west and the movement present in the surface. A fifth is the earth itself, almost a drone, grounding the voices together. The surface patterns found in the bare peat on one particular day produced the framework for a score. This work has been realised within the historic Norman Chapel in Durham, a space with dramatic reverberation – a complete contrast to the environment of Moss Flats.

Haggs# 1 - 4

Laura Harrington





For the moving image work *A Child of its Time* (2014) I took my 15-month old pre-linguistic son to Moss Flats as a way of thinking about how our relationships to landscape and the natural world are formed. *A Moment in Time* (2014) is a plaster cast taken from a mould of the surface topography at Moss Flats on one particular day, transforming the material processes found in the peat surface into a new work. The intricate line drawings in this book, *Hagg # 1 - 6*, (2015), morph the hags into new beings – the spirit creatures of Moss Flats.

Linda: Your investigations have clearly been very resonant for you as an individual but have also led to many fruitful connections with other practitioners. How have you experienced the balance between what is solitary work and ongoing dialogues, the sense of collaboration?

Laura: During this residency the initial conversations with Jeff at Moss Flats were vital and then the different people I have shared this journey with have also been a significant part of the process – you, Lee Patterson, Sarah Bouttell, Chris Watson, Josephine Dickin-son and the five singers for example – each bringing a new element to the exchange and shaping the journey in some way. Typically my time working with Jeff in the field involved a very early start and very long days, providing an opportunity for interesting exchanges and conversations, stimulated directly by the immediate surroundings. Our collaboration was intense at first, spending a lot of time talking and understanding more about our differing approaches, learning more about the causes and effects of erosion on peatlands, and then it became much more conversational. I think it would be fair to say that although our outcomes are entirely different, we both were able to recognise similar approaches to how we work. Jeff's join

publication with Martin Evans *Geomorphology of Upland Peat*¹ became a key reference point. However, solitary work is vital. I grew up in rural Wales and much of my childhood was spent exploring the hills and woods where I lived. Rebecca Solnit's idea – 'the thing in nature which is totally unknown to you is usually what you need to find, and finding it is a matter of getting lost'² is key to my process of making work. I remember in Wales just walking and not stopping until thoughts became clearer, sometimes for hours at a time. This is definitely a method that works for me. This is not a conscious or artistic decision, more a result of the landscape working on me. Early research around peatland erosion by physical geographer Margaret Cruickshank (formerly Bower), has been important. Her unpublished thesis *A summary of available evidence and further investigation of the causes, methods and results of erosion on blanket peat*, written in 1959,³ has been a touchstone in my understanding, a number of sections featuring Moss Flats. A copy of her hand-typed and assembled thesis is with Jeff and he shared it with me quite early on in the residency. I often found myself imagining her voice, experience and journey. I am drawn to the idea of a female physical geographer in the 50s, interested in peatland erosion – I doubt there were many. Her photographs depicting the different causes of erosion on peat have been important references within my research. A number of pages and photographs from her thesis are shared within this book. Her work came about following the release of aerial photographs from the RAF after WWII, enabling a new and important survey of erosion on blanket peat to take place. Within the last few weeks I have made contact with Margaret and found it useful to hear her voice, talking about her memories of working with peatland erosion. Despite it being over 60

years ago, she remembered Moss Flats clearly. She wondered whether it had been recolonised yet. I felt happy to tell her that it was close. She spoke about her time at Moor House, staying in the old house for around three weeks, studying on her own at Bog Hill, Burnt Hill and Moss Flats.

She eloquently told me how her interest in peat came about. Growing up in the steel and coal town of Rotherham, her family visited the East coast to escape, but she was more drawn to the hills. However, it was during an excursion to Kinder Scout that her eyes were opened to the possibilities of peat – *I didn't know what I was heading for – three metres deep bare peat*. Her early fascination with RAF air photos combined with this new encounter sparked her postgraduate research. We talked about the photographs, the possible causes of erosion, the different research routes and the journey of her thesis, which I was holding as we spoke. It was her thesis and the photographs it contained that suggested to me the image of Moss Flats as an open wound. Indebted to her legacy, I hope my investigation and this new body of work are viewed as a continuation of research into Moss Flats.

Capturing a moment in time, one of things I remember from your visit to Moss Flats was your saying that you had entered a 'new botanical zone'. Given that your botanical journeys have taken you across continents, this touched me – a contingent and new encounter with a local landscape and an unknown zone. Have any specific elements or memories of Moss Flats remained with you?

Linda: The bog asphodel, a plant that only grows on high wet moorland, was tucked on one of the leeward slopes; its spike of yellow flowers, modest but still miraculous. I'm very grateful to you for drawing my attention to it. I discovered later its botanical name *Narthecium*

ossifragum comes from the Latin meaning 'bone-breaker', a reference to the fact that sheep grazing such land, with acidic soil low in calcium, are susceptible to weak bones. In Norway they blame the bog (or bastard) asphodel for afflicting their sheep with a disease called 'elf fire'.

As habitats depreciate, plants like this are becoming more and more rare. It's good to know that certain species are still thriving at Moss Flats. Like you, I am very aware of their vulnerability, and by extension our own fragile hold on the planet's ecosystems. How much do you think art and literature can raise environmental awareness and transform the way people experience and honour their place in the landscape? What happens in those zones where nature and culture meet?

Laura: This is a key question but not a straightforward one to answer. It's something I am constantly re-addressing through the work I do alongside scientists and other disciplines – how interdisciplinary working can form part of this discussion and how these relationships can be respectful and symbiotic. I would like to think that the work has been made in such a way that it holds knowledge and consideration in terms of its subject (the landscape, natural world and the science informing the research) but then, through sharing with an audience, it opens up a dialogue on such issues by shifting the responsibility of resolving them from the work and into the consciousness of the viewer. It's hard to quantify or measure a behavioural shift but I believe I'm part of a wider process and debate among people who care about the natural world and how we as humans live within this planet. It is vital that culture plays a part in this.

Over the last few years I have been enjoying the revival in 'nature writing' and seeing how this is re-engaging people with the natural

world. You introduced me to the writings of Nan Shepherd and specifically *The Living Mountain*, where she came to know her chosen place, the Cairngorm Mountains, deeply rather than widely, always looking into this landscape with an acute perception rather than at it. ‘*I looked slowly across the Coire Loch, and began to understand that haste can do nothing with these hills-. I knew when I had looked for a long time that I had hardly begun to see.*’ This ability to go into the hills aimlessly, inviting her readers to look again at different angles, is a process I recognize and try to emulate. Good work expands people’s experiences and perceptions and inspires them in new ways. I’m currently immersed in Rachel Carson’s *The Sea*, first published in 1968, which brings together the earlier writings *The sea around us*, *Under the Sea Wind* and *The Edge of the Sea*. A fusing of environmental concerns with expressive writing makes her works timeless.

Linda: As a fellow maker and cross-artform collaborator, I’m always intrigued by other artists’ and writers’ practices and processes. The creative act is pure paradox: on one level mysterious but also pragmatic, non-utilitarian yet deeply relevant and necessary. I’d be interested to hear how your distinctive hagg drawings evolved and how you found yourself drawn to using language as both medium and meaning, what words make possible beyond the visual. Are you able to say a little about that?

Laura: My hagg drawings have some kind of affinity with the idea of animism – souls existing in both humans and all other elements of the natural world. The pen and ink drawings evolved from spending significant time on damaged and exposed peat. The vulnerability that was oozing from such a raw landscape was hard to ignore and the different hags

present enabled me to think about this in a different way. Striking, amorphous forms, which eventually were understood as ‘hags’ would strut out of the landscape, holding onto their life amongst an eroding surface. Coming across different senses of character within the forms (usually from vegetation playing the part of a comical hair cut or comb over) became a bit of an obsession. Strong root structures were one of the reasons for the shaping of the hags. My first interaction with these forms began by placing oatcakes (a must-have snack when in the field) as eyes and photographing them with their new identity. This wasn’t anything beyond the process of doing – a playful act for my own entertainment – but it did start to bring to my attention how much I was drawn to them as something beyond their current existence. Shortly after I completed *Layerscape*, I spent two weeks on a residency in Southern Spain in an arid desert. My work there built on these hagg drawings, but instead of black ink I used white ink. Erosion was the biggest threat to the landscape there and, although there wasn’t a name such as ‘hagg’, I saw similar forms, where plant root structures were holding back erosion somewhat but creating unusual looking forms at the same time. So these forms are a homage to erosion everywhere – to what was once there but now gone. The word ‘hagg’ was instantly fascinating – something I always associated with a witch or the saying ‘you old hag’, with derogatory female connotations – so I was curious about the name’s origin in relation to thinking about such a landscape. It transpires that the meaning of the word ‘hagg’ actually comes from the old Norse word for ‘channel’. As much as it is confusing, I like the way the word has evolved to define the left-over form. An example of how language is adapted by those who use it. Using language as a medium is a new process

for me. For some time now I have kept messy lists of scientific words that in some way resonate beyond their actual meaning. *Landscape Language*, taking fragments of language gathered from the physical sciences, began as a quest to find a new liveliness and context for these words. The process of repeating these common words again and again, turning a word around and around, created the possibility of transformation, reflecting what is occurring in the landscape they derive from.

Linda: And so we return to place as fact and place as metaphor or symbol via the timely, playful and sensitive way your work is finding new correspondences within this ancient, wild environment, regenerating it by paying attention, bearing witness, but leaving the land itself undisturbed.

April – August 2015

References

1. Evans, Martin & Warburton, Jeff. 2007. Geomorphology of Upland Peat. Wiley-Blackwell.
2. Solinit, Rebecca. 2005. A Field Guide to Getting Lost. Penguin Books Australia.
3. Bower, M.M. 1959. A summary of available evidence and further investigation of the causes, methods and results of erosion on blanket peat. Unpublished MSc thesis. University of London
4. Shepherd, Nan. 1977. The Living Mountain. Aberdeen University Press.

Saara-Maria Kariranta, Riikka Keränen & Hanna
Kaisa Vainio

Suopuheita

Suovastaanotto, juhlatilaisuus suon kunniaksi, järjestettiin 1.8.2020 Kempassuolla, ennallistetulla suoalueella Puolangalla Kainuussa. Ennallistamisen seurauksena vedenpinta on noussut ja maisema muuttuu hiljalleen lähelle sitä, mitä se on ollut ennen suolle tehtyjä ojituksia. Tähän tekstiin olemme valinneet ja litteroineet otteita puheista, joita kutsuvieraat esittivät juhlassa.

”Olin yli viidenkymmenen, kun mulle meni ymmärrykseen asti se, että minkä takia Suomessa on niin paljon soita. Meillä on soita sen takia niin paljon, kun meillä sataa enemmän kuin haihtuu ja sen takia veden pitää jossakin siinä välillä olla. Kun maastot on monenmuotoisia ja se vesi pikkuhiljaa vetelehtii kohti vesistöjä ja merta, niin se asettuu semmoisiin paikkoihin missä se voi hyvin lepäillä ja silloin maisemaan syntyy erilaisia soita. Ja kun sitä on tapahtunut täällä jääkaudesta asti tuhansia vuosia, niin suot on ehtineet ottaa valtavan monenlaisen muodon.

Vesi on hirveän oleellinen asia Suomen maisemissa kaiken kaikkiaan. Vesi rakentaa maiseman elämän kanssa yhdessä.

Jos katsoo satelliittikuvia tai ilmakuvia niistä monesti näkee miten vesi liikkuu siellä, miten maiseman peittää metsän ja peltojen, sammalten ja soiden vihreä vaippa. Ja siinä monesti näkee miten siinä vaipassa vesi virtaa. Se on rakentunut sille kiviselle ja hiekkaiselle pohjalle minkä jääkausi jätti. Se ihmeellinen matto ja se ihmeellinen elämän vaippa.

Suot on valtavan moninaisia. Erilaisia soita on enemmän kuin erilaisia metsiä. Meillä on paljon soita, joita ei ole missään muualla maailmassa kuin sknadinaaviassa, kuolassa, kanadassa ja sen takia esimerkiksi englanninkielinen suo sanasto on hankala, koska englantia puhutavissa maissa ei ole samanlaisia soita kuin meillä täällä. Suot on taiga-vyöhykkeen tilan avaajia, hengenavaajia.



Photographer Nina Wilenius



Photographer Nina Wilenius

Suot muodostaa erilaisia kokonaisuuksia. Voidaan puhua nevoista tai mäntyisistä rämeistä, jotka Kainuun vaaroilla ovatkin kuusen valtaamia, joka on aivan erityistä maailmassa. Hirveän harvassa paikassa soiden pääpuuna on kuusi. Sitten siellä reunoilla on kuusta kasvavia meheviä korpia. Ja siellä missä alarinteille tulee lähdevettä eli pohjavettä, koska vesi matelee myös maan sisässä kohti merta. Sitten sillä vedellä on kauniit lähteensilmät vaaran rinteiden alla, niistä lähtee kirkkaita puroja. Soissa virtaa maalliset ja taivaalliset vedet. Meillä on happamia ja tummia suolampia ja meillä on aivan kirkkaita lähteitä. Vesi on se ihme.

Ja koska suo on rikas parhaimmillaan kaikkein ravinteikkaimmat letot on raivattu pelloiksi. Sen takia ne on letot harvinaisia. Korpia on kuivattu kasvamaan puuta, metsää ja sen takia ne on vähän harvinaisia. Mutta yksi ihana asia, joka soista tulee on, että ne ruokkii meidän pienvesiä, joista esimerkkinä Kainuussa on metsäpuroja, joissa on jokihelmisimpukkaa ja pieniä lohia. Suot tuo ilmastoon kosteutta, joka ruokkii lajiston monimuotoisuutta. Kaikkein rikkaimpia aina ovat reunat, rannat, suon laidat, purot. Niin suo tuo meille vaihtelua metsämaisemaan. Suot avaavat metsämaisemia ja lammet ovat kauniita taivaanpeilejä.

Paitsi että suo antaa, se myös säilöö. Elsa jo puhui miten syntyy turvetta ja miten hiiltä varastoituu ilmasta näihin soihin. Suo säilöö paljon sitä elämää mitä siinä on ollut. Soista on löydetty mikrofossiileja, joista on voitu päätellä millainen ilmasto ja millainen kasvillisuus on ollut tuhansia vuosia sitten. Ja soista on esimerkiksi saatu selville, että kainuussa on viljelty viljaa jo muutama tuhat vuotta ennen kuin varsinainen peltoviljely alkoi tuolla etelä suomessa. Täällä on 5000 vuotta sitten vallinnut kivikauden kesä ja silloin Oulujärven ympäristössä

kasvoi mm. pähkinäpensaita ja viljaa, ja se on saatu selville soita tutkimalla. Soista löytyy siemeniä ja muuta vanhaa mikä on siellä säilynyt. Sieltä löytävät myös arkeologit erinäisiä asioita; soista on löydetty veneiden raatoja, kelkkoja, suksia. Sieltä on löydetty paljon verkkoja koska monen suon alkuperä on ollut metsälampi... “

Riitta Nykänen (Nyyskä), Puolankalainen biologi & ympäristökasvattaja

“Viisi vuotta sitten UPM-myi kaikki nämä alueet ja metsien mukana tuli suot. Takana oleva räme on ennallistettu aiemmin ja nyt ennallistettiin tämä. On hienoa, kun negatiivinen kierre saadaan käännettyä positiiviseksi. Kun ihminen suuressa viisauudessaan haluaa hyödyntää maat mahdollisimman tehokkaasti, tämäkin suo oli ojitettu ympäriltä, mutta onneksi tänne ei oltu tultu.

Nyt täällä on lintukanta noussut ja vedenpinta on noussut. Täällä pysyy vesi ja osa painuu pohjaveteen. Tää meinas kasvaa umpeen, mutta nyt nähdään jo, että männyt rupeaa kuivumaan, koska tämmöisellä suolla pitäisi olla aukeaa. Tämä on ollut 40-50 vuotta ojitettuna. Mutta nyt vesi ei mene keväällä välittömästi jokeen, vaan se jää tänne ja suodattuu pikku hiljaa. Ja rahkasammalen kasvu elpyy ja lakat ja karpalot täällä viihtyy. Ja linnusto. Nyt niistä on jo suurin osa lähtenyt pois.

Toinen malliesimerkki miten saadaan maksimaalisesti pilattua paikat on kun on sata hehtaaria kaivettu valtavan syviä ojia ja on ajateltu että siihen tulee hieno mettä. Sieltä menee keväisin menee valtavia määriä vettä hillitön määrä humusta ja soopaa hyvään harri jokeen, kutupaikat pilalle ja ravinteet sinne vesistöön. Ja siihen tuli sitten semmonen

epämääräinen metsä ja kaikki rahkasammal ja kaikki hävisi ja tilalle tuli semmonen jonninjoutava kasvi joka ei hyödytä yhtään mitään. ja Sitten lampien pinnat putos ja luonnontilainen suo kuivui kans sieltä takaa. Eli kun sieltä pitäisi tulla tasaisesti vettä jokeen koko kesän, eikä vaan keväällä koko p**** niin ei oikein voi pilata enempää ja tietenkin menee hiiltä taivaalle kun se rupeaa palamaan, kun se vedenpinta on laskenut. No nyt ne ojat on tukittu aika hienolla menetelmällä. Markku Holappa puolankalainen kaivinkonekuskki, joka on erittäin sitoutunut ja asiansa osaava on padonnut ojat niin että padot vuotaa luonnontilaisille soille jolloin jokeen ei mene enää yhtään soopaa ja pohjavedet on noussut ja lampien vedet myös ja luonnontilainen vesitalous on palautunut ...”

Timo Kujala, Kempassuon maanomistaja, liikemies, Arvometsä oy:n perustajajäsen, Forestor Oy:n toimitusjohtaja, Hiilinielu yhteismetsän perustajajäsen.

Suon ennallistamisten yhteydessä on käyty keskusteluja niiden merkityksestä ilmastonmuutoksen hillintään. Suota ennallistettaessa kasvihuonekaasujen vapautuminen kiihtyy aluksi, kunnes suo toimii jälleen hiilinieluna. Eri suotyyppit käyttäytyvät eri tavoin ennallistamisen yhteydessä.

Suovastaanottoon kutsuttiin vieraita juhlistamaan ennallistettua suota tavoitellen moniäänistä vierasjoukkoa. Ajatuksena oli lieventää suon hyödyntämisestä ja suojelukäytänteistä käytävän keskustelun tunnepitoisia vastakkainasetteluja keskittymällä suohon liittyviin inhimillisiin suhteisiin. Suon tuoksu jo itsessään lähettää ihmisen mielihyvää vahvistavat hormonit liikkeelle, näin ollen kokoontuminen suolle vaikeissakin kiistanalaisissa kysymyksissä voisi olla rakentavaa.

Se, miten ja missä suon ennallistaminen hyödyttää ilmastonmuutoksen hillitsemistä, on monimutkainen kysymys, joissa asiantuntijoiden keskenään eriäviäkin kantoja tulisi kuunnella ilman ideologisesti tahi taloudellisesti valmiiksi sidottuja mielipiteitä. Helpompaa on ymmärtää, että ennallistaminen palvelee luonnon monimuotoisuutta ja lohduttaa yhteisöä, jonka lähiympäristön suon ojitus aikoinaan muutti.

Suovastaanotto opetti koollekutsujiansa, rakkaus luontoa kohtaan on jaettavissa ja jakaessa se moninkertaistuu. Performatiivisen puhujan Reijo Kelan mukaan:

“Opetan, opetan, opin. Rakastan teitä. Ja suota.”

Saara-Maria Kariranta, Riikka Keränen ja Hanna Kaisa Vainio

Taiteilijat ovat Mustarinda-seuran jäseniä ja kokonaistaideteoksena toiminut tapahtuma oli toteutettu yhteistyössä Suomen Luonnonsuojeluliiton Hiilipörssi-hankkeen kanssa. Suovastaanoton järjestämiseen osallistui myös Kainuun luonnonsuojelupiiri.

<https://mustarinda.fi/program/suovastaanotto-1-8-2020>
www.hiiliporssi.fi



Photographer Nina Wileniusv

Saara Korpela

Carbon footprints of art organizations and Carbon Challenge 2030

**How to make your carbon footprint lighter?
Join Carbon Challenge 2030!**

As the year draws to a close, it is a good time to reveal the carbon footprints of my employers – four art organizations – and to launch the 2030 carbon challenge.

The carbon footprints of four art organizations

IHME, Frame Contemporary Art Finland, Mustarinda and HIAP – Helsinki International Artist Programme are Finnish art organizations that operate internationally. Mustarinda runs a residency in Hyrnsalmi, HIAP has one in Helsinki. Mustarinda has a 700-square-metre house, HIAP hosts artists in three different properties that span more than 1,500 square metres. IHME, which produces one work of art a year, has an office of 70 square metres. Frame's office is only slightly larger, but it serves as an information centre for the visual arts, funds

international grants and programme activities for the visual arts, and is responsible for the Finnish Pavilion at the Venice Biennale. Carbon footprints for IHME, Frame, HIAP and Mustarinda have been calculated using the Carbon-smart project's calculator¹. It uses these categories: energy (heat and electricity), travel and accommodation, procurement, waste, food, and some services (e.g. phone and telecommunications, cleaning). In Frame's case, we also developed calculation factors, for instance, the installation of the work. The calculator does not provide information on the carbon footprint of materials used in a piece of art.

Rule of thumb: transit, heat and meat

Calculating an organization's carbon footprint took from 2 to 8 person-weeks, depending on the scope of operations and the availability of data. Not every organization can invest so much time in carbon computation. In that case,



emissions can be reduced using a simple rule of thumb: **by minimizing flying, heating and meat-eating**. A carbon footprint is still a useful tool when you want to go carbon-neutral, as it allows you to set goals and monitor their achievement.

In the calculations made this year, the share of travel (in practice flying) was surprisingly large. Energy consumption, i.e. heating, was a significant source of emissions for HIAP, but not for others. Emissions from food were very small. That is because art organizations only buy food on rare occasions. The opposite is true of their employees and artists, who have to eat several times a day. But those emissions are part of the carbon budget of the individual, not the organization.

Total carbon footprints for one year:
IHME **16 tonnes CO2e** (75% of this from travel)
Mustarinda **25 t CO2e** (travel 83%)
HIAP **120 t CO2e** (energy 60%, travel 38%)
Frame **640 t CO2e** (travel 89%)

The more you spend, the bigger the emissions

Small organizations and individual artists can take comfort from the fact that euros and emissions go hand in hand. The connection is so strong that it can be expressed in a number: in Finland, consumption emissions average 0.5 kg CO2e/euro². This means that those with the greater financial resources have the biggest responsibility and an outright obligation to take the initiative in leading sustainable change. It's no surprise that out of these organizations it is Frame, which awards a lot of grants, that produces the most emissions. The vast majority of Frame's emissions are generated within grant projects by travel, in practice flying. To understand the scale, it is fair to say that the size of Frame's total emissions corresponds to the annual emissions of approximately 60

Finns³.

HIAP: Emissions from staff mobility have fallen by as much as 86%

HIAP is an inspiring example of reducing emissions. As staff have started to travel more slowly, less, and closer, emissions from staff travel have fallen by 86%. HIAP has also worked hard to reduce emissions from heat consumption. Although only a tenant, HIAP together with the Governing Body of Suomenlinna have invested in an intelligent heating-management system, which is expected to reduce emissions by 15%. Although the figure is small in percentage terms, the reduction corresponds to the combined emissions from energy usage of both the IHME and Frame offices.

Ten times lower heating emissions with smart energy solutions

It is an interesting detail that the carbon footprint from energy consumption is the same at IHME and Mustarinda. IHME's office area is 70 square metres, ten times less than Mustarinda's with its area of 700 square metres. This shows the different potentials for different actors to influence the emissions they produce. Based in Helsinki, IHME's office is heated by Helen's district heating, which is produced using fossil fuels. There are no alternative heating options. In contrast, Mustarinda, in a privately owned house in the countryside, made large investments of both cash and working hours in testing and building new energy solution. This has paid off, and they now have an energy system based on wind power, solar energy and geothermal energy.

Food is essential – Can an organization

support personal decisions?

In addition to the results presented above, I calculated that the carbon footprint from food would be 70% lower if all residency artists ate vegan food instead of beef-focused mixed food. This would also significantly reduce the organization's total emissions: they would fall by 30%. The initial assumptions for this hypothetical calculation are in Mustarinda's blog. It is clear that personal food choices can play an important role in overall emissions. However, it's good that employers do not decide what their employees eat. Nevertheless, organizations can consider ways of supporting low-emission vegetarianism.

Carbon Challenge 2030

No artist or art organization operates in a vacuum. We are all bound together in multiple ways. A new carbon-neutral normal has to be created jointly.

That is why I am challenging you for 2030:

- Monitor your emissions, reduce them by 90% and offset the rest
- Demand:
 - guiding legislation for climate action and compensation
 - more research, more comprehensive data, better calculators
 - the support, training and information needed for the change to take place, including support structures
- Create demand for
 - low-emission products, services and facilities
 - Carbon-neutral facilities and venues
 - Carbon-footprint calculation as an additional service provided by accounting companies
 - Environmental programs and

certification

- Slow down, adjust your expectations
- Spend time talking and accepting emotions
- Reach out to everyone
- Create a low-emission culture

The information here is based on a speech⁴ I gave at the Eco-seminar⁵ organized by IHME, Frame, HIAP and Mustarinda at HAM – Helsinki Art Museum on 19 December 2020. The talks given at the seminar have been published on IHME's YouTube channel⁶. Worth taking a look!

This article is part of a series published in 2020 about the carbon footprint of an art production, written by IHME Helsinki's eco-coordinator Saara Korpela. ihmehelsinki.fi

Endnotes

- 1 Carbon-smart project's calculator
<https://blogs.helsinki.fi/hiilifiksi/>
- 2 Julkisten hankintojen ja kotitalouksien kulutuksen hiilijalanjälki ja luonnonvarojen käyttö
https://helda.helsinki.fi/bitstream/handle/10138/300737/SYKEra_15_2019_korjattu_26_02_2020.pdf?sequence=4&isAllowed=y
- 3 Carbon footprint of the average Finn
<https://www.sitra.fi/en/articles/carbon-footprint-average-finn/>
- 4 Taideorganisaation hiilijalanjälki
https://www.ihmehelsinki.fi/wp-content/uploads/2020/12/11_Taideorganisaation_hiilijalanj%C3%A4lki_SK.pdf
- 5 Ecoseminar: Environmental crisis – from words to deeds in the field of art
<https://www.ihmehelsinki.fi/en/2020/10/environmental-crisis-from-words-to-deeds-in-the-field-of-art-eco-seminar-on-nov-19/>
- 6 IHME Youtube Channel
<https://www.youtube.com/user/ihmeproductions>

Saara Korpela

How to promote sustainable eating in an art organization?

Food has a major impact on the climate¹, biodiversity², and the state of the Baltic Sea³. It is also a very personal matter, bound up with a lot of feelings and vested interests⁴. What is the role of the workplace, and how do we promote sustainable eating in an art organization?

Alongside housing and transport, food⁵ is the **individual's** most significant generator of climate emissions. According to statistics, the average Finn eats or drinks more than 2500 times a year⁶. Altogether Finns manage 14 billion mealtimes a year! So it's no wonder that the food production and distribution chain emits approximately 25%⁷ of Finland's greenhouse emissions.

We might joke that the carbon footprint from an art organization's staple diet is small simply because it consists mostly of champagne⁸. But it's true that food accounts for only a small component of art-organization budgets. Catering at events and meetings, lunches at restaurants, and packed lunches for day trips – their carbon footprint is the organization's direct responsibility. In contrast, employees' personal choices are not included in the organization's carbon budget. But there are numerous ways that a workplace can encourage sustainable mealtime practices. Here are some examples.

How to support sustainable eating practices in an art organization:

DIRECT IMPACT:

-CATERING AT EVENTS. Use events as a showcase for new, ecological taste sensations. A competent catering service or restaurant can conjure presentable dishes out of ecological raw ingredients. Potatoes and other root vegetables are top of the class in climate foods, roach dishes remove nutrients from Baltic, while organic fare fosters soil fertility. Also, find out where the establishment's electricity and heating come from, and how much transportation is involved in getting the raw ingredients. The next step is avoiding waste.

SUPPORTING EMPLOYEES:

1. TOGETHER. Discuss how the work culture could encourage more sustainable choices.
2. SELF-MONITORING AND ANALYSIS. Do meals involve recurring challenges? Too much meat, excessive amounts of chocolate, lots of packaging waste, uneaten packed lunches? Analyse how time constraints, knowledge, emotional states, and the available options affect choices.
3. TIME AND ORGANIZATION. Is there time for a breather and a visit to a local eatery on your lunch break? Do you have time in the evening to make food for the next day? How can you affect these issues? Learning new routines takes time. Divide tasks into parts, write a to-do list and set a reminder in your phone.
4. KNOWLEDGE AND MOTIVATION. The workplace coffee table can be an excellent arena for exchanging recipe tips and cooking tales. A really enthusiastic team of workers could pay a chef to teach them how to make bream fillets or pea falafels. You can experiment with joint cooking sessions, remotely or

live!

5. LIKE HAVING YOUR OWN RESTAURANT. Using local food services is a good idea when there is vegetarian food on the menu and waste is minimized. It can be good to let the owner of a small restaurant know what day of the week you will eat there or when you have your summer holiday. You can also see if you can make a deal with a local restaurant on collecting that day's leftover meals.

6. PRIZES, COMPETITIONS AND CAMPAIGNS. Sustainable practices can also be promoted with playful competitions. Vegetarian Month in October and Veganuary are already traditional campaigns that the whole team can take part in. You can also just draw a flower or write an aphorism to acknowledge a colleague who has remembered to bring a packed lunch every day of the week or fried Baltic herring for the first time in their life. It's important to remember to reward your own and others' successes!

This article is part of a series published in 2020 about the carbon footprint of an art production, written by IHME Helsinki's eco-coordinator **Saara Korpela**. ihmehelsinki.fi

Endnotes:

1 Livestock’s Long Shadow
<https://www.fao.org/3/a0701e/a0701e00.htm>

2 Biodiversity
<https://www.fao.org/biodiversity/en/>

3 What is happening in the Baltic Sea?
<https://www.ihmehelsinki.fi/en/2020/03/what-is-happening-in-the-baltic-sea/>

4 How do Vested Interests Maintain Outdated Policy? The Case of Food Marketing to New Zealand Children
https://www.researchgate.net/publication/266493946_How_do_Vested_Interests_Maintain_Outdated_Policy_The_Case_of_Food_Marketing_to_New_Zealand_Children

5 FoodMinimum
<https://projects.luke.fi/ruokaminimi/en/>

6 Nutrition in Finland
https://www.julkari.fi/bitstream/handle/10024/137433/Raportti_12_2018_nettti%20uusi%202.4.pdf?sequence=1&isAllowed=y

7 Ilmastonmuutosta voi hillitä ilmastoystävällisellä ruokavaliolla
<https://ilmasto-opas.fi/fi/ilmastonmuutos/hillinta/-/artikkeli/ab196e68-c632-4bef-86f3-18b5ce91d655/ilmastonmuutosta-voi-hillita-ilmastoystavallisella-ruokavaliolla.html>

8 IHME Helsinki Facebook Post
<https://www.facebook.com/IHMEhelsinki/photos/a.195524130477577/2008450425851596/?type=3>



The back cover of the second issue of SDO Magazine &, designed by Timo Aarniala. 1968.
Yrjö Sotamaa personal archive.

Suomenlinna 1968

The seminar 'Industry, Environment, Design' held in Suomenlinna in 1968 had a great influence on the development of Finnish and Nordic Design. The topics that were discussed in the event have a strong resemblance to the discussion that is taking place today regarding the urgency of environmental issues and the need for our society to rapidly change its course.

During the first part of the symposium in the beginning of July 1968, the focus was on industrial design and social responsibility, as well as future possibilities for technology. Later in July, the second part included talks about innovation, processes in industrial design and methods for planning, and the development of design education. The invited speakers included design theorists Buckminster Fuller and Victor Papanek, a group from the Royal College of Art's Design Research Unit,

Swedish environmentalist Hans Palmstierna, Finnish Minister of Labour Jussi Linnamo, psychologist Jan Kronlund, and industrial designer Henrik Wahlforss, joined by a range of engineers and architects and economists.

The second edition of the Scandinavian Design Students' Organisation (SDO) magazine - an idiosyncratic and eclectic publication featuring manifestos, design theory and illustrations was published during the Suomenlinna seminar. The spirit of an impending natural catastrophe was present on the first page of the magazine, where the organisation's new manifesto was presented. The greatest threat facing planet Earth was 'man's own nature and its discontent with the world he was born into', while 'men with fore-sight in several branches of science are urging the initiation of emergency measures to insure that this planet is not poisoned or ravaged beyond human use.' The magazine



Photographs of the seminar by Kristian Runeberg, from the personal archive of Yrjö Sotamaa

featured Buckminster Fuller's articles from the World Science Decade documents series which posed questions such as 'What do we mean by universe? What is energy? What is brain?'. Viktor Papanek's article 'Do-It-Yourself Murder' addressed the social and moral responsibilities of the designer. The other featured topics included the use of computers in education, space travel, genes and the mystery of life, development of urban space and designing for children.

The seminar 'Industry, Environment, Product Planning' was arranged by Yrjö Sotamaa together with engineers Harri Hintikka and Matti Kaje, and architects Juhani Pallasmaa and Tom Simons. The seminar was funded by the recently established SITRA, the Finnish Innovation Fund (the seminar was SITRA's 5th project).

An important part of the Suomenlinna seminar's program was also to introduce the products of two workshops, which had been initiated already in May. The first group's task, led by Victor Papanek, was to design a playground for children with cerebral palsy, while the second group was to design a mobile slaughterhouse for reindeer. Both of the assignments reflected the idea of design as an activity needing research and a scientific approach, but also, the slaughterhouse aimed at the Finland's only indigenous people, the Sami in Lapland whose main livelihood reindeer farming was, provides an interesting and early example of design anthropology, a field that is still relatively little discussed today. According to design historian Alison J. Clarke, the design community's interest in the anthropological rose simultaneously with a critical design culture, which 'sought to strip away the layers of "false" meaning around commercial products'. In this process anthropology's aim of

revealing the different layers in human, social and cultural interactions provided an alternative to designing for the capitalist commodity culture. Designing the mobile reindeer slaughterhouse to be used by the Sami thus reflected the newly found interest towards designing for 'peripheral economies', while the project was fuelled by the introduction of a new law in Finland demanding better hygiene for slaughtering kettle, without any promise of funding to help build permanent slaughterhouses to meet these demands.

Sources:

Kaisu Savola: 'When Beauty is Not Enough to Save the World - A Short History of the Scandinavian Design Students' Organisation 1966-1969'

Teollisuus ympäristö tuotesuunnittelu, 1-4:
Transcripts of the presentations at Suomen-
linna 1968 Seminar



Photographs of the seminar by Kristian Runeberg, from the personal archive of Yrjö Sotamaa

World Resource Inventory

Buckminster Fuller

Quotes taken from the Transcripts of the recorded lecture with this title
Teollisuus ympäristö tuotesuunnittelu, 1-4: Transcripts of the presentations at Suomenlinna
1968 Seminar

1.
“I think it is quite clear in our known history of man and this planet, there has been no moment of his being in greater awareness of the critical aspects of his life.”

“The lunatic from now on is going to be the great authority”

“Great change can happen within a lifetime”

8.
“...One of the great dangers of society today lies in an enormous bureaucracy that has not unlearned what it has to unlearn, not daring to think, having learned not to think.”

“We are on this spaceship Earth, our spaceship is a beautifully designed machine. It’s a perfect design. Man has been aboard it for 2 million years to our knowledge and allowed to be so ignorant he didn’t know he was aboard a ship....”

“I think we have been allowed just enough cushion of error up to now to learn, but I don’t think Nature allows us any more cushion of error.”

“I find that all of our society is thinking that education must work towards this great specialization and man tends to think without any questioning that this is logical, inevitable and desirable. Now we find him then being born with general adaptability, with a drive to understand the whole, unique in having the general adaptability in contradiction with the specialist. We have to ask a big question here. How did this come about that we - it is unnatural then what we’re doing to develop specialization, how is it we happen to do it?”

“Extinction is a consequence of over-specialisation.”

19.
“It can very well be that humanity aboard our spaceship Earth is not going to make good, not understand in time, not make use of what it has here, and will not discipline itself quickly enough... the business man, he must make a profit this year, that is all he cares about, and he’s going to be a President, re-elect by the stockholders only if he makes a profit this year. He’s not looking out for tomorrow. He hasn’t any interest whatsoever in your children or your great grandchildren or children of all times, which all of us must be concerned with if we are going to keep life going on in this spaceship Earth.

24.
“We are at a point now that if we carry on only developing great technology for how to kill each other, that’s the only reason we’ve - for instance, in developing the blast furnaces to make steel. Blast

furnaces were making steel for battleships for fifty years before they put a piece of steel in a building on the land.”

28.
“Here is man in great ignorance and fear then does the right things for the wrong reasons. He is simply scaring himself into acquiring the technology he was opposed to.”

“If the universe is then an aggregate of non-simultaneous events it is a scenario, a moving picture scenario, it is not a single picture. Quite clearly the single picture of a caterpillar does not foretell the picture of the butterfly. You can only understand our universe then in a long scenario of continual transformation. Therefore you can’t have one picture that tells you all about the universe.”

“I’ll then point out to you that we have a whole society of nationalists, all been turned into specialists on our way to extinction. Learning then that extinction then comes from over-specialization, society having developed the ability to take enormous energy out of the atom, being able to destroy ourselves, and no coordination to try to make the total world work, leaving things in the hands of the politicians, who automatically have bias, and assuming it has to be you or me. So we get on higher and higher in this cold war.”

“I find then that it is a good possibility that man will be saved, that he’s going to make good on the spaceship earth, but he’s going to have to do it in a great hurry. He’s going to have to be able to coordinate all the events in terms of everybody. Everybody is to be taken care of. We know it’s feasible.”

“It is perfectly possible to have a design revolution where you can increase...efficiencies...and by doing more with less, you could take care of more of humanity.”

“It can only come from our doing more with less...”

“But that is a design revolution, it is not just a make-it-bigger kind of revolution like you are used to”

“I find the really great scientists are also artists and the great artists are also great scientists, and I have found these people comprehending the principles and they are not just a subjective scientist finding out the information as a pure science and having no responsibility what is going to be done with this, i happen to be responsible to society for the information I am getting out of the universe, so i think then the responsible scientist/artist, taking the definite initiative, which I think you all potentially are if you drag yourself out and get enough perspective here, get rid of those inertias and conditioned reflexes and begin to believe and make it spin around, get all your fundamental information and expand mentally and set about to see how you can do so much with so little, there is no question about it, man can within the critical period probably get the world to work in such a way to take care of everybody.”

“Everybody able to enjoy the total spaceship Earth, nobody trespassing on the other and nobody in fear of the other. Nobody profiting at the expense of the other. This is the challenge and I am quite sure it can be done.”

Combustive Art

The accelerating pace of climate change and biodiversity loss constitute a massive calamity that is impossible for the human mind to grasp in its entirety. To tackle this crisis, a systemic approach to the workings of complex, entangled processes is needed alongside the focus on localized practices. There are many roadblocks on the paths to more sustainable futures. Chief among these are governments and mega-corporations with their fallacious assumption that economic growth can continue indefinitely, possibly even by capitalizing on ecological disasters.

This specious conviction is underpinned by the delusion that human activities are somehow exempt from the laws of life that govern Earth's ecosystems. More astounding still, this condition of alienation from life-enabling ecosystemic connections is one of the key uniting features defining what are commonly deemed to be "advanced" societies – and, art, as an integral part of society, is no exception from the paradox. Conversely, in fact, the prevalent practices of contemporary art and related scholarship can be viewed as having evolved to a point in history where art is enlisted to uphold and perpetuate the separation between nature and culture.¹ Despite this, art can ideally

choose a different path by opting instead to deconstruct artificial conceptual divisions.

For several years, my work as a curator and writer has been addressing how entrenched ways of making, presenting, experiencing and studying art have been based on the spurious logic of fossil combustion. My concerns have been revolving around the conditions, limitations and opportunities of *ecological reconstruction* in contemporary art and society. The term is borrowed from a working paper² published by the BIOS Research Unit in October 2019, but instead of focusing on energy transition and structural change in society, my work principally addresses the mental adjustments necessitated by the transitions to post-fossility, specifically the shifts in imaginaries, worldviews and consciousness required both on an individual and collective level.

In my work, I have sought to articulate the complexity of today's ecological urgencies by linking post-fossil philosophy and feminist energy humanities with posthumanist thinking, because the ecological calamities of today are associated with various continuums of subjugation and exploitation, notably the legacy of



Image credit Zbynek Burival / Unsplash

colonialism. To address this complexity, I have sought to incorporate a more sensitive and better-informed approach to social injustices into my practice. In my previous work on art and ecology, I admit having failed to publicly condemn the fallacies of white environmentalist movements.³ I owe a debt to intersectional feminism that critically reflects on differences and inequalities within the context of a broader inquiry into ecological change. Intersectionality is an approach that originated from black feminism and African-American feminist theory. Like intersectional feminism, eco-intersectionality endeavours to centre the knowledge and experiences of racialized and indigenous ‘others’.⁴

Intersectionality flags up the inherent inequalities of today’s eco-disasters. Approaches to ecology and sustainability that acknowledge historical and present-day social injustices can turn out to be revolutionary in opening up new ways of seeing the world, revealing the boundaries of “self” to be fundamentally unstable, and exposing how fossil-reliant societies are a bizarre historical anomaly.

Post-fossil praxis

In 2019 the artworld seemed to suddenly wake up to the gravity of climate change. So far, however, the chief focus of discourse has been on the harmful impacts of global mobility. Broadly-based dialogue around the topic of post-fossil praxes and what post-fossilility might mean for various social agencies is yet in its nascence.⁵

My personal attempt at “post-fossil praxis” in 2019 consisted of my working chiefly from Finland, cutting back my flying to two round trips, and allocating funds for peatland restoration to offset my carbon footprint.⁶ Even this was too

much flying, but without having yet established a fully local curatorial practice, total avoidance of flying is difficult, especially since my career to date has chiefly been dedicated to promoting the international mobility of artists and curators. I have adjusted certain aspects of my practice, however. For instance instead of flying overseas for quick visits, I favour longer work trips, residencies, and involvement in dialogue on localized ecological issues. Between September and November 2019 I visited New York and Los Angeles to build up a collaborative research project. The examples below are from that trip.

I have been fortunate to have been involved in long-term, small-scale processes largely thanks to a combination of serendipity, generous work grants, and my privileged life circumstances. Indeed one of the salient insights I have gained during my years in this profession is how eco-crises are bound up with privilege and inequality – my experience has made me mindful of how inequities are exacerbated in crisis situations. Not everyone is equally responsible for the eco-calamity, not everyone suffers from it equally, and not everyone enjoys equal opportunities to take combative action. It is vital that we recognize these critical imbalances rather than just focus on keeping our own side of the street clean, for the solution ultimately lies in fostering equity and equality.

The deconstruction project

Tackling eco-crises also entails a process of “unlearning” and deconstruction. To address modern society’s alienation from ecology, concrete action is certainly needed, but so are thorough-going changes in how the world is perceived. People must abandon outdated beliefs and practices, learn to comprehend

the precise environmental impacts of their choices, and organize themselves to work collectively rather than becoming mired in individual angst. It is time to critically reappraise dominant narratives about enlightenment, progress, economic growth, legitimation and justice – and to interrogate the legitimacy of the Western human being as the starring protagonist in these narratives. Being inextricably caught up as an agent in these narratives, art, too, has much to “unlearn”.

Los Angeles, November 2019

*Decolonization and care – both are critical topics occasionally raised in dialogue around contemporary art, but the context of this particular dialogue is surprising: I find myself taking part in a panel discussing the topic of ‘Re-designing Los Angeles’. The city’s Chief Design Officer **Christopher Hawthorne** has assembled a diverse panel of voices⁷ to discuss the future of Los Angeles. In his opening speech, he raises issues such as the need to dismantle social structures that are no longer sustainable, emphasizing how decolonization and care should be embraced as the guiding principles of urban development. After broaching the topic of land acknowledgement, he goes on to discuss various forms of inequality that are dividing the city. The panellists, who all come from different backgrounds, reflect on which elements of the built environment are worthy of care in the eyes of varied communities. Hawthorne observes that this is a project entailing the polyvocal dissection of painful historical continuums. To achieve ecologically sustainable change, the urban environment must be examined pluralistically, from as many angles as possible. The city has for instance launched a project advancing the idea that the right to shade is an equal rights issue. LA’s less advantaged neighbourhoods suffer more acutely from rising heat levels than privileged*

residential neighbourhoods. Over the coming years, LA therefore plans to invest in providing more shade in various parts of the city. Sacrifices will need to be made: some of LA’s iconic palm trees will have to make way for shadier tree species. A city that glories in its reputation for year-round sunshine now faces the predicament of figuring out how to protect its residents from excessive sun exposure as equitably as possible. This will necessitate visible changes in the cityscape. Perhaps the city will never achieve its lofty ambitions, but the discussion left me with the overall impression that the LA committee is on the right track.

What does urban planning in California have to do with the future of contemporary art? For one, the case of Los Angeles sheds light on how ecological and social issues are inherently entangled, while also underscoring the complexity of the polyvocal approaches that are needed to collectively prepare for the consequences of ongoing crises. These issues also apply directly to the resilience and future of art and the meanings associated with it.

The petro-paradox

The past few years have witnessed lively debate on how radically the fossil era has impacted Earth over the past 150 years, in tandem with discourse on alternative scenarios for handling the transition to post-fossilility. For instance *Energia ja kokemus* (Energy and Experience), an essay by the philosopher-researcher-writer duo **Tere Vadén** and **Antti Salminen**, has been instrumental in driving this debate in Finland. Another influential work also published in 2013 is *Niukkuuden maailmassa* (In a World of Scarcity) by the philosopher and journalist **Ville Lähde**. The theories presented by these philosophers are closely linked to the ecological reconstruction project advanced

by the BIOS Research Unit. The Mustarinda Association, which runs a residency in Hyrynsalmi, is in turn actively searching for practical strategies for accelerating the post-fossil transition. Working in collaboration with the HIAP – Helsinki International Artist Programme, Mustarinda has been running a related project since 2018.⁸ All the above examples highlight the need for technological and infrastructural transformation, but also change on an experiential level.

In his writings in the emerging field of the energy humanities, the cultural theorist **Imre Szeman** describes how fundamentally bizarre modern society's dependence on fossil fuels really is, and how the concealment of this dependency is a requisite condition for the continued functioning of modern society:

*[...] Fossil fuel culture and modernity are one and the same; to be modern is, in part, not to know or understand this deep, dark dependence of the modern on the organic remnants of another era. [...]*⁹

Many experts on energy humanities and post-fossility theorize that societies have been able to perpetuate the delusion of endless economic growth and boundless prosperity only because fossil energy sources are so readily at our disposal. The superior ability of fossil fuels to store and release vast quantities of energy through combustion has made possible an anomalous set of historical circumstances. Today, as societies face a forced transition to post-fossility, we have no choice but to bid farewell to the ideas and practices that defined modernity. Instead, we must embrace a mindset of energy and material consciousness¹⁰ and develop new framings of scarcity and abundance. The post-fossil transition means paying careful attention to the politics

and geographies of accumulation, allocation, and accountability. This cultural watershed will inevitably also alter the practices and meanings associated with art.

Fossil art

Fossil fuels are inextricably linked to every aspect of our daily lives; nothing is entirely impervious to their influence, not even the notions of selfhood that we construct through our choices and opportunities. Without them, art would look very different, and what we recognize as “art” would be something entirely different – and this salient fact has been overlooked in art discourse. It therefore bears repeating: art comes into existence as part of a complex network. It involves the expenditure of energy and materials, at the very least during its interaction with participating bodies, no matter how ostensibly “immaterial” a work of art might initially appear to be.

Fossil modernity has created a framework for a particular mode of art praxis: the globalized artworld – with its mega-institutions, massive scale, furious pace of production, frequent flying, countless freight shipments, super-sized art fairs and biennials – is possible only because of the vast quantity of affordable energy that is readily at society's disposal. The perpetual pursuit of novelty and the corollary phenomenon of throwaway consumerism are based on “fossil logic”, which is also an underlying cause of society's collective experience of fatigue and burnout.¹¹ The effects of fossility are both direct and indirect: even when art is created without direct fossil mediation, fossility still forms the “energetic basis” of the reality in which art comes into being.

Post-combustion art?

The transition to post-fossility calls for sacrifices and limitations, and also the redistribution of scarcity and abundance, but it also presents fresh opportunities, as posited by **Essi Vesala** in her enlightening curating-themed thesis for the University of Stockholm, *Practicing Coexistence – Entanglements between Ecology and Curating Art*:

*As the post-fossil paradigm and de-growth have strong connotations with the ethos of scarcity, and cutting down, refusing and so on, it is perhaps not seen as an overly inspiring way of looking at curating and art. Nevertheless, the ethos of scarcity and post-fossility can be turned upside down, not only letting go of old, familiar and harmful ways of doing, but experimenting with new possibilities that the paradigm opens up.*¹²

What kind of changes might the new cultural paradigm imply for the artworld? Before delving deeper into this question, we should briefly review where things stand today: Contemporary art is generally regarded as being “up there” with the philosophical vanguard, but the artworld at large has been surprisingly slow to wake up to the magnitude of the eco-crisis. Ecological themes have only recently emerged as core thematic content in contemporary art, certainly far too late to exert any tangible impact on prevailing social norms. There are exceptions, of course, and it would be remiss of me to underestimate the artists and curators who have made a long-term practice of spotlighting ecological issues in their work.¹³ Ecological thinking and activism has existed in art probably for as long as art has been around, but it has largely been relegated to footnote status in the canon of art history. Many artists and individual practitioners have called upon

art institutions to adopt and support more ecologically sound practices. So far, however, official art institutions have been unresponsive if not outright ignorant to the call for greater sustainability.

One possible explanation for art's slow response is pragmatic: the mechanisms of international art networks are reliant upon mobility of a massive scale – mobility of artworks, people, and cash flows. International mobility – along with novelty value and volume – are the guiding precepts and yardsticks of what defines “success” on the art scene, but this regrettably comes at the cost of a massive ecological footprint. Biennials and major art institutions compete for top artists and big turnouts, and the top-billed works compete voraciously for attention. The biggest, most jaw-dropping, and most easily digestible (i.e. Instagrammable) visual spectacles usually emerge triumphant. It is eye-opening, therefore, to look carefully at who sits on the boards of major art institutions, and to note how many of those board members are somehow connected to the fossil economy. “Following the money trail” often exposes the inseparable entanglement between global art institutions and the logic of fossil combustion.

Art's slow response to the ecological wake-up call is no doubt also linked to a lingering belief in the autonomy of art, and the (partly legitimate) fear of art being harnessed to serve as a mouthpiece for ecological enlightenment. Another plausible explanation is the inherent challenge of ecocriticism, i.e. the extreme difficulty of unravelling the complex, ever-changing interdependencies at work in fossil modernity.

Fossil-free art and the fallacy of scale

The field of art and culture encompasses a vast array of varied practices, and it would be erroneous to speak of this field as a homogeneous entity. There are many kinds of art fairs, auctions, biennials, mass events, museums, galleries, artist-run spaces, art forums, residencies, training programmes and people working within these contexts, and all have varied approaches – moreover, with various forms of cross-fertilization going on. The ecological footprint of different institutions and practitioners varies radically, and each one is handling the transition to post-fossility in its own way, at its own pace. It is therefore all the more vital to look carefully at the precise environmental impacts of different forms of artistic activity, paying special attention to where the money comes from, not to mention the “fossil complicity” of artworld mega-institutions.

The Finnish curator and climate activist **Anna-Kaisa Koski** has for instance pioneered the *fossil-free art* initiative,¹⁴ which aims to shed light on complicit fossil connections. Koski hastens to add that art-making is by no means the most environmentally harmful activity in which humans engage on Earth, but concedes that certain entrenched institutional conventions tend to greatly increase the ecological footprint of certain practitioners. She uses the concept *fallacy of scale* to describe how critics tend to point the finger and berate the footprint of specific visible practitioners rather than attempting to collectively address the root causes and background culprits of environmental pollution.¹⁵ My sentiments are aligned with Koski’s insofar as I would hate for art practitioners to succumb to despondency and give up art purely due to feelings of personal guilt. Instead, I hope that we can work

together to find ways of influencing individual opinion as well as the policies of decision-makers, corporations, institutions and financing mechanisms.

Upping the complexity factor

The one thing I find truly depressing is the endless barrage of facile climate-cum-Anthropocene-themed art that is being churned out all over the world, which has precious little to do with genuine ecologically-driven art. There are inherent problems in the way that certain artists and art institutions attempt to reduce complex ecological processes into a trite, easily digestible package that lends itself to a nice “wow experience”. The project-oriented work culture that currently holds sway on the culture scene (dominated as it is by neoliberal values and governance practices) has driven many artists to adopt a result-centric “design strategy” in their work – simply because financiers and the general public recognize “designed” creations as “impactful art”. The art that seems to revel in the spotlight these days is the type that conveys a simplistic, easy-to-swallow message that chimes harmoniously with a universalized ethos.

Also in execution, much of today’s eco-art seems to contradict the very values that the artist purports to uphold. The most flagrant examples of this hypocrisy are massive environmental installations sprawling across thousands of square metres that require the use of helicopters, generators and dozens of kilometres of optic cable simply to “underline the beauty” of a landscape or natural setting or to “visualize climate change”.¹⁶

The ideal approach, as I see it, would be quite the opposite: complex and sensitive. Most environmental and land/earth art, both



The ethics and aesthetics of climate art: Ice Watch was an outdoor installation by Icelandic artist Olafur Eliasson and geologist Minik Rosing displayed at London’s Tate Modern (11.–20.12.2018), for which 24 blocks of ice weighing between 1.5 and 5 tonnes were transported from the Nuup Kangerlua fjord in Greenland. Photo by Tim White. <https://creativecommons.org/licenses/by-nc-sa/2.0/>

historically and today, persists in repeating the same old harmful and fallacious division between nature and culture, easily succumbing to oversimplification and othering. Even with the best intentions, such approaches permit artists to address only a narrow fragment of the issues they purport to be concerned about. What is more, art that superficially draws on climate change research regrettably succeeds in going no deeper than an anecdotal textbook illustration.

One key problem is that the ecological crisis cannot, in any meaningful way, be addressed purely as a “theme”. A genuinely ecological perspective entails a deep understanding of

inter-dependencies, synergies, and cumulative effects, and genuine ecologically-driven art and curatorial practice should always somehow address the material and energetic processes that enable art and curating to go on in the first place. This is an enormous challenge – particularly in a culture that owes its very existence to the erasure of these processes.

Ecological art-making and curating?

In my work as a curator, I have cautiously tried to move in the direction of “less is more” and “quality over quantity”. I have consciously sought to foster long-term working

relationships and slowly evolving processes – processes that are sometimes difficult to even recognize as “art” in the conventional sense. Such an approach requires an entirely different skillset than the authority, expertise and control that curators are often expected to put into practice. I have tried to adopt a gentle, nurturing approach, and I have admittedly failed on many occasions.

Instead of travelling nonstop in a quick succession of visits, I try to build up longer-term connections and dialogues with specific communities. When I travel, I spend as long as possible at my destination. I try to plan projects with an eye to minimizing freight, ideally so frugally that everything can be packed in a single suitcase. I strive to avoid the use of virgin resources and single-use materials. I curate with respect for other-than-human agencies, and I try to navigate and experiment with new practices as far as possible within the confines of existing institutional structures.

Sometimes I have done a truly poor job at helping artists remain true to their ecological principles. Due to my approach, I have seen many doors closed in my face. I do not claim to be an exemplary curator, nor is my ecological footprint the smallest it could be, but I am committed to minimizing my harmful impact on the planet and hope, one day, to make my footprint carbon-negative.

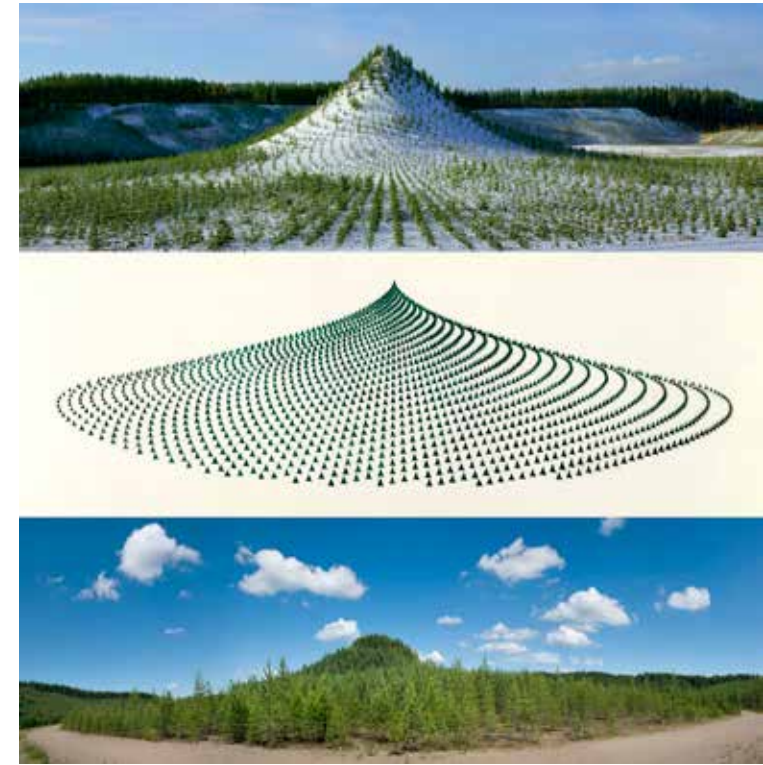
I have found that eco-driven curatorial practices tend to be under-appreciated, or looked down upon as “less professional” or too risky. The ideals associated with curating are normally quite different. This is among the reasons why Vesala’s thesis on curating seems so refreshing: She describes eco-driven curatorial practice as a philosophical approach

weaving together post-fossil, decolonial and feminist new materialist thinking. Vesala extols the merits of a slow, sensitive approach, proposing fresh alternatives to the usual “let’s take charge” style of curating. She boldly invites greater complexity. I feel privileged to have been one of the curators interviewed for her thesis.

I adhere to a policy of using the word “ecological” only to describe artistic and curatorial practices that conceptualize normally invisible interdependencies and cumulative impacts in a way that registers consciousness of the ethical and environmental consequences of engaging in any form of artistic practice. Compared with older, established concepts such as environmental art and earth/land art, I regard “ecological art” as highlighting the way in which technological, biological, economic and political processes “reproduce” one another.¹⁷ Because this notion goes deeper than a simple update of systems thinking, the inclusion of decolonialist and feminist perspectives is integrally important for deconstructing tangled assumptions. Earth/land art and environmental art are good definitions for describing certain art practices, but they come nowhere near articulating the complex insight that is needed for comprehending the current situation. On the contrary, these older terms are easily associated with the notion of “nature” or “the environment” being a mere backdrop for human activity.

Monuments to a lack of ecosystemic understanding

Despite possessing many undeniable merits, the majority of the environmental art, Earth art and ecological art that I have encountered over the years has either persisted in romanticizing the idea of “pure”, “unspoiled” nature, or has



Agnes Denes, *Tree Mountain – A Living Time Capsule—11,000 Trees, 11,000 People, 400 Years (Triptych)*, 1992—96, 1992/2013. Chromogenic print, 36 × 36” (overall). Courtesy of the artist and Leslie Tonkonow Artworks + Projects

entirely failed to register awareness of the complex entanglements that influence the work’s process of becoming.

This impression was reinforced when I recently visited an exhibition featuring *Tree Mountain* by **Agnes Denes**, a pioneer of ecological art whom I personally admire. The work consists of a landscaped mountain planted with an estimated total of 10,600 pine trees in the village of Pinsiö, near Ylöjärvi, Finland.¹⁸ Initiated in 1982 by the Strata Network, the project was completed between 1992 and 1996, with a forest of trees planted according to a mathematical formula devised by the artist. Occupying a former gravel pit, the mountain is elliptical in shape, 420 metres long and 270

metres wide. When viewed from the side, it resembles – typically for Denes – a pyramid.

I only recently formed a deeper acquaintance with this world-famous environmental art project at Denes’ amazing *Absolutes and Intermediates* retrospective in New York. Ironically enough, I formerly resided roughly 20 km from the work’s real-life location for many years. The irony was heightened by the fact that the long-awaited exhibition was held at The Shed in Hudson Yards, a visible hub of capital-driven urban development. In the video and photographs at the exhibition, I noticed that Denes’ *Tree Mountain* – which she designed to be symmetrical – was looking rather threadbare and lopsided. The accompanying panels

explained that the forest's patchy growth was attributable to the fact that Finland, like the rest of the planet, had not escaped the adverse impacts of climate change over the past few decades.

The Finnish artist **Eero Yli-Vakkuri** has worked on the conservation of *Tree Mountain* since 2013, along with another nearby environmental piece by **Nancy Holt**, *Up and Under* (1998).¹⁹ When I shared with him what I had read on the panel, he was not convinced. He pointed out that the forest's poor growth stems from the fact that neither the artist nor the commissioner had any idea of what it involves to grow a healthy forest, added to which the local community lacked incentive to care for the forest because they had no personal bond with the artwork. Contrary to what the artist originally envisaged, it is impossible to grow a perfectly symmetrical monoculture forest on a steep gravel slope. Where the project does succeed, however, is in standing as a grim monument to humankind's inability to comprehend or nurture ecosystemic interdependencies. The original plan conceived by Denes is undeniably impressive: her mathematical "planting formula" is visually striking, particularly from a bird's eye perspective (see *Tree Mountain* on Google Maps). Had the artist worked together with the forest ecosystem as an agency in its own right, the work's merits would be altogether different. According to Yli-Vakkuri's conversations with Denes, however, the artist intended for nature to follow her formula as precisely as possible.²⁰ All told, the project is perhaps not the finest sample of Denes' work, which often engages in a sensitive study of cumulative ecosystemic impacts and interdependencies.

Entangled art for a post-fossil world

In the post-fossil future, art can no longer persist in perpetuating a strict division between nature and culture. Everything is already way too entangled. The genre in which I have seen the most hybridized and hence sharpest approaches to ecological themes is performing arts, or genre-defying work occupying a domain somewhere between visual and performing arts. A good example is *Toxinosex-ofuturecumings*,²¹ a performance staged in spring 2019 by **Ana Teo Ala-Ruona & co.** The piece expressed a register of entanglement highly befitting our damaged planet and the life that tenaciously struggles to survive in its toxic ecosystems.

Visual art seldom captures a comparable degree of porosity and entanglement. One evocative exception is the LA-based artist **Candice Lin**, who muddies and "stains" meanings in ways that dismantle conventional narratives about nature, race, gender and purity. Lin's installations present historical events from unusual perspectives, through the lens of a specific plant or raw material, shedding light on how desirable commodities (such as poppy seeds, porcelain, or the carmine pigment extracted from the bodies of female cochineal insects) and the passions they stir have contributed to shaping world politics and power relation between cultures.²²

I furthermore believe that art is no longer solely a domain reserved for human-to-human interaction but, as theorized by the authors of *Taiteen metsittymisestä. Harjoitteita jälkifossiilisiin oloihin* (On the reforestation of art: post-fossil praxes', 2018), "[...] the role of the author or audience is to an increasing degree being shared with more-than-human agencies".²³ This collection of essays edited by artist and writer **Henna Laininen** is the very first anthology of post-fossil artistic practices



Candice Lin, *System for a Stain*, 2016. Wood, glass jars, cochineal, poppy seeds, metal castings, water, tea, sugar, copper still, hot plate, ceramic vessels, mortar and pestle, Thames mud, jar, microbial mud battery, vinyl floor. Commissioned by Gasworks, London. Courtesy of the artist and François Ghebaly (Los Angeles). Photo by Andy Keate.

published in Finnish. In her essay for the same book, artist and researcher **Saara Hannula** points out that many contemporary artists are beginning to register a new awareness of the material and energetic basis of their art-making, and are thus striving to engage in "more open, processual and/or non-hierarchical practice allowing more room for the process or work to unfold on its own terms, opening itself to cues from the surrounding conditions or environment, to material or more-than-human agencies, to unpredictable and random events". Hannula theorizes that *multispecies co-creation*, which destabilizes or possibly even negates the idea of authorship and authoredness, might help to dispel the myth of individualism that stubbornly lives on in the domain of contemporary art.²⁴

Perhaps, in the future, we will see more projects initiated by localized transnational collectives such as the **On-Trade-Off** collective, which is active in the Democratic Republic of Congo and Belgium.²⁵ The artists in this group employ a variety of perspectives to reveal the social injustices associated with the global trade routes of lithium and its problematic transition to the so-called "green economy". The project reveals how the minerals needed for manufacturing smart devices, electric cars, and solar panels necessitate an ever-growing volume of mining that holds disastrous consequences for human communities and broader ecosystems in the Congo region (a theme also relevant to Finland, a country eyed eagerly by international mining corporations as a future

source of raw materials). The members of the collective rarely travel between Europe and Africa – most of their collaboration takes place in the form of exchange and sharing of information, photographs and video footage.

In lieu of society merely embracing a growing consciousness of its material and energy consumption, I believe that the very way we conceptualize energy and materiality is about to undergo a profound change in the near future. Our notion of what constitutes a “human” has already changed radically in the past few years: What we once thought of as an intact human body with clear boundaries has revealed itself to be a vessel for multi-species colonies of interdependent micro-organisms. The notion of agency has also changed drastically: The idea of human exceptionality has been destabilized by scientific findings revealing that plants and animals are capable of communicating and forming complex relationships. Not even “dead” things can be dismissed as mere inanimate matter, for they possess agency as critical enablers of human experience, for instance when converted into technologies. The special aptitudes of more-than-human agencies – such as the ability of plants to photosynthesize – might soon also finally receive recognition as highly advanced technologies.

The ecological art of the future will acknowledge and co-evolve with human and more-than-human technologies, without making any distinction as to whether a materiality or environment is “natural”. Most of this art will be created on digital platforms in urban settings.

Localized practice and a return to the rhythm of the seasons and movements of celestial bodies seems an equally relevant approach to challenging fossil logic and its force-fed

notions about productivity. This mental downshift is well-aligned with the new theories presented by energy researchers, who advocate that society should adopt cyclic rhythms in the production, storage and consumption of energy. Indeed the entire concept of “productivity” is ripe for a wholesale critical reappraisal. We must question the idealization of over-exuberant efficiency and instead find new indicators of what constitutes “meaningful” activity.

In the near future, art will perhaps be viewed from a wholly new temporal perspective, too: no longer as something eternal, no longer as something judged on the merits of its novelty value, but on how well it carries significance from generation to generation. Transgenerational thinking is a concept connected to nurturing and passing on life-sustaining skills, both in art and in life. Borrowing the ideas of the influential thinker **Donna Haraway**, perhaps the art of the post-fossil future can be thought of as a rich, organic compost heap that is teeming with life.²⁶ In conclusion, I hasten to emphasize that none of the ideas shared above are, by any means, new – they have merely become relevant again as part of a cyclic movement portending the end of an historically anomalous era.²⁷

Epilogue

This text was written in autumn 2019 with a grant awarded by the Kone Foundation for researching post-fossil, post-humanist and eco-intersectional perspectives on contemporary art and its curatorial practices. The above observations are also based on nearly a decade’s personal experience of engaging in thought-provoking clashes between ecological issues and institutional conventions in

contemporary art.

My essay was originally published in the Finnish EDIT Media on January 8, 2020 – on the verge of the COVID-19 pandemic. Between January and June, the pandemic ripped open a portal, a wormhole into new worlds.²⁸ Among so many other worlds, the globalized art ecosystem largely came to a halt during the spring months. Many aspects of the international art system that previously seemed as “normal”, or were taken for granted, became obsolete overnight or exposed their in-built vulnerabilities. In this abruptly altered situation, the need to radically reform the standards, operating models, and aims of cultural activities and institutions is even more acute than before. The need to foster just, inclusive and diverse forms of ecological practices (within and beyond the arts) is more pressing than ever. For some, the virus finally revealed the interconnectedness of all life and exposed the systemic injustices at the root of contemporary societies. Tragically, it also deepened existing political divides and social injustices. At the moment, the portal has opened into a world where billionaire wealth is booming, while unfathomable number of humans struggle to stay alive and to have enough to scrape by. However, the political transformation needed is not only about humans. I trust the following words by writer, philosopher and curator Paul B. Preciado are helpful in developing political strategies to deal with the virus and its ripple effects.

“The mutation in progress could ultimately catalyze a shift from an anthropocentric society where a fraction of the global human community authorizes itself to exercise a politics of universal extractivist predation to a society that is capable of redistributing energy and sovereignty. At the center of the debate during and after this crisis will be which

lives are the ones we want to save. It is in the context of this mutation, of this transformation of the modes of understanding community (one that encompasses the entire planet, since separation is no longer possible) and immunity, that the virus is operating and that the political strategy to confront it is taking shape.”²⁹

Ki Nurmenniemi is a Helsinki-based curator of contemporary art, an art writer, and facilitator of multidisciplinary dialogues. With their educational background in the Arts as well as in Social Sciences, Jenni’s curatorial focus is on how different eco-philosophies and notions of sustainability (ecological and social) are approached in the Arts. In their long-term institutional position as a curator at HIAP –Helsinki International Artist Programme (2012-2018), Jenni curated many international exchanges and multidisciplinary cooperative projects such as ‘Frontiers in Retreat – Multidisciplinary Approaches to Ecology in Contemporary Art’ (2013-2018). Among Jenni’s latest projects as an independent curator are the on-line public program ‘Care Practice: Recipes for Resilience’, co-curated with Ceci Moss (June 2020), and the exhibition ‘Beings with’ as part of Fiskars Village Art and Design Biennale (2019).

kinurmenniemi.net

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References:

1 Thanks for this observation are deserved by my first reader, curator Jussi Koitela. Further insightful views on this topic are shared by Sacha Kagan in ‘Art and Sustainability – Connecting Patterns for a Culture of Complexity’ Bielefeld: transcript Verlag. 2013 (2nd amended edition).

2 <https://eko.bios.fi> (accessed 2.1.2020).

3 For instance certain segments of the so-called “deep ecology” movement, who disregard these historical continuums and the resultant inequalities, can at worst cross over into eco-fascism: <https://www.theguardian.com/world/commentisfree/2019/mar/20/eco-fascism-is-undergoing-a-revival-in-the-fetid-culture-of-the-extreme-right> (accessed 8.1.2020).

4 The concept of intersectionality became established after the American lawyer Kimberlé Crenshaw published her essay ‘Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics’ (1989), but the same idea was advanced earlier by the American feminist writer and civil rights activist Audre Lorde: “There is no thing as a single-issue struggle, since we do not live single-issue lives”. (See e.g. Lorde, A. 1984). Intersectionality began by addressing the experiences of racialized women. Among the recommended texts offering insights into how this concept might be applied to look at the causes and effects of eco-crises is A.E. Kings’ article *Intersectionality and the Changing Face of Ecofeminism. Ethics and the Environment*, Vol. 22, No. 1 (Spring 2017), s. 63–87. Also recommended are essays by Kathryn Yusoff, Professor of Inhuman Geography, such as *A Billion Black Anthropocenes – or None*. An excerpt of this book is available here: <https://www.e-flux.com/journal/97/252226/white-utopia-black-inferno-life-on-a-geologic-spike/> (accessed 2.1.2020). The art historian and cultural critic T.J. Demos also discusses the inter-linking of ecological and intersectional perspectives: <https://thedistance-planlexicon.org/ECOLOGY-AS-INTERSECTIONALITY> (accessed 2.1.2020).

5 Chayka, K. 2019. *Vanity and Vapour Trails / Can Art*

World Kick its Addiction to Flying
<https://frieze.com/article/can-art-world-kick-its-addiction-flying> (haettu 2.2.2020).

6 <https://hiiliporssi.fi> <https://www.lentomaksu.fi>

7 *3rd LA (Re)designing LA: Amnesiac City – Bolstering Civic Memory in Los Angeles*. Occidental College, Los Angeles. 4.11.2019. See also <https://www.nytimes.com/2019/12/01/us/los-angeles-shade-climate-change.html> (haettu 2.1.2020).

8 For further information on the project, see Nurmenniemi J. *Going Post-fossil in a Neoliberal Climate*. In (Eds. Elfving; Kokko; Gielen.) *Contemporary Artist Residencies. Reclaiming Time and Space*. Valiz, Antennae – Arts in Society. Amsterdam. 2018.

9 Excerpt from Szeman’s response to a survey circulated by the Mustarinda Collective. <https://mustarinda.fi/magazine/post-fossil-fuel-culture/post-fossil-fuel-culture> (haettu 10.12.2019).

10 The term is often used interchangeably with “resource consciousness”. I prefer “material”, because the tendency to perceive things such as ecosystems as exploitable “resources” is a big part of the problem. The terminology we choose plays a major role in shaping how we think and act.

11 For instance artist Kim Modig and curator Marina Valle Noronha reflect on the physical and psychological stress of the prolific international visibility that is expected of artists in today’s fossil-based culture: <https://www.aqnb.com/2019/06/06/am-i-living-like-an-asshole-kim-modig-marina-valle-noronhas-art-off-the-air-on-the-motions-emotions-of-art-that-travels/> (haettu 2.1.2020).

12 Vesala, E. 2019. *Practicing Coexistence – Entanglements Between Ecology and Curating Art*. Stockholm University, Faculty of Humanities, Department of Culture and Aesthetics.

13 For instance the art historian Professor Hanna Johansson has written about Finnish artists who have been addressing ecological themes since the 1970s. Johansson, H. 2005. *Maataidetta jäljittämässä. Luonnon ja läsnäolon kirjoitusta suomalaisessa nykytaiteessa 1970–1995*. Helsinki, Like Kustannus.

14 Koski is a long-term activist who has been involved in

campaigns such as Hiilivapaa Helsinki (Carbon-free Helsinki). In September 2019 she launched the Twitter campaign #fossiilivapaataide. Koski has compiled related comments and experiences on social media. <https://hiilivapaasuomi.fi/helsinki/> (accessed 2.1.2020).

15 Collated data on major polluters and their carbon footprint (up to 2017) can be found here: <https://www.climateaccountability.org/carbonmajors.html> A recent example from Finland: *Saksalaisjärjestöt peräävät Suomelta valtio-omistajan vastuuta: Fortumin ostama Uniper päästää enemmän hiilidioksidia kuin koko Suomi*: <https://yle.fi/uutiset/3-11128400> (both accessed 8.1.2020).

16 <https://yle.fi/aihe/artikkeli/2019/01/04/valotaiteilija-kari-kola-suunnittelee-gronlantiin-ilmastomuutoksen> <https://yle.fi/uutiset/3-9956825> (accessed 2.1.2020).

17 Nor can they exist or function entirely separate from one another.

18 Agnes Denes, *Tree Mountain – A Living Time Capsule – 11,000 Trees, 11,000 People, 400 Years*, 1992–1996. Pinsiö, Ylöjärvi. <http://www.strata.fi/puuvuori.html> (haettu 2.1.2020).

19 Yli-Vakkuri, E. *On Land and Environmental Art Conservation*. In Laamanen, I. (Ed.), 2019. *Crossroads – New Views on Art and Environment*. Finnish Cultural Institute in New York and the Academy of Fine Arts at the University of the Arts Helsinki. 2019.

20 Denes has stated that her goal was to create “a man-made virgin forest” that would be nurtured for at least 400 years. The title moreover suggests that the work is a “time capsule”, a summation of a particular way of seeing forests and nature that prevailed at the time of the work’s inception.

21 *Words Make Worlds*: Ana Teo Ala-Ruona on the somatic possibilities of language and what is lost in translation across contexts. Ana Teo Ala-Ruona interviewed for AQNB (Steph Kretowicz). <https://www.aqnb.com/2019/12/10/words-make-worlds-ana-teo-ala-ruona-on-the-somatic-possibilities-of-language-whats-lost-in-translation-across-contexts/> (accessed 10.12.2019).

22 Candice Lin’s exhibition ‘A Body Reduced to Brilliant Colour’, 2016, Gasworks, London, is available on video:

<https://vimeo.com/192544862> (accessed 2.1.2020).

Lin’s art is also discussed in a recently published book: Arndt, L.; Umolu, Y. *Candice Lin – A Hard White Body*. Reva and David Logan Center for the Art, distributed by the University of Chicago Press. 2019.

23 Laininen H. (Ed.) at al. 2018. *Taiteen metsittymisestä. Harjoitteita jälkifossiiliisiin oloihin*. The Academy of Fine Arts, University of the Arts Helsinki, Helsinki. p. 50. Working group: Saara Hannula, Henna Laininen, Isla Peura, Markus Tuormaa, Timo P. Vartiainen.

24 Hannula, S. In: Laininen, H. (Ed.) 2018. *Taiteen metsittymisestä. Harjoitteita jälkifossiiliisiin oloihin*. The Academy of Fine Arts, University of the Arts, Helsinki. p. 71.

25 On-Trade-Off is coordinated by Picha (Lubumbashi, Congo) and Enough Room for Space (Brussels, Belgium), with the participation of Sammy Baloji, Alexis Destoop, Marjolijn Dijkman, Gulda El Magambo, Femke Herregraven, Jean Katambayi, Frank Mukunday & Trésor Tshibangu, Georges Senga, Rosa Spaliviero, Daddy Tshikaya, and Maarten Vanden Eynde in collaboration with Musasa.

26 Haraway, D. 2016. *Staying with the Trouble. Making Kin in the Chthulucene*. Duke University Press. Durham and London. p. 32.

27 Many post-fossil theorists argue that indigenous peoples – at least from the viewpoint of ecosystem vitality – are the only human groups to have shown any aptitude whatsoever for genuinely sustainable coexistence with other species. Post-fossil culture does not gaze at the future through a lens of techno-optimism, but instead – alongside fostering new technologies – searches for new ways of reconnecting with life-sustaining ecosystems on an experiential level. See e.g. McCoy, K., Tuck, T., McKenzie M. (Ed.) *Land Education: Rethinking Pedagogies of Place from Indigenous, Postcolonial, and decolonizing perspectives*. Routledge. New York. 2016.

28 I am borrowing the idea of the pandemic as a portal from author Arundhati Roy. She discusses this, as well as possible pathways to the Global Green New Deal, with author, filmmaker, and social activist Naomi Klein on the video ‘Global Green New Deal: Into the Portal, Leave No one Behind’ <https://www.youtube.com/>

watch?v=w0NY1_73mHY&feature=share&fbclid=IwAR-0bZv_blucLP4SuYN2nzxwfnGTQL3rczrBSaJIWLw-FZOG4PfKKOlV5b2Cg (accessed 26.5.2020).

- 29 Paul B. Preciado, 'Learning from the Virus' <https://www.artforum.com/print/202005/paul-b-preciado-82823> (accessed 26.5.2020).

Saara Hannula & Antti Salminen

Paikasta esseenä



Saarilta: huomioita Suomenlinnasta ekologisen romahduksen kiihtyessä (2020) oli paikkasi-donnainen ja monikanavainen ääni-installaatio, joka toteutettiin osana lokakuussa 2020 järjestettyä The Post-Fossil Show -näyttelyä.

Nimitimme teosta ”ympäristönomaiseksi esseeksi”: tyyliltään ja muodoltaan työ oli ekologis-kulttuurista olosuhdetta paikallisesta perspektiivistä temaattisesti punnitseva (lat. exagium) ja taiteellisesti koetteleva (ransk. essayer). Avoin ja keskeneräinen muoto mahdollisti keskuksettoman ja silti tihentyvän paikan ja sen historioiden merkityksellistymisen paikan itsensä koettelemana. Essee ei tässä tapauksessa mieltynyt niinkään tekstuaalisena vaan tekstien ja paikan muodostamana moninapaisena ja tapahtumallisena kokonaisuutena.

Lopputulos oli prosessuaalinen, solaarinen, ergodinen, satunnaistettu off-the-grid -ehdotus jälkifossiiliseksi kuunteluksi. Työskentelimme vuoden hiljaa sen kanssa, mikä Suomenlinnan kaltaisissa vallan ja hegemonioiden merkitsemissä ympäristöissä helposti jää kätköön ja sivuun.

Vuonna 2019 vietimme 11 kuukautta HIAP:n taiteilijaresidenssissä Suomenlinnassa. Residenssimme lähtökohtana oli ajatus taiteellis-tutkimuksellisesta yhteistyöstä. Olimme työskennelleet samankaltaisten teemojen ja kysymysten parissa tahoillamme ja rinnakkain jo pitkään, mutta emme olleet vielä tehneet yhteisiä teoksia. Residenssin aikana teimme HIAP Open Studios -tapahtumien yhteydessä kolme HIAP:n takapihalle ja projektitilaan sijoitettavaa pienimuotoista teoksellista kokeilua, joista kukin yhdisti aiemalle työskentelyllemme ominaisia kirjallisia,

esityksellisiä ja tilallisia elementtejä eri tavoin.

Talvella 2020 aloimme valmistella HIAP:n ryhmänäyttelyyn tulevaa teosta. Ajatus paikkasidonnaisesta ja monikanavaisesta ääni-installaatiosta oli kehkeytynyt jo toista vuotta: ajattelimme, että se antaisi meille muotona mahdollisuuden yhdistää taiteellisille käytänteillemme ominaiset lähtökohdat ja luoda niiden pohjalta itsellemme uudenlaista teoksisuutta ja taiteellista estetiikkaa. Hahmottelemamme teosmuoto nivoi Antin kirjalliselle työskentelylle ominaisen fragmentaarisen poetiikan Saaran esitystaiteellisessa työskentelyssä esiintyvään paikkasidonnaisen esitysinstallaation muotoon. Samalla se altisti kestoiltaan ja materiaalisuuksiltaan pitkäjänteisen kirjallisen ilmaisun esitykselliselle ja tapahtumalliselle ajattelulle sekä niille ominaiselle väliaikaisuudelle ja katoavaisuudelle.

Työssä fragmentaarisuus ymmärrettiin tietyn estetiikan lisäksi jälkifossiilisen ymmärryksen tiedollis-ajallisena horisonttina. Fragmentti muotona ei ole sellaisenaan valmis väite, suunnitelma tai skenaario, sen kauneus nousee epätäydellisyydestä ja symmetriapakoisuudesta. Murtuneisuutensa myöntävänä kielenä se voi viittoja paitsi fossiilisen moderniteetin tuhovoimaan, jo tapahtuneeseen katoon, toisaalta näyttäytyä sen todisteena ja tulevaisuuteen kohdistuvan epätietoisuuden ellei suoranaisten ei-tietämisen ikonina. Fragmentti on liikaa ja liian vähän, liian varhain ja liian myöhään: vastaava kaksinainen riittämättömyys ja siitä kenties juontuva tiedollinen nöyrytminen olennoi niin ikään inhimillisen uudelleenjäsentymisen ja elonkehän murtumisen aikaa.

Teoksen yhtenä lähtökohtana oli tuoda

fragmentaarinen ajattelu ja poetiikka keholisesti, tilallisesti ja ajallisesti koettavaksi. Halusimme kokeilla, millaisia kokemuksellisuuksia voimakkaan hajautettu, tilaan ja aikaan siroutuva teksti voi mahdollisesti tavoittaa: miten teksti ei kirjoittuisi ja luettuisi paikan ja sen historioiden selitykseksi vaan voisi avata sen samanaikaisesti ja keskuksettomasti monesta perspektiivistä. Fragmenttimuoto näyttäytyi meille tapana lähestyä paikkaa sen kerroksellisuus ja moninaisuus huomioiden.

Tekstuaalisesti essee koostui viidestä Suomenlinnassa kahden vuoden aikana kirjoitetusta fragmenttisarjasta, joita yhdisti Suomenlinna ymmärrettynä erilaisilla inhimillisen, ihmisetömän ja historiallisen kokemuksen tasoilla. Sarjat erosivat toisistaan niin tyyliinsä kuin aihepiirinsä puolesta. Yhdessä ne muodostivat heterogeenisen kudelman, joka toi esiin Suomenlinnan virallisen (sotilaallisen, valtiollisen ja geopolittisen) historian katvealueita ja ehdotti saariryhmää hallitsevien narratiivien rinnalle muita tapoja hahmottaa paikan luonnetta ja tapahtumallisuutta.

Kullakin fragmenttisarjalla oli oma lukijansa. Näin tavoittelimme kirjaimellista moniäänisyyttä ja äänikuvan kuoromaisuutta, toisaalta ylisukupolvisten äänten kerrostumista. Luki-joina olivat meidän lisäksemme Antin poika Toivo ja äiti Eevi sekä esitystaiteilija-runoilija Milka Luhtaniemi.

Etsiessämme teokselle sopivaa sijaintia harkitsimme useita eri paikkoja Iso-Mustasaarella ja Susisaarella, mutta päädyimme lopulta työskentelemään HIAPin projektitilan takapihalla, joka oli tullut meille paikkana tutuksi jo edeltävänä vuonna. Takapiha kutsui meitä heterogeenisyydessään, ylijäämäisyydessään

ja hoitamattomuudessaan: se tuntui edustavan paikkana jotakin muuta kuin Suomenlinnan virallista historiaa ja maailmanperintökohteelta odotettavissa olevaa hallittua estetiikkaa. Teosta suunnitellessamme pyrimme työskentelemään paikan luonnon kanssa määrittelemättä sitä ja ottamatta sitä haltuun.

Päädyimme lopulta toteutustapaan, joka maastoutui rinteeseen ja etualaisti huomaamattomuudessaan paikan oman esityksellisyyden ja tapahtumallisuuden. Aurinkokennosta, akusta, lataussäätimestä, keskusyksiköstä, antureista ja viidestä kaiutimesta koostuva äänijärjestelmä hajautettiin takapihalla kohoavaan rinteeseen ja sen yläpuolella levittyvälle tasanteelle. Anturit mittasivat lähiympäristössä tapahtuvia ympäristömuutoksia: valon ja pilvisyyden vaihtelua, lämpötilan muutosta, kosteuden määrää, tuulen nopeutta ja liikettä. Niiden välittämä tieto ympäristöstä sääteli algoritmin välityksellä sitä, missä rytmissä ja järjestyksessä tekstifragmentit tulivat kuulluiksi. Näin ollen esseen kompositio ja lukutapahtuma muodostuivat näyttelyn aukioloaikana vallitsevien sääolojen ja suhteellisen niukan syysauringon ehdoilla.

Jokainen fragmenttisarja reagoi siihen yhdistetyn anturin antamaan dataan eri tavoin. Esimerkiksi erilaisia paikalla koettuja pieniä tapahtumallisuuksia listaava sarja reagoi ilman lämpötilaan lukunopeutta muuttamalla. Saaren esihistoriasta sisällissotaan ulottuvia mikrohistoriallisia anekdootteja tarinoiva sarja reagoi liikkeeseen, kun taas sarjoista runollisimman kompositio rakentui valotilanteen vaihdoksisista. Algoritmissa komposition muuntelevuus takasi, että teos ei millään ajanhetkellä toistunut täsmälleen samanlaisena.

Kaiuttimet oli sijoitettu rinteeseen siten,



1.4.7381 eaa.

Ancylustransgressio kiihtyy: saaret odottavat muinaisjärven pinnan alla kallioille ominaisella kärsivällisyydellä.

28.7.1764

Merivesi päästetään ensimmäistä kertaa telakka-altaaseen.

Jos täpläverkkoperhonen voi elää 4000 kedon verkostossa, voimme elää missä tahansa tulevaisuudessa – mutta vain harvoilla saarilla.

Ajatellaan saaria. Määritelmällisesti: tyypillisesti poikkeuksellisen matalia, osin vedenalaisia vuoristoja, joiden huipulta huipulle päästäkseen täytyy joko lentää tai kellua. Elämää joko on tai ei, monesti on.

Tai: Mantereen repaleista tiedostamatonta, emämaalle usein sopimatonta elämää ja elottomuutta, kaikkea sitä mikä ei ole todennäköistä, luvallista, turvallista; toisinaan liian hyvää ollakseen totta, toisinaan liian kategorisoimatonta tullakseen kohdatuksi.

Kaikki paikallisuudet eivät kestä kaikkia kulttuureita. Kaikki kulttuurit eivät kestä kaikkia sivilisaatioita. Yksikään tunnettu sivilisaatio ei ole toistaiseksi kestänyt fossiilisilla polttoaineilla aikaansaattua modernisatiota. Vaikuttaa siltä, että näin ei tapahdu.

Sitä mikä merkityksellisesti kuuluu paikkaan, ei voi siirtää paikaltaan muuttamatta sekä paikkaa että paikkaan kuuluvaa, sijoillaan-olevaa. Riittävän voimaperäinen sijoiltaan-meno voi riittää horjuttamaan paikkaan kuuluvan tapaa olla kulloisenaan, sellaisuudessaan, tämyyksissään, toisin sanoen itse-ehtoisena, määritelmiä ja haltuunottoa kaihtaen. Usein sijoiltaan joutuminen tarkoittaa paikan merkityksen haipumista ja sen elämää kannattelevan mielekkyyden menetystä.

Kato on enimmäkseen hiljaista ja näkymätöntä, koska yhden paikan maailma ei välttämättä alun perinkään ole ollut toisessa tunnistettu tai merkityksellinen. Osa tästä tuhon vuosta on väliaikaista ja korjautuvaa, osa on peruuttamatonta ja pysyvää.

Vain se, mikä osaa kadota, voi merkityksellisesti säilyä. Kestävä on muodoton: muodot nousevat siitä omassaan.

että niitä ei ollut mahdollista nähdä tai niistä kuuluvaa ääntä kuulla kerralla. Teoksen kokeminen ja esseen “lukeminen” edellyttivät siten kävijältä maastossa liikkumista ja siihen asettumista. Koska esseellä ei ollut algoritmin aikaansaamasta satunnaisesta vaihtelusta johtuen selkeää alkua, loppua tai kestoä, sitä ei ollut myöskään mahdollista kuulla kokonaan tai ottaa kokemuksellisesti haltuun. Kaiuttimista kulloinkin kuuluvat, viiden eri ihmisen ääneen lukemat tekstit muodostivat paikassa kulloinkin esiintyvien äänten kanssa lukemattomia yhdistelmiä, jotka kietoutuivat yhdessä osaksi kokemusta.

Esseen äänijärjestelmä toimi aurinkovoimalla: 285 watin monikideaurinkopaneeli varasi sadan ampeeritunnin lyijyakkua. Äänijärjestelmä rakennettiin yksinomaan aurinkopaneelistä saatavan sähkövirran ja sitä väliaikaisesti varastoivan akkuteknologian varaan, mikä edellytti tarkkaa suunnittelua ja virtojen hallintaa. Tässä prosessissa teoksen ohjelmoinnista ja äänijärjestelmän rakentamisesta vastanneiden Ossi Mäkisen ja Auri Mäkelän, äänisuunnittelijana toimineen Johannes Vartolan sekä teknisenä neuvonantajana vierailleen Antti Majavan asiantuntijuudet olivat korvaamattomia.

Huomioimme teosta suunnitellessamme aurinkosähkön rajallisuuden ja järjestelmän sammumisen todennäköisyyden, mutta emme varautuneet siihen mitenkään. Kekrin aikoihin ennakoimamme sammuminen vihdoinkin tapahtui: installaatio hiljeni auringon laskiessa ja heräsi ääneen uudelleen seuraavana aamuna. Paikan kanssa työskentelymme jäsentyi näin eräänlaiseksi anti-interventioksi, joka asettui ei-inhimillisten voimien ja toimien varaan niiden taiteesta välinpitämättömillä ehdoilla.

Teokseen sisäänrakennettu kontingenssi loi pohjan teoksisuuden uudelleen ajattelulle jälkifossiilisesta näkökulmasta. Äänijärjestelmän toiminta ja teoksen kokeminen olivat monella tapaa riippuvaisia näyttelyn aukioloaikana vallitsevista olosuhteista, eikä teoksen “toteutumisesta” ollut näin ollen mitään takeita. Oli täysin mahdollista ja jopa todennäköistä, että paikalle saapuva näyttelykävijä tai satunnainen ohikulkija kohtaisi kaiuttimista soivien ihmisäänten sijaan paikan oman äänimaisen sellaisenaan. Teoksisuus oli siten tässä tapauksessa hyvinkin haurasta ja huojuvaa. Toisaalta teoksen mahdollinen toteutumattomuus oli huomioitu jo suunnitteluvaiheessa ja sisällytetty siten osaksi taiteellista ajattelua ja teoksen konseptia: järjestelmän romahdus ei näyttäytynyt vältettävänä pahana vaan osana teosta ja sen mahdollistavaa olosuhdetta. Tässä mielessä myös paikan omat äänet olivat osa teosta, vaikka ne eivät olisi kävijälle siten mieltyneetkään.

Kokonaisuutena essee yhdisti jälkifossiilissa diskurssissa esiintyvät laskennalliset ja ei-laskennalliset lähestymistavat. Teoksen toiminta ja kokonaiskompositio perustuivat yhtäältä auringosta saatavalle laskennalliselle varannolle, toisaalta ympäristön osin satunnaisille säätilan ohjaamille hyvin arvaamattomille virtauksille. Näin se tutki yhtäältä laskettavan energian riittävyttä ja medioitumista, toisaalta energiaympäristön ennakoimattomuutta. Kolmanneksi teosta luonnehti tuottamattoman tuhlauksen ja ylijäämäisyyden eetos: teos oli kahden viikon ajan käynnissä vuorokauden ympäri ja soi suurimman osan ajasta muille kuin ihmiskorville – kenties pääasiassa eläimille ja jumalille.



English abstract

Saarilta: Huomioita Suomenlinnasta ekologisen romahduksen kiihtyessä (On Islands: Suomenlinna-based observations amidst an accelerating ecological collapse) was an ergodic environmental essay that built on a series of textual fragments written on Suomenlinna in 2019 and 2020. In the Post-Fossil Show, the essay took the form of a site- and weather-conditioned multi-channel sound installation located outside of the gallery. The channels were connected to sensors that detected and measured environmental changes (light, temperature, humidity, wind, movement) in the immediate surroundings of the installation: the data was processed by a procedural algorithm that selected the audio files according to the input it received. The sound system was powered by a portable solar panel. Thus, the composition and reading of the essay were contingent on the atmospheric conditions at play during the exhibition.

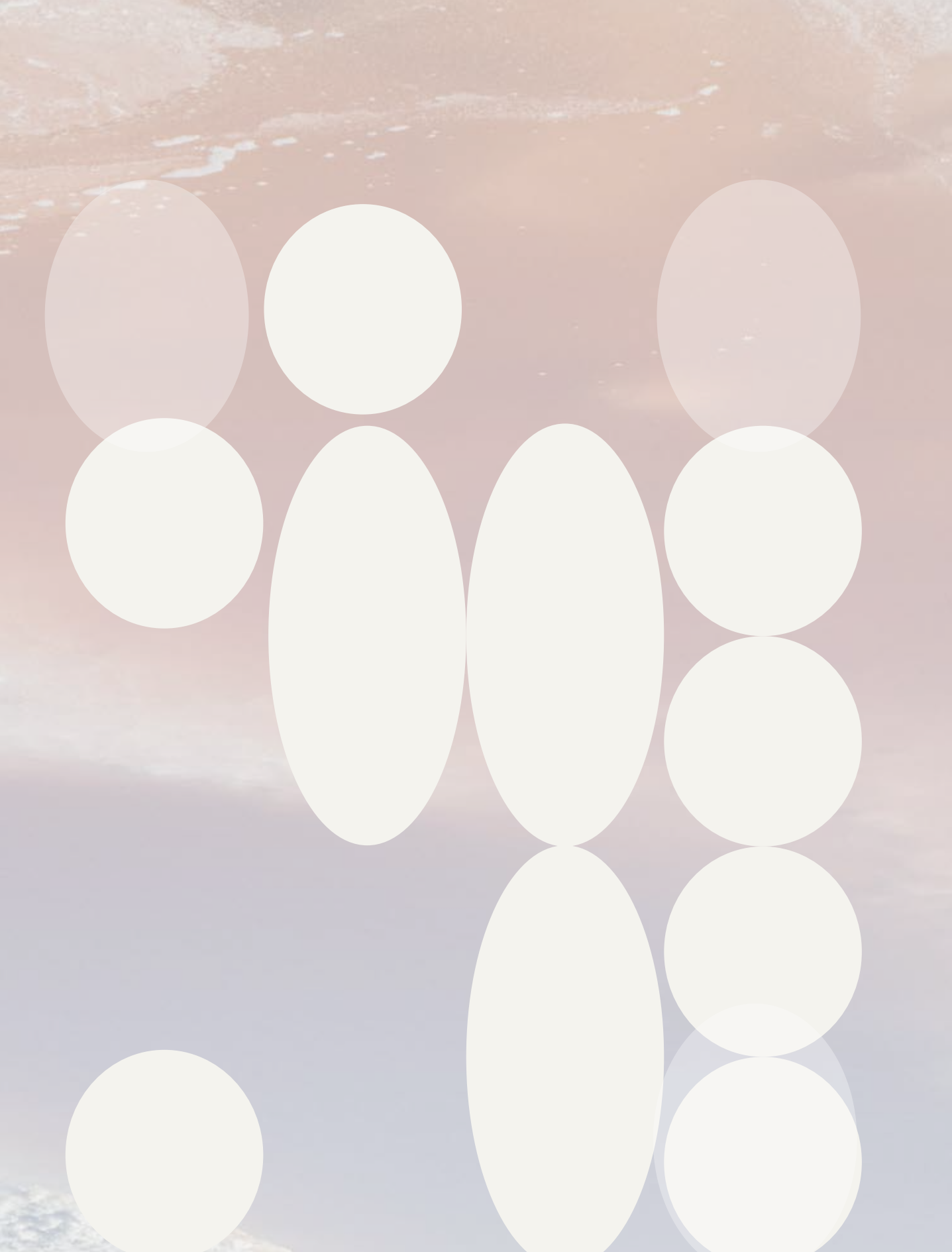
The essay had no beginning, end, or duration. The combinations of the fragments varied indefinitely, which is why the reading experience was different for each visitor.

Credits

Concept, text and installation: Saara Hannula & Antti Salminen
Sound design: Johannes Vartola
Programming and technical implementation: Auri Mäkelä & Ossi Mäkinen
Reading: Saara Hannula, Milka Luhtaniemi, Toivo Renfors, Eevi Salila-Anttila, Antti Salminen

Työryhmä

Konsepti, teksti ja installaatio: Saara Hannula & Antti Salminen
Äänisuunnittelu: Johannes Vartola
Ohjelmointi ja tekninen toteutus: Auri Mäkelä & Ossi Mäkinen
Lukijat: Saara Hannula, Milka Luhtaniemi, Toivo Renfors, Eevi Salila-Anttila, Antti Salminen



Bitu Razavi

A Coloring Book For Concerned Adults



Metsien ikäluokat Suomessa
Age classes of forest in Finland



0–40-vuotiasta metsää
0 to 40-year-old forest



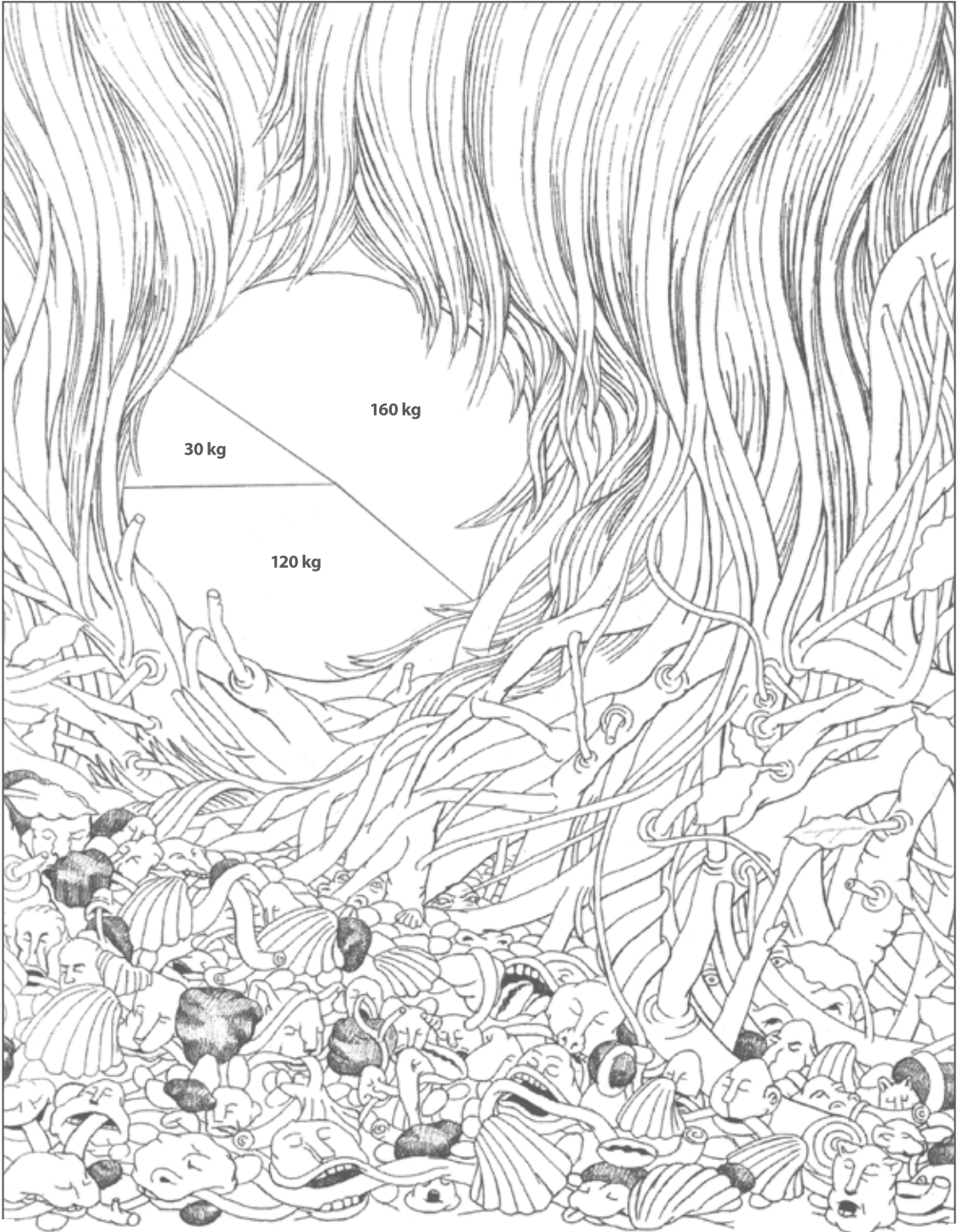
41–80-vuotiasta metsää
41 to 80-year-old forest



101–140-vuotiasta metsää
101 to 140-year-old forest



Yli 141-vuotiasta metsää
141+ year-old forest



Vuotuiset keskimääräiset CO2e-päästöt suomalaiselta, joka
Average amount of CO2e produced annually by a Finn

☐
ei ikinä lajittele ja kierrätä
who never sorts and recycles waste

☐
joskus lajittelee ja kierrättää
who sometimes sorts and recycles waste

☐
lajittelee ja kierrättää aina
who always sorts and recycles waste



Keskimääräisen suomalaisen ruokavaliosta aiheutuva vuotuinen levämäärä Itämeressä
The amount of algae in the baltic sea caused by the diet of the average Finn annually

☐
Eläinpohjainen ruoka
Animal based food

☐
Kasvispohjainen ruoka
Plant based food

☐
Aalkoholijuomat
Alcoholic beverages

FRAUD

Carboniferous Capitalism^[1]



In 2017, The National Museum of Finland celebrated the country's 100th anniversary with the exhibition 'The Public and the Hidden Finland'. It comprised a selection of pictures from the National Board of Antiquities' collection. In the section 'Technology and nature', the following caption could be read:

"The image of Finland combines high-tech and modernity with a mythical connection with nature. The forests and the lakes are building blocks of the Finnish state of mind and a source of well-being. Furthermore, everyone is free to enjoy nature based on the jokamiehenoikeus ("everyman's right") right-to-roam legislation. However, nature can also be viewed as a resource, an endlessly renewable commodity. 100,000 hectares of forest are clear-cut annually in Finland. The diverse forest ecosystems are threatened by monocultural fields of trees. Less than one tenth of Finland's forests have been declared protected nature reserves. (...)"

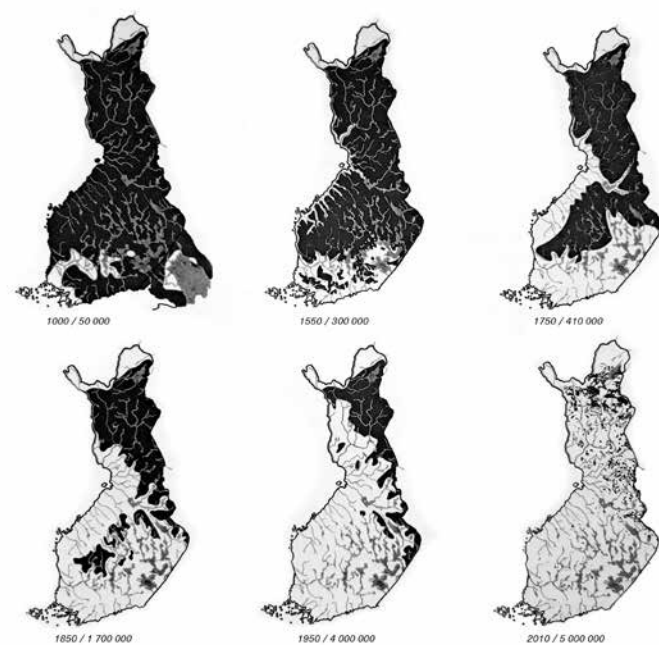
Following the title of the exhibition, 'The Public and the Hidden Finland', the text in a first instance describes the commonly accepted and circulated version of history followed by a more controversial one, that of nature as resource. The text (not included here) then went on to summarily describe the history of industrialization and post-industrial Finland.

It ended by stating that "Finland is taking climate change into account and investing in the bio-economy and nuclear power", but that there have also been investments in mining, which is posited as a non sustainable solution. FRAUD's investigations could be described in this context as building a critical spatial literacy into the 'Hidden Finland', one that may question highly mediated and accepted notions such as the sustainability of the acclaimed bio-economy.[2] We seek to complexify the current discourse on forestry and financialisation through a genealogy of carbon and its many derivatives, from the carbon stored in trees, its distilled form in pine tar (terva), to fossil fuels and their financialisation in emission trading systems and carbon accounting.

To begin: forest "nature"

"From the tree of nature to the tree of knowledge, from the tree of life to the tree of memory, forests have provided an indispensable resource of symbolization in the cultural evolution of humankind" (Harrison 1993, 8)

Long before a forest was understood as a carbon resource, or a carbon sink, it had an altogether different meaning. In Prologue,



The disappearance of natural forest in Finland between 1000 and 2010. The maps portray uniform natural forest area (dark). Smaller fragments of natural forest within forests areas transformed by anthropogenic action (white). The number after the year indicates population size.

Source: Keto-Tokoi, P. and Kuuluvainen, T. (2014) Primeval Forests of Finland, Cultural History, Ecology and Conservation. Helsinki: Maahenki.

Zarathustra warned us: “Do not go to man. Stay in the forest!” (Nietzsche 1968, 2). In this warning also lies the separation of ‘civilisation’ and ‘nature’, which went hand in hand with the division of ‘nature’ and ‘culture’. In considering classical sources of history-making such as the Roman Empire, not as a form of validation of History, but rather as a study of widely circulated symbolisation, we find that as the empire grew, the nearby forests of Latium became defined in distinction, and outside of the res publica (Harrison 1993, 49). Thus, civitas, and with it the taxable citizen, and the origins of civism, meaning the virtues and sentiments of a good citizen, has its dubious beginning with the beginning of forest clearing.

Forest became a frontier or margin against which the civic, strictly institutional space was defined. It demarcated the natural boundaries of the Roman res publica and the res nullius (Harrison 1993, 49). In contrast, cities were a type of asylum situated in a forest clearing. Those entering the civic boundaries of cities were supposedly seeking refuge from the forested shadows. Forests were in fact commonly referred to as the locus neminis, or “place of no one” (Harrison 1993, 4). The res nullius stood against the res publica in such a way that a sylvan fringe gave the civic space its natural boundaries. The European Enlightenment furthered the classical apprehension of forests as a border. Following Cartesian thought, the forest is an alienating and confusing space. It

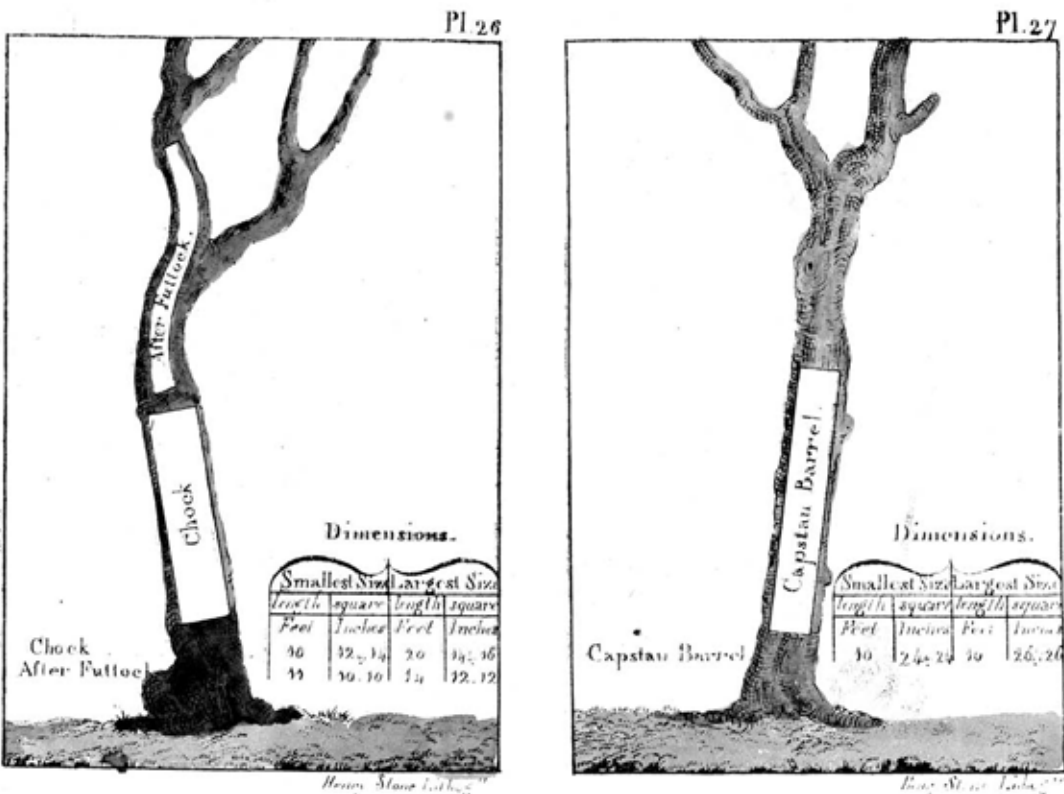
poses a barrier to the engineer’s mind which fosters a mode of Cartesian rationalism that is averse for the rural vacant plain. After all, a forest is a place where the straight lines of geometry encounter the greatest obstacles.

These notions reinforce the separation and abstraction in “nature” and “wilderness”. Finns are closer to their history as forest dwellers than their southern neighbours, where we must look to antiquity to understand nature before its abstraction, when “[u]nder the goddess’s reign [Artemis], earth and sky were not opposed, nor were life and death, animal and human, male and female, inanimate and

animate, matter and form, forest and clearing.” (Harrison 1993, 19). In ‘Tree People’ (Puidenkansa) Ritva Kovalainen and Sanni Seppo vividly describe the wealth of traditional Finnish beliefs centred on trees and forests. In one example, trees act as intercessors, or “intermediaries to maintain contact with the dead or to return a slain bear to its home in the skies” (2014, 8). The relationship between trees and humans is further connected through their interlinked destinies. It was for example believed that should a sacred tree become ill, the humans with which it is in a relationship would also become weak. In their book, Kovalainen and Seppo argue that Finns



The drawing is based on a story in the C13th Chronicle of Henry of Livonia describing the destruction of the sacred grove at Ebavere Hill. Before the economically fuelled clear cutting in the early 20th century, linked to post-war reparations to the Soviet Union, we find the ideological destruction of trees waged by the Church. The latter placed churches over the stumps of felled trees in sacred groves, facilitating the erasure of pagan belief systems (Kovalainen and Seppo, 2014, 44). Image rights: CC. Attribution - Share Alike.



Forestry and arboriculture have always been intimately linked to boatbuilding practices.Lähde / Källa / Source: Guillet, Peter. The Timber Merchant's Guide. Clock & Rose Press, 1823

still carry these traditions within them. With this in mind, considering less than 10% of Finland's primeval forests remain (and its sacred trees), we could begin to consider the massive clearcutting of the country's forests not simply as ecocide, but as geotrauma.[3]

Speculation, a genealogy of scarcity? Or governance as corruption.

The financialisation and valuation of forests and forest resources can be seen as one of the foundations of western political power as much as its effacement. Forests once marked the limit of sovereignty, the areas of productive economy and with it the threshold of the law. In the late middle Ages, when the forest became the foundation of political power, “the impending wood shortage became an increasingly effective instrument of politics” (Radkau 2012, 139).[4] ‘Forest laws’ designated grounds reserved to the royal houses and aristocracy for hunting. Afforestation was a cruel, despotic instrument of dispossession to forcibly evict and invalidate ancient freedoms and common rights such as communal land- and water-uses. The latter is echoed in the Great Partition (1757-1827), an umbrella for several agricultural land reforms enforced in Sweden and Finland (part of Sweden at the time) by the Swedish Empire (Storskiftet and later Enskiftet and Laga skiftet in Swedish or Isojako in Finnish).

Another common practice was the creation of scarcity through restricted wood supply access also decreed by aristocracy for their own financial gain (Radkau 2012, 139). This artificial creation of scarcity has a very long tradition which finds its penultimate orgasm in speculation. In this sense, scarcity can be understood as a preface to the colonial project - and it is also at the root of forest policy

which has in some cases been defined as “the history of growing scarcity of wood” (Streyffert 1954, 3). Even Karl Marx pointed out that afforestation, namely forest enclosures, which precipitated the origins of the landless proletariat, were a response to the “chimerical fear of falling into scarcity” (Foucault, 2009, 61).

The history of forests and financialisation is deeply entangled. To fuel the colonial expansion longleaf pines were in high demand to make masts. They often were called “king's trees” reserved for making ships' masts (Radkau 2012, 138). The northern forests of Finland, Sweden and Canada fed the colonial enterprises undertaken by European empires, providing pine logs for masts and pine tar to seal the hulls of ships. Trees suitable for masting were difficult to find as mast trees take a century to grow, and timber production from pine trees was only a viable industry in sparsely populated areas. They were however a crucial requirement for any sailing ship, and often had to be replaced after storms or wear. As European powers competed on the high seas, higher, tougher and more robust masts were in increased demand. They became the cutting edge of naval technology. Ships with huge single masts could travel at full sail compared to those with composite masts which were slower and vulnerable to strong winds. These masts are cited as one of the reasons why Britain outstripped France at sea in the C18th (Bamford 1956, 207-8). Thus, these crucial Finnish forests, stripped for masts and tar, line the world's seabeds, scattered in a trail of wrecks that traces the colonial impetus.

A fine trace of Stockholm tar.[5]

The colonial expanse also afforded the colonial gaze onto the other through the ontological definition of the terra nullis, therefore morally



Tervahovin palo Oulussa (tar court fire in Oulu), 1901. Source: Oulun maakunta, Arkiston valokuvat, No 4 / III.



At the site of the tar fire of 1901 in Oulu, now lies a defunct port, re-purposed as tourist eateries such as Tervasoiehtu (Tar Torch), a humorous nod to Oulu's tar history and the bourgeoisie it fostered. Source: Image courtesy of the artist.

validating is conquest. A similar establishment of civitas and cultivated land against the shadowy depths of the forests, which had sanctioned its destruction in Europe, was applied to the lands that were encountered in the Americas.

Black gold speculation

An often overlooked 'carbon derivative' in the expropriation of land in the Americas is terva (pine tar), which was used as a wood preservative. Finnish pine tar (often referred to as Stockholm tar) is described in many archival exchanges between colonial powers as being the best both in quality and fabrication method (Kent 1973, 80). Consequently, Finland has historically been one of the most important providers of both timber and tar for many of its European neighbours' pillaging ventures abroad. The fluctuation of the black gold's resale value is linked to both the creation of a bourgeoisie (in Oulu), and to great famines (Kainuu region). The increase of timber value, also afforded by the demand of trading companies and naval fleets, afforded the switch from an agricultural to a monetary economy. These reforms are dubbed the 'liberalization of Finland' in the 1860s, which also coincide with the creation of the Finnish markka, and the beginning of a widening gap between forest owners and landless peasants (Toivanen 2018). These reforms also precipitated the 'hunger lands'. One of the main factors in the great famine of 1867 killing hundreds of thousands, was the inability to finance cereal import because of the decrease in the price of pine tar (Toivanen and Kröger 2018). Thus pine tar brought the beginning of speculation, riches and extreme poverty to the country.

Pine tar today in Finland epitomises the

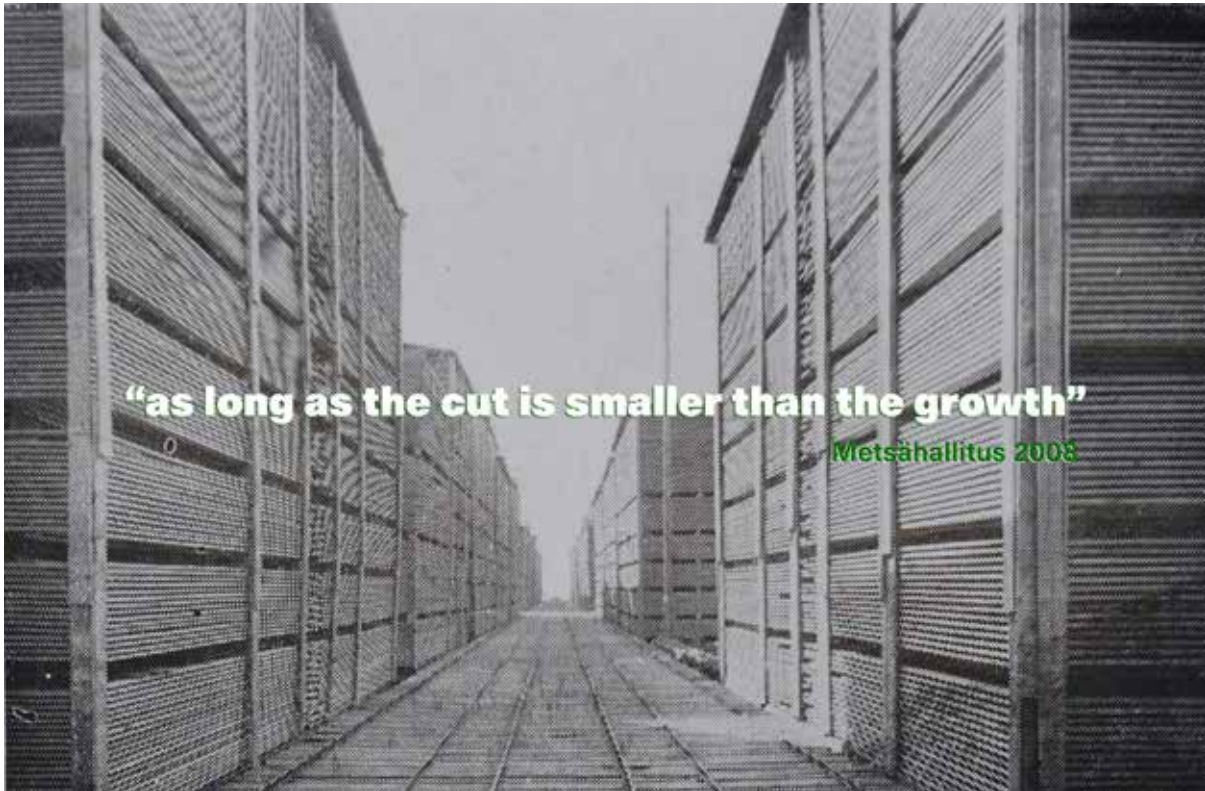
complexities challenging the co-existence and development of traditional practices alongside a bureaucratic apparatus that privileges the logic of accumulation. Under EU law, terva is categorised as a chemical which requires a production permit costing 200,000EUR (Braunschweiler n.d.). The EU chemical definition was devised according to industrial production methods and scale. Small artisanal terva producers have to merge or collectivise to survive. While this traditional knowledge is under constant threat of disappearance under the EU's legal framework, in former tar production and distribution areas (such as Oulu and Kainuu), pine tar festivals have emerged as a hipster-esque nostalgia of Finland's past, dehistoricising its relationship to death, famine and speculation.

Jos ei viina, terva ja sauna auta, niin tauti on kuolemaksi.
(Finnish Proverb: If alcohol, tar and sauna do not help, then the disease is fatal)

The mathematization of risk calculation and 'worth'

... "as long as the cut is smaller than the growth"

The wider global trend towards financialisation and the switch from agricultural to monetary economies emphasises notions of 'exchange value'. The trees which were used to make the masts of the empires' fleets, also became a resource with an exchange value. Eino Saari (1894-1971) is said to be one of the founders of forest economics in Finland. He pioneered the first national wood utilization survey in the world – the birth of forest valuation. This could be understood as the development of biological-mensurational research which enables



Montage by the artists, Metsähallitus mantra superposed on image found in Enso-Gutzeit’s 1929 year end corporate report depicting the timber yards at Kotka, a mill mostly used now to supply cardboard for Amazon shipping.

$$\max_{\left\{N_0, k, J_s, \gamma_{dt_s}, \gamma_{bt_s}\right\}} J = \left\{ \frac{\sum_{s=1}^k b^{t_s} \left\{ \sum_{t=1}^n \left[\sum_{v=1}^g p_v D_{lv t_s} h_{lt_s} + p_b D_{bt t_s} h_{bt_s} \gamma_{bt_s} \right] - C\left(\mathbf{h}_{t_s}, \mathbf{D}_{t_s}\right) \right\} + \sum_{i=0}^{t_k} b^i p_c Q_i - w}{1 - b^{t_k}} - \frac{A}{r} \right\} (1 - \rho),$$

A formula for Economic Ecological Optimisation. Source: Sampo Pihlainen, Olli Tahvonen, and Sami Niinimäki. ‘The economics of timber and bioenergy production and carbon storage in Scots pine stands’. Canadian Journal 44(9): 1091-1102 (2014)]

the application of economic theory and facts to biological and technical conceptions. In 1966, Kullervo Kuusela of the Finnish Forest Research Institute stated: “the age of planned development of forest resources is about to begin” (Edwards 1968, 155). Kuusela’s statement points to the importance of early national wood utilization surveys within a genealogy of ecosystem services.

Central to planned development is forest modelling, one of the oldest forms of mathematization of risk calculation and the calculation of ‘worth’. The birth of forest valuation is, according to the economist John Maynard Keynes, the link between the present and the future, the latter being “perfidious” and threatening (Esposito 2011, 11). Industrial forestry thus conquers the perfidious future through planned harvest, determined maturity, yield calculation and other predictions. Forest modelling, in its conquest to assuage future uncertainties, systematises the forest as a set of variables within a formula, forever optimising itself, thus paving the way for its financialisation.

To understand the financialisation of nature - which could be defined as “economic reasoning and market approaches applied to ‘nature’” it is useful to understand what is deemed as ‘productive’ in financial terms (Fioramonti 2014, 104). According to the System of Environmental-Economic Accounting (SEEA), what is deemed productive: “must be carried out under the instigation, control and responsibility of some institutional unit that exercises ownership rights over whatever is produced” (United Nations 2009, 7). In concrete terms it applies in the following way. For fish stock, natural growth in the high seas is not counted as production as it is not bound by international quotas and the fish is not managed by any

proprietary institution. However, the growth of fish in fish farms is defined as production and consequently adds to GDP (Fioramonti 2014:111). In a similar way, the natural growth of wild, uncultivated forests is excluded from production, whereas industrial forests, consisting of trees grown for timber are counted and defined as productive (111). Thus, and somewhat sordidly, the deliberate felling of trees in wild forests counts as production, constituting a positive increment to national income (111). Certain practices are clearly privileged by these definitions. Such categorisation and logic define Neoliberal Biodiversity Conservation: ‘an amalgamation of ideology and techniques informed by the premiss that nature can only be “saved” through its submission to capital and its subsequent revaluation in capitalist terms’ (Büscher et al. 2012, 4). Neoliberal biodiversity conservation exudes a Christian logic of salvation, imbued with the associated morals, and repurposed by finance capital.

What the SEEA definitions and modes of valuation leave out of the equation are the incomputables, such as traditional knowledges and complex relationships.[6] If “power is grounded in the very ability to calculate, count, measure, balance and act on these calculations” (Weizman 20012, 17), that which cannot be measured, cannot be governed, and it can also not be valued in marketable terms. Thus, through the illusion of total capture by efficient calculation, incomputables become marginalised and slowly erased. As an example, Tero Mustonen recounts a meeting with Vladimir Kolesov, one of the principal knowledge-holders of his generation, an Evenk hunter and reindeer herder from the nomadic community ‘Gonam’ in Siberia. Vladimir checks an ice pressure ridge of a river, and shares the specific Evenk terminologies for these ice ridges,



Vladimir, an Evenk hunter and reindeer herder from the nomadic community 'Gonam' in Siberia checks an ice pressure ridge of a river, and shares the specific Evenk terminologies for these ice ridges. Source: Reindeer Nomads: The Event of the Siberian Taiga, Tero Mustonen, in 'The Postcolonial Arctic', Moving Worlds Vol 15(2) pp44-50 (Leeds; Singapore, 2015).

indicating how intimately the Evenk language interacts with the rivers and forests of Iengra (Mustonen 2016, 49). As such, it reflects the importance of the relationship between knowledge and place. These relationships are not figured in carbon accounting, or in the calculation of worth, when Metsähallitus proceeds to the clearcutting of old growth forests, most recently at the time of writing, in the area of our friends in Mustarinda (Kainuu region). These losses are precisely incalculable.

In contrast with Vladimir's rich vocabulary in relation to ice ridges, the UNCLOS (The United Nations Convention on the Law of the Sea) framework defines ice in legal term as equal to water, and as such, the Arctic Ocean is regarded as empty, categorised as unpopulated, while it is the site of indigenous hunting

(Bruun 2016, 35). The redefinition of land as void, is itself another violent act of erasure, which guides the ownership and use of land (Sematei 2005, 86). Similarly incalculable in Metsähallitus's precision software are the complex lichen growing on trees and on the ground in old growth forests.[7]

The reindeers' winter grazing consists mainly of various forms of lichen, particularly reindeer lichen, *Cladonia rangiferina* and *Cl. silvatica* but also includes crust lichen, *Parmelia olivacea*, and beard lichen, *Alectoria* and *Usnea*, together with (particularly in the spring country before the fresh grazing has sprouted) the rock lichens, *Gyrophora*, which have been softened by snow and thaw water; all lichens must be in a moist and soft condition (Kent 2018).

Reindeer herders in Finland must often feed industrially produced food to their herds because of the lack of such lichen. This is but one example of an impoverished biodiversity directly related to the lack of old growth forests, which is not quite encapsulated in Metsähallitus' mantra: "as long as the cut is smaller than the growth".

Carboniferous capital, carbon markets and legitimised accumulation

"Good Derivatives - You CAN Put a Price on Nature"
Richard Sandor at TEDxWallStreet"

Postmodern sociologists argue that contemporary Capitalism privileges flow oriented ontologies and network structures (Steinberg and Peters, 2019, 2015; Steinberg 2001). It is no surprise that the northern forests are seen as a great cycle of flows, which have carbon circulation, exchange and storage as nominal abstractions. We argue that understanding the northern forests as a space of flows pictures them as void of social factors, biodiversity, conflicts, and incomputables.

Forests, footprints, industry pollution, credits, emissions, animate and inanimate alike are measured and valued in terms of carbon, and their potential to sequester it. In the wake of climate catastrophe, carbon as currency becomes a tool that like forest modelling, which capitalises in the present upon the uncertainty of the future (Esposito 2012). Following this logic, carbon has been introduced as a commodity on the futures market, to be traded, exchanged, and subjected to market speculation.

As such, carbon is the currently accepted unit

of measure to calculate the value of "nature". This is reflected in the emergence of carbon markets worldwide, and in forestry policies such as those defined by Metsähallitus. In a manner similar to the corporate annual report, Metsähallitus publishes its holdings based on wood mass and carbon content. It ensures that each year, the mass and carbon removed, does not surpass that which is growing (or standing). For example, in 2019 they reported that an annual increment of 11 million cubic metres exceeded the annual fellings by five million cubic metres (Mäntyranta 2019). These simplified metrics convey palpable earnings, a convincing support to Metsähallitus' claim in the fight against climate change. However, the underlying carbon calculation is not that complex, and closer consideration reveals some of its shortcomings.

Carbon sequestration is calculated as follows: A CO₂ molecule is made of one carbon atom and 2 oxygen atoms. The atomic weight of carbon is 12, and oxygen is 16. The molecular weight of CO₂ is 44. This means 12 Kg of completely combusted carbon produces 44 Kg of CO₂, or 1 Kg of carbon at complete combustion will produce 3.67 Kg. of CO₂. Wood is heterogeneous and the exact amount of carbon in 1 Kg of dry wood will vary depending on the species of wood, age of wood etc. It is reported that 1 Kg of wood contains about 450 to 500 gm of Carbon. This means 1 Kg of wood is holding about 1.65 to 1.80 Kg of CO₂. In this way wood, or forests, act as carbon sinks (Kuitinen 2015).

Notwithstanding the averaging and generalisations that render this calculation practically inconclusive, carbon trading and pricing, and carbon as a form of measurement mobilises a certain world view. What is the broader cultural significance of the proliferation of

carbon analytics, along with the methods and imaginaries employed to rationalise the bioeconomy?

Metsähallitus's recent Climate Smart Forestry project attempts to address some of the critique directed towards its simplistic calculations. It takes into account more granular data such as soil, land use and regional ecology, otherwise known as the integration of 'feature selection' and 'feature engineering' (Domingos, 2012; quoted in Mackenzie 2015, 440). However this vision, that a larger amount of variables, or more data, could theoretically lead to a calculation that encapsulates the complexity of a forest, is predicated upon a flawed concept of statistical models. This view is contemporaneously exacerbated by machine learning models, in which so-called 'smart forestry' promises greater efficiency. No matter how much data is collected, and features implemented, a number of factors render these calculations erroneous, such as generalisation (mentioned above), the necessity of a fixed and comprehensive classification system (which is namely at odds with complex species such as lichen), and a stable, calculable input and output. All of which could not be retrofitted to a forest.[8]

Numerous contemporary examples of the oppression inherent in classification are widely discussed, from predictive policing, and racial bias to smart city gentrification (see Safransky 2020, Arora 2019, Benjamin 2019, or Wang 2017). These categorisations could be understood as rooted in Carl Linnaeus' pioneering 1758 global racial order 'Systema Naturae' in which he distinguished four categories of human species, each with inherited biological and cultural characteristics: HomoEuropaeus with his light-skin, muscular built, inventiveness and governed by laws; Homo Americanus

was copper-coloured, choleric and regulated by customs; Homo Africanus was black, phlegmatic and indolent and governed by impulse (Linnaeus 1758, 20-22). Sámi were placed by Linnaeus in the category of Homo Monstrosus, regarded as degenerate and freakish creatures (Koerner 1999, 416). This vision was echoed by English naturalist Oliver Goldsmith in his 1774 'History of the Earth', who ranked the Sámi as the lowliest of his six races, and an earlier French naturalist Jean-François Regnard (1655-1709), who compared "this little animal that is called a Lapp" to apes (Koerner 1999, 416). Linnaeus' system also classified fauna and flora species, a nomenclature that is still widely used today despite its incommensurable violence and discrepancies, such as the case of the composite organism lichen, which defies classification as either fungi or algae (Gabrys and Pritchard 2018, 394-5, Rikkinen 2014).

In a similar way, carbon centred calculations and the notion of 'nature' reducible to its weight in carbon that was initially popularised with the Kyoto Protocol, obfuscates other politics of extraction. Strata of fossil fuel, or "subterranean forests", are a contentious treasure within the contemporaneous nomenclature of carbon (Sieferle 2001). According to Larry Lohmann "The Kyoto pact is technocratic" (Lohmann 2001, 2). It portrays the causes of global warming mainly in physical terms, which is the production of excessive amounts of greenhouse gases calculated in CO2 emissions. However, it does not "address institutions and power imbalances which have resulted in both the overuse and the unequal use of the atmosphere." (2) Also, by avoiding historical analysis, the focus on emissions themselves, rather than what is being burned "averts [the] gaze from the politics of [the] industry, the explosion in trade-related



Carolus Linnaeus in Laponian costume (1853), replica painting of Estate Hartenkamp (1737). Linnaeus is pictured showing the 'Linnaea borealis' in his hand (named after him). Note the elements of Sami dress and the shaman drum. Source: University of Amsterdam. Permission: Public Domain.

transport, subsidies for fossil fuel exploitation, the creation of consumer demand, and so on.” (2). In other words, carbon accounting is a system that was put in place to apparently ‘save nature’, but actually facilitates environmental destruction at a much greater pace and scale.

Carbon accounting facilitates environmental destruction.

Carbon credits are perhaps one of the most deceiving aspects in support of this grand fallacy. Framed in terms of debt, carbon credits are posited to alleviate the ‘evil’ carbon footprint, present day indulgentia. The financialisation of nature which gained traction leading up to the Kyoto Protocol, shifted to emission trading and creative carbon accounting with the Paris Agreement. The dubious and lucrative phenomenon of carbon leakage is one that stems from the attempt to universalise emission mitigation practices.[9] Carbon leakage is posited as a negative externality of climate change policies,[10] a phenomenon projected from the imagined consequence of production processes moving to countries with less stringent measures. This displacement would lead to rising global greenhouse gas emissions rather than its desired opposite. As a result, manufacturing industries that have been deemed at risk of carbon leakage receive an amount of emission allocations for free. This may be understood under the umbrella of ‘allowances for economic growth’, the actual subface[11] of the green economy. One of the consequences of market speculation driving the cost of carbon credits is that industrial sectors are receiving more free pollution permits than the amount of CO2 they emit, which they sell, incurring what is called windfall profits (Carbon Market Watch (n.d.); Elah and

Okereke 2014, 24). These profits are to the order of billions on a yearly basis. This begs the important question, in whose interests is the carbon market and its entire system of knowledge production.

The inconclusive

The reduction of forests to a weight measured in carbon, valued according to the carbon futures market, can be understood within a genealogy of expropriation. In 1542, the land proclamation claimed the “uninhabited wilds” of Finland as crown property. In reality the lands were often shared or freehold. Several agricultural land reforms followed, such as the 18th century Land Enclosure Statute, in which the liberal property rights required fixed physical occupation and cultivation of the land to give recognition of land ownership, thereby denying collective land use such as for hunting, and fishing, or collective land rights such as those of the Sámi (Lähteenmäki 2006, 188). The use of Crown commons and wastelands dictated the state’s agricultural policy, which included forests, and was driven by increase in the value of timber (188). This forced collective land use into individual holdings, and presented a significant land dispossession for the people of the North. In a similar continuation of this practice, in 1966, ‘Features in Finnish forestry’ defines waste land as land that is “practically treeless” (2). These waste lands, home to bird species and used by fishermen and hunters, were drained and rendered productive. Thus, divesting most of Finland’s peatland and marshes for the production of forests or fuel. Tree less, uninhabited wilds, unpopulated, discovery, these have long been the semantic tools of expropriation. The logic of the bioeconomy which propels policy making is equally a form landgrab validation

Vandana Shiva calls for the decolonisation in the deep sense of the term (Mies and Shiva 1993, 264-5). Decolonisation not only of one nation over another, but decolonisation of the concepts of Western notions, its alleged superior knowledge systems of how to live, what progress entails, and what development actually means. The carbon market, or carbonocracy is a continuation of imperialistic relations, cleverly outsourced to the allegedly objective and impartial market, programmed

by Western thought, categorisation systems and power structures. We should question the green economy and its mantra, recycled by such policy and profit makers as Metsähallitus. Their formulas and calculations are not neutral. The question is in whose interests are these modes of valuation being promoted in the hidden Finland, and worldwide? More importantly, how can we re-centre non-modern knowledge systems?



Forest rewinding experiments in Karelia by the Snowchange cooperative. Restoring habitat based on traditional knowledges through wood mass decay, accelerated deadwood drying, and standing trunks and branch heaps to provide future owl, woodpecker, termite and hedgehog habitats. Image courtesy of the artist.

FRAUD (Canada/Spain) is made up of the duo Audrey Samson and Francisco Gallardo. Critical spatial practitioners, they develop modes of art-led enquiry, which examine the process of ‘financialisation’ through extractive data practices, and cultivate critical cosmogony building. FRAUD has been awarded the State of Lower Saxony – HBK Braunschweig Fellowship (2020), the King’s College Cultural Institute Grant (2018), and has been

commissioned by Contemporary Art Archipelago (2020), the 5th Istanbul Design Biennial (2020), and the Cockayne Foundation (2018). Recent work includes: Carbon Derivatives, the 57th Venice Biennale, the Whitechapel Gallery, London (2018) and Somerset House, London (2018); Shrimping Under Working Conditions that was shown at Kunsthall Trondheim (2017) and the Empire Remains Shop in London (2016).

Footnotes:

- [1] The title is derived from “Carboniferous fractions of capital” in Elah and Okereke (2014, 24).
- [2] For a rich resource of critique in this regard, see BIOS.fi.
- [3] Geotrauma is a film by Ana Dana Beroš and Matija Kralj (2017), which describes an accumulation of traces entangled within all humans, bearing silent witness to worldwide humanitarian crisis. It is later defined within the academic field of geography by Rachel Pain (2020) to explicitly include ecological crisis.
- [4] Around 1580, “Duke Julius of Brunswick, who had made the Oker River raftable, boasted to the recalcitrant city of Brunswick that he was now able to build more with one gulden than his father could with 24. In return, large-scale timber rafting exacerbated the wood supply in many places from which timber was exported. The danger of a wood shortage seemed all the more threatening as the easily accessible forests visible to the cities were most quickly cleared out. For that reason, the impending wood shortage became an increasingly effective instrument of politics, not only in Germany, but also in wide areas of Europe. Not only was this specter used to solidify territorial dominion and to open up fines for forestry violations as a source of revenue; the precarious wood supply was also a tool for the governments to turn the mining privileges (Bergregal) into money and to get greater control of the mining industry. The princes invoked the wood shortage, but by placing restrictions on the use of the forests they played a vigorous part in making wood scarcer, which was in their own monetary interests.” (Radkau p139).
- [5] European colonial expansion/expropriation was largely conducted while Finland was under the Swedish Crown
- [6] See Gray and Sheikh (2018) for a discussion of the complexity and irreducibility of soil.
- [7] We are indebted to Jouko Rikkinen for generously

- sharing with us the complex world of lichen during our residency at HIAP in 2017.
- [8] See Mackenzie (2017) for a comprehensive explanation of the shortcomings of generalisation, classification and averaging in the context of statistical modelling.
- [9] A more detailed account of this phenomenon can be found in Samson and Gallardo (2018).
- [10] See OECD (2006).
- [11] This term is used in the spirit of Frieder Nake's theorisation of surface/subface.



Seining boat restoration with traditional methods (turvottaminen) using pine tar (terva). Image courtesy of the artist.

BIBLIOGRAPHY

Arora, Payal. 2019. “Decolonizing Privacy Studies.” *Television & New Media* 20(4): 366-378. <https://doi.org/10.1177/1527476418806092>

Bamford, Paul Walden. 1956. *Forests and French Sea Power 1660-1789*. Toronto: University of Toronto Press.

Bruun, Johanne M. 2016. “Colonization and Calculation: Framing Arctic Geopolitics.” *Moving Worlds: A Journal of Transcultural Writings* 15 (2): 27-43.

Braunschweiler, Hannu, n.d. “Is Pine Tar under Threat? – What Is the Aim of the Biocides Directive?” In *The Finnish Pine Tar*, edited by in Kaatariina Entoonen, Esa Heikkinen, Henna Lintunen, Teuvo Ranki and Viri Teppo-Parna, 12-18. Turku: Rakennusperinteen Ystävät Ry.

Carbon Market Watch. n.d. “About.” Accessed September 26, 2020. <http://carbonmarket-watch.org>

Dana Beroš, Ana and Matija Kralj. 2018. “Geotrauma.” *Technosphere Magazine*. January 15, 2018. <https://technosphere-magazine.hkw.de/p/Geotrauma-kM2s5DDFPn1ECiKuCq1wqX>

Domingos, Pedro. 2012. “A few useful things to know about machine learning.” *Communications of the ACM* 55(10): 78–87. <http://dl.acm.org/citation.cfm?id=2347755>

Edwards, Harvey, 1968. *Scandinavia: the Challenge of Welfare*. Camden: T. Nelson Press.

Esposito, Elena. 2011. *The Future of Futures: the Time of Money in Financing and Society*. Translated by Elena Esposito and Andrew

K. Whitehead. Cheltenham: Edward Elgar Publishing.

Esposito, Elena. 2012. “The Mysteries of Money”. *Inaesthetics* 3(4). Available at: <http://inaesthetics.org/index.php/main/issue/3/3>

Fioramonti, Lorenzo. 2014. *How Numbers Rule the World: The Use and Abuse of Statistics in Global Politics*. London and New York: Zed Books.

Foucault, Michel, 2009. *Security, Territory, Population*. Lectures at the Collège De France, 1977-78. Translated by Graham Burchell. Edited by Michel Senellart. Basingstoke and New York: Palgrave Macmillan.

Gabrys, Jennifer and Helen Pritchard. 2018. “Sensing Practices.” In *Posthuman Glossary*, edited by Rosi Braidotti and Maria Hlavajova, 394-6. London and New York: Bloomsbury.

Gray, Ros and Shela Sheikh. 2018. ‘The Wretched Earth,’ *Third Text* 32(2-3), 163-175. <https://doi.org/10.1080/09528822.2018.1483881>.

Kent, Howard S.K. 1973. *War and Trade in Northern Seas: Anglo-Scandinavian Economic Relations in the Mid-eighteenth Century*. Cambridge: Cambridge University Press.

Kent, Neil. 2018. *The Sámi Peoples of the North: A Social and Cultural History*. London: C. Hurst & Co.

Koerner, Lisbet. 1999. “Daedalus Hyperboreus: Baltic Natural History and Mineralogy in the Enlightenment.” In *The Sciences in Enlightened Europe*, edited by William Clark, Jan Golinski and Simon Schaffer. Chicago and London: The University of Chicago Press.

Kovalainen, Ritva and Sanni Seppo. 2014. *Tree People*. Translated by Roderick Fletcher and Keith Bosley. Porvoo: Hiilinielu tuotanto and Miellotar.

Kuittinen, Matti. 2015. “Carbon storage in wood-based buildings.” *Metsawood*. November 10, 2015. <https://www.metsawood.com/global/Tools/MaterialArchive/MaterialArchive/Article-Carbon-storage-in-wood-based-buildings-Matti-Kuittinen.pdf>

Kullervo, Kuusela. 1966. “Finland’s Forest Resources.” In *Features on Finnish Forestry*, edited by Forestry Information Service. Helsinki: Finnish Forestry Association.

Lähteenmäki, Maria. 2006. *Peoples of Lapland; Boundary Demarcations and Interaction in the North Calotte from 1808 to 1889*. Helsinki: Finnish Academy of Science and Letters.

Linnaeus, Carl. 1758. *Systema Naturae per regna tria naturae: Secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis* (10th ed. Vol. 1). Stockholm: Impensis Direct. Laurentii Salvii.

Lohmann, Larry. 2010. “Democracy or Carbocracy? Intellectual Corruption and the Future of the Climate Debate.” *The Corner House*, October 30, 2001. <http://www.thecornerhouse.org.uk/sites/thecornerhouse.org.uk/files/24carboc.pdf>

Mackenzie, Adrian. 2015. “The Production of Prediction: What Does Machine Learning Want?” *European Journal of Cultural Studies* 18(4-5): 429 –445. <https://doi.org/10.1177/1367549415577384>

Mackenzie, Adrian. 2017. *Machine Learners:*

Archaeology of a Data Practice. Cambridge: The MIT Press.

Mäntyranta, Hannes. 2019. “Metsähallitus fights climate change – forests classified as carbon sinks and carbon storages.” *Forest*, November 10, 2019. <https://forest.fi/article/metsahallitus-fights-climate-change/>

Matt, Elah and Chukwumerije Okereke. 2014. “A NeoGramscian Account of Carbon Markets: the Case of the European Union Emissions Trading Scheme and the Clean Development Mechanism.” In *The Politics of Carbon Markets*, edited by Benjamin Stephan and Richard Lane, 113-132. Routledge, London.

Mies, Maria and Vandana Shiva. 2014. *Ecofeminism*. London and New York: Zed Books.

Mustonen, Tero. 2016. “Reindeer Nomads: the Evenk of the Siberian Taiga.” *Moving Worlds: A Journal of Transcultural Writings* 15 (2): 44-50.

Nake, Frieder. 2016. “The Disappearing Masterpiece; Digital Image & Algorithmic Revolution.” 4th Conference on Computation, Communication, Aesthetics & X. <http://2016.xcoax.org/pdf/xcoax2016-Nake.pdf>

Naum, Magdalena and Nordin, Jonas. 2013. “Situating Scandinavian Colonialism.” In *Scandinavian Colonialism and the Rise of Modernity: Small Time Agents in a Global Arena*, edited by Magdalena Naum and Jonas Nordin. New York and London: Springer.

Nietzsche, Friedrich. 1968. *Thus Spoke Zarathustra*. In *The Portable Nietzsche*. Translated by Walter Kaufmann. New York: Viking Press.

Organisation for Economic Co-operation and Development (OECD). 2006.

Athanasia Aarniosuo

EGL E ODDO: Knowing the Land, Palm by Palm

Finland-based Italian artist, plant seed enthusiast **Egle Oddo** was a resident at HIAP between August and October 2018. For the first month of the residency, Egle had her own two-floor studio in the HIAP studio building. The studio's architectural elements allowed for a very interesting work space: the working space is downstairs and has extremely high ceilings, while the bedroom is upstairs, and with its wooden ceilings and wooden floors is almost like a nest. "The interesting architecture made me realise how important space is in developing artistic thinking," Egle tells us

This architectural thinking space became even more obvious during the latter part of Egle's residency, during which she was given her own space within Gallery Augusta in which to do scientific research. Egle took the chance to transform the gallery into a studio/living space, in which she built her own bed and living area;

her own space within a space, within which she lived for two months. Gallery Augusta is very big and lofty, and the free space above and around Egle allowed her thinking to develop freely and allowed her to consider her work in new, surprising ways.

Utricularia australis and understanding plants through sensual experimentation

During those months, Egle was building small objects, creating performative work and also collecting seeds from the island. On one of her many walks collecting seeds, she made an extraordinary discovery. In an artificial little pond, Egle found a type of yellow flowers which she had not previously noticed in her fifteen years of living in Finland. She found the flowers very intriguing and started looking at them and photographing them. In a performance, Egle took a bath in the little flower-filled pond; she lay there bathing,



Egle meets *Utricularia Australis*, Suomenlinna 2018. Photo Egle Oddo

completely surrounded by these small, yellow flowers. In the pond, she could hear a drone-like sound, formed by many tiny continuous clicks.

Later, Egle consulted a botanist collaborator, who told her that she had actually made an exciting discovery. The flower is called *Utricularia australis* and it is, as the name suggests, original to Australia. It occurs these days in Southern Europe, but it does not appear in Finland in such massive populations as in Suomenlinna during summer 2018. Because of the nature of Suomenlinna, with merchant and other ships travelling through it, it is rich in seeds which are not to be found anywhere else in Finland. *Utricularia australis* is a carnivorous plant, and the clicking sound Egle could hear while lying in the pond, was actually the sound of the plant feeding on insects.

The discovery was extremely interesting to Egle. In her work, as she tells us, she tries to firstly understand plants through a botanical point of view, then afterwards, as an artist she tries to follow her intuition beyond natural sciences. Natural sciences inevitably create hierarchies of species and of subspecies, and while it is important knowledge in order to approach and understand various phenomena, it is equally important to experience the phenomena sensually. As well as lying in a pond with the flower slowly eating, she took the sensual experimentation further: she collected the plant and took it home, then drank the water filtered by it in the hopes of understanding the plant through her own body. The results of this experimentation are not measurable in scientific ways: “I cannot say that my person was changed by this experience, but I cannot say that it didn’t,” Egle laughs.

Seeds in urban environments

During her stay in Gallery Augusta, Egle was also able to read, write and prepare an article on the copyright of seeds. The part of the plant Egle is most interested in, is indeed the seed. The main reason for her interest, is that we don’t see many seeds in an urban environment. In a city, seeds cannot be collected or planted. We can buy seeds in shops, but they have been cultivated and selected based on certain criteria; there isn’t much left to chance. When Egle plants seeds she collects them from plants herself together with specialists who help her identify the plants; she creates gardens, living sculptures which she calls “evolutionary gardens.” She plants seeds and follows their growth for about three years; after, she just lets them be. She asks the town hall not to interfere with their growth or trim them, but instead to let the plants interact with each other and with the insects autonomously.

With these interventions Egle wants to bring seeds closer to people. Seeds are so tiny and insignificant-looking, they are almost invisible. Egle’s aim with these interventions is to magnify the presence of the seeds and solve this problem of their absence from the urban environment. “We are not autonomous in choosing what to grow in cities, we do not take initiatives,” Egle sighs. But it is possible to have guidelines, and the help of experts in choosing what to plant and grow, avoiding the introduction of invasive species, something that the city planners of the landscape departments are often very concerned with. “Such an overestimation of what might happen,” Egle laughs.

Instead, she believes that more autonomy would help enrich the biosphere in cities, which would be not only a political act, but also a social activation. It is the responsibility of each

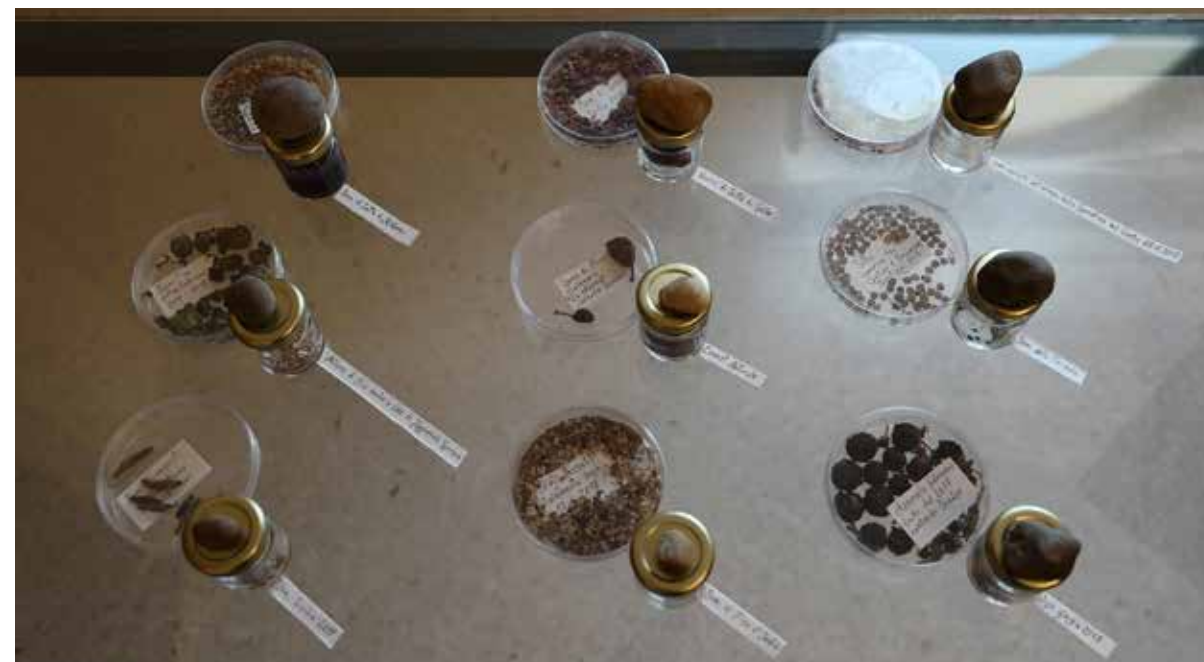


Photo Jytte Hill

individual to think of what it means to have a relationship with plants, since we need them in everything we do. This is, therefore, the core of Egle’s practice: the exploration of the absence of seeds from urban environments, the introduction of seeds to such environments, and seeing what happens between the seeds and people.

Egle has been exploring these topics for many years in Finland, where the social, political and economic situation is rather stable, but also in Italy, Gambia and more recently Tunisia. Egle’s residency at HIAP was partially motivated by her involvement in the CrossSections project, which was initiated by Basak Senova in 2017. Thanks to curator Basak Senova and the CrossSections project, Egle was asked in 2018 to transform a small plot of land near the Kamel Lazaar Foundation in Tunisia and to imagine a possible project around it. This plot

of land was initially described to her as insignificant, dirty and problematic. Some olive trees were said to be struggling, and some herbs were scattered around. Egle was informed that the land is actually a little below sea level, so occasionally salty water rises to the plot, making it a challenging environment for most plants.

Without actually having visited the plot yet, Egle started to study the flora of Tunisia and especially that region. She discovered that the plot had a very interesting potential to grow extremophiles, plants that like extreme conditions such as too much water, no water, heavy metals, pollution, rocky biotopes, high salinity and so on; basically, any condition that would be too problematic for most other plants. After instructing the Kamel Lazaar Foundation not to touch the plot, Egle then contacted “Centre de Biotechnologie” at the Technopole of Borj



Egle Oddo's installation in Augusta during Hiap Open Studios, Helsinki 2018. Photo Antti Ahonen

Cédria. With the help of their specialist in extremophiles, Karim Ben Hamed, Egle found that halophytes, plants that can deal with high salinity, would be the best candidate among extremophiles to be introduced ex-situ in the garden.

Egle's first visit to Tunisia was inspiring and very welcoming: Karim Ben Hamed had arranged for Egle to meet with several researchers and botanists as well as with the director of the Technopole, with whom they immediately started planning and building up common goals. However, when Egle and Karim went to see the plot, they found that her instructions to leave the area untouched had not been followed, and the Kamel Lazaar Foundation in the attempt to block out the salt from the original soil, had flooded the plot with clay-based soil, full with debris. The precious possibility for halophytes was deleted except

for a small triangle of land, which Egle immediately protected. As saddened as Egle was to see what had happened, it also made her believe even more strongly in the need for her practice: the lack of interest for understanding plants beyond their immediate functional performance for humans makes people overlook some plants in favor of others. Especially those plants which are not beautiful, or edible, or useful to humans tend to be thought of as unwanted weeds. What had happened was meant as an act of kindness; the Kamel Lazaar Foundation meant to be helpful in fixing the plot for Egle to better grow a garden.

Egle Oddo during her residency at Fondazione Orestiadi, Gibellina 2018. Photo Antti Ahonen
After the initial surprise, Egle and Karim proceeded to take samples of the soil and the water in the area, from the little untouched

corner as well as nearby areas in order to see the species that grow there and to understand the biotope. In the end, Egle has now come up with a new plan, taking in account the day to day operations of the Foundation: as the garden will also be used by the Foundation as an area for convivial events, she has proposed to plant a selection of cultivars and wild plants that represent the local flora in the border of the garden, and halophytes in the untouched corner. In another plot next to the original garden, she will plant more halophytes.

The plans are under negotiation, and Egle has been invited to go back in September to collect seeds from the wild. Such is the nature of her work, that she cannot rush things, she has to follow the pace of seasons. Egle also likes a direct approach in working the land. "Palm by palm," she says, "that's how you know the land." She does not use machines either but prefers to use all her senses equally when working.

As well as the CrossSections project in Tunisia with Basak Senova and the Kamel Lazaar Foundation, Egle is also making an evolutive garden in Italy, working with seeds of progenitors of brassicas, which are native to Sicily.

Egle values the time she spent at HIAP and Gallery Augusta, as a time during which ideas were allowed to develop. "The residency opened my thoughts and gave me the possibility to bring forward the project in a way I did not expect," she discusses. "Even though a lot of the time spent at the residency was seemingly uneventful, the current projects were growing and cooking in my head."

The CrossSections project has been developed and curated by Basak Senova. Over the course of three years (2017–2019), with the participation of 19 artists, diverse scholars and

cultural workers, various meetings, workshops, exhibitions, performances, talks and book launches are being held in three cities: Vienna, Helsinki, and Stockholm. The partners of the project are Kunsthalle Exnergasse – WUK (Werkstätten und Kulturhaus) in Vienna; iaspis – the Swedish Arts Grants Committee's International Programme for Visual and Applied Artists, Konstfack University College of Arts, Crafts and Design, and NFK – The Nordic Art Association in Stockholm; Nya Småland in different locations in Sweden; HIAP – Helsinki International Artist Programme and Academy of Fine Arts – University of the Arts Helsinki in Helsinki; Center for Contemporary Arts, Estonia in Tallinn; and Press to Exit Project Space in Skopje.

NESTORI SYRJÄLÄ: Trying to Save What Can be Saved

HIAP alumni Nestori Syrjälä has been a resident artist through HIAP's residency exchange program on several occasions over the years.

Through HIAP's collaboration with AECID, Ibero-American Institute of Finland, Embassy of Finland, Madrid, and Frame Visual Art Finland, Nestori participated in an exchange at Madero Madrid, together with Spanish creators as well as Finnish artists Essi Kausalainen, Mikko Kuorinki and Jaakko Pallasvuo. The selected artists worked together first at Madrid, and

later at HIAP at the El Ranchito Finland residency in Helsinki.

Nestori's project at HIAP dealt with the anthropocene: a geological time defined by human activity, characterised by climate change and loss of biodiversity.

HIAP welcomed Nestori again in 2018, when Nestori worked at HIAP's Suomenlinna studios in preparation for his participation at the Gwangju Biennale 2018.



Blue Marble Doormat, 2019.



Running Man, 2016-17.

AA: Your work over the years has explored issues of climate change and the loss of biodiversity. Do you have hope for the environment?

NS: Hope or not, there is no excuse for falling into any kind of comfortable catastrophism: it can be strangely soothing to think that capitalism, fossil fuels, or whatever are just these gigantic unstoppable destructive forces that will eventually turn everything to dust - and there is nothing for us to do but look from the sidelines and feel hopeless. As long as there are living creatures on the planet, you should do what you can and try to save what can be saved.

In my work I deal with these issues from an artistic perspective, which is not about designing ecological ways to live or anything like that. I work quite freely with whatever ideas come to mind. I would say these issues are more relevant for me in the way I work: how much I

travel, what materials I use, how much work I produce etc.

AA: Contemporary society is causing much anxiety in people. Humans are lost amidst several crises: the environmental disaster, economic and political crises. What do you think would be an effective way of bringing about social change?

NS: Here in Finland, for example we need to bring our energy and resource consumption to about one fifth of what it is now. It is a daunting task. I can see no easy technical way to bring it about. Science or politician have a very bad track record and I doubt there is much hope there. Hopefully I am wrong. I think the transformation from fossil-fuelled consumerist society to some kind of post-fossil world will require a pretty radical re-evaluation of our current values. And probably much more. Through art you can explore radically different



mammalbonetrashbagmultivitaminswimsuitlacieharddrivehouseduststeelboltpencilweightplate, 2020.

ways to see and do things. So maybe there is something we can do in the arts also, but if there is it will probably come as side product and not by producing ten thousand eco-themed biennials. Or maybe that is exactly the kind of madness that should be done. I really don't know.

AA: Do artists have a responsibility to respond to the social and environmental issues that people are concerned about?

NS: Artists are free to work with whatever subject they choose. But everybody also has a responsibility to live and work in a way that does not destroy the conditions of life on the planet. So, even if you are making abstract sculptures you need to consider how you are doing it, what materials and how much energy you use in the process, how much are you travelling and by what means, how large studio you have and so on.

AA: What are you working on at the moment?

NS: Nowadays I am more and more interested in working in public space. The audience in public space is more diverse, there is real conflict and actually opposing views. It is more difficult but also more rewarding and relevant way to work at the moment. I'm currently working on a piece that will be show in Tarvaspää / Ainola / Visavuori - so in the context of Finnish national romantic art and these already dead, and from today's perspective kind of problematic artists. Also I am developing a collaborative public art project for a housing complex in Stockholm. It is a try at making a public art in a new way: not by commission or competition, but by working directly with the architects and the housing association.

Dana Neilson

How to get to Helsinki?



Travel related to art and research is a notable source of carbon dioxide emissions. To lessen the carbon footprint of our movements HIAP encourages travelling by ecological means and avoiding flying and private car usage whenever possible.

Here are the common slow travel routes that are used to travel to Helsinki by land/sea:

TIP: The most ecological route may not be the most affordable. The earlier you book your trip, the better your chances are to find affordable tickets.

TRAVELLING FROM THE SOUTH:

Warsaw-Vilnius-Tallinn-Helsinki

The bus Warsaw-Vilnius-Tallinn can be booked from Ecolines or Lux Express.

Schedules and tickets for the ferry Tallinn-Helsinki are available from Eckeroline, Tallink-Silja** or Viking Line.

**Tip: The lowest emissions boat that operates between Helsinki and Tallinn is the liquid natural gas (LNG) Ferries the Tallik Megastar or the Tallik MyStar.

The carbon footprint of this total trip with a standard ferry is 86 kg CO₂eq. Using the LNG Ferry the emissions are 80 kg CO₂eq. The air travel between Warsaw and Helsinki results in 300 kg CO₂eq.

Finnlines who operates the ferry between Helsinki-Lübeck will have new LNG ferries in their fleet as soon as 2021. Check the type of ferry when you are booking to make the most ecological choice!

TRAVELLING FROM THE WEST:

Hamburg-Copenhagen-Stockholm-Turku-Helsinki

The train Hamburg-Copenhagen can be booked via DBS or Deutsche Bahn.

The train Copenhagen-Stockholm via SJ.

The ferry Stockholm-Turku booked via Tallink-Silja or Viking Line**.

The train from Turku-Helsinki via VR.

**Tip: The lowest emissions boat that operates between Stockholm and Turku is the Viking Grace and the MS Viking Glory.

The carbon footprint of this trip with a standard ferry is 54 kg CO₂eq, with the LNG (liquid natural gas) ferry the Viking grace it is 33 kg CO₂eq. The air travel between Hamburg and Helsinki results in 382 kg CO₂eq.

Hamburg-Lübeck (Travemünde)-Helsinki

The Bus Hamburg-Lübeck can be booked from Deutsche Bahn.

Schedules and tickets for the ferry Lübeck-Helsinki can be found at Finnlines.

The carbon footprint of this total trip is 352kg CO₂eq. These calculations are for a diesel Ropax ferry which on average emits .3kg CO₂e/km (information from VTT Llpasto). The air travel between Hamburg and Helsinki results in 382 kg CO₂e.

**Stockholm-Luleå-Tornio/
Haaparanta-Kemi-Helsinki**

The train Stockholm-Luleå via SJ.

The bus Luleå-Tornio/Haaparanta via Kiruna Stadstrafik or Eskelinen.

The bus Tornio/Haaparanta-Kemi via North European Bus Tours Ky.

The train from Kemi-Helsinki via VR.

The carbon footprint of this trip 16 kg CO₂eq.
The air travel between Stockholm and Helsinki results in 226 kg CO₂eq.

Umeå-Vaasa-Helsinki

The Ferry Umeå-Vaasa can be booked through Wasaline.

The Train Vaasa-Helsinki via VR.

The carbon footprint of this trip 29 kg CO₂eq (based on the carbon data for a diesel ferry).
The air travel between Umeå and Helsinki results in 155 kg CO₂eq.

Seyðisfjörður-Hirtshals-Frederikshavn-Göteborg-Stockholm-Helsinki

The Ferry Seyðisfjörður-Hirtshals can be booked through Smyril Line

The Train Hirtshals-Frederikshavn can be booked via Nordjyllands Trafikselskab

The Ferry Frederikshavn-Göteborg via Stena Line

Train Göteborg-Stockholm with Swedish Railways

From Stockholm you can travel to Helsinki via train or ferry see routes above

The carbon footprint of this trip 307.7 kg CO₂eq (based on the carbon data for the LNG ferry between Stockholm and Helsinki) . The air travel between Egilsstaðir to Helsinki via Reykjavik results in 1509 kg CO₂eq.

**TRAVELLING FROM THE NORTH:
Rovaniemi-Helsinki**

The recommendation is to travel by train, the journey takes on average 8 hours and prices can range from 34€-80€. For tickets and timetables see the VR Website.

There are also bus connections by OnniBus and Matkahuolto.

The carbon footprint of this trip by train is 1 kg CO₂eq, by bus 59 CO₂ eq. The air travel between Rovaniemi and Helsinki results in 231 kg CO₂eq.

**Narvik-Luleå-Tornio/
Haaparanta-Kemi-Helsinki**

Train Narvik-Luleå via Swedish Railways

The bus Luleå-Tornio/Haaparanta via Kiruna Stadstrafik or Eskelinen.

The bus Tornio/Haaparanta-Kemi via North European Bus Tours Ky.

The train from Kemi-Helsinki via VR.

The carbon footprint of this trip is 13 kg CO₂eq. The air travel between Narvik and Helsinki results in 324 kg CO₂eq.

**Tromsø-Bromsgård(Narvik)-Luleå-Tornio/
Haaparanta-Kemi-Helsinki**

Bus Tromsø-Bromsgård(Narvik) via Troms Fylkeskommune

Train Narvik-Luleå via Swedish Railways

The bus Luleå-Tornio/Haaparanta via Kiruna Stadstrafik or Eskelinen.

The bus Tornio/Haaparanta-Kemi via North European Bus Tours Ky.

The train from Kemi-Helsinki via VR.

The carbon footprint of this trip is 28kg CO₂eq.
The air travel between Tromsø and Helsinki results in 357 kg CO₂eq.

**TRAVELLING FROM THE EAST:
Moscow-St.Petersburg-Helsinki**

The train Moscow-St.Petersburg-Helsinki via VR (or Russian Railway).

The carbon footprint of this trip is 2 kg CO₂eq.
The air travel between Moscow and Helsinki results in 292 kg CO₂eq.

CARBON EMISSIONS:

Carbon emission calculators give a rough estimate of the CO₂ or CO₂e (CO₂ equivalent, which includes all greenhouse gas emissions that contribute to global warming) created by a certain trip and though the numbers may vary the general consensus is that modes of transportation can be ranked from most emissions to least emissions in the order plane, ferry, bus, train.

The carbon calculator used in the above calculations estimates the CO₂e created by 350 km travelled with different vehicles as follows;

Plane = 200kg
Average ferry = 60kg
LNG(Liquid Natural Gas)= 35kg
Bus = 23kg
Train = 1kg
(based on Finnish transportation systems).

This calculator was developed by the University of Helsinki and uses VTT Lipasto calculations as their basis, with the added radiative forcing index (RFI) for flights. Helsinki city environmental services has confirmed the calculations are trustworthy.

To calculate the flight distances www.distancefromto.net was used and for train and bus distances Rome2rio.com has been relied on.

In the cases of specific types of ferries have the VTT Lipasto database was used:

LNG ferry 18kn: .099 kg CO₂e/km.
Petrol ferry 18kn: .144 kg CO₂e/km
Petrol ferry 24-27kn: .282 kg CO₂e/km
Petrol ferry 40kn: .461 kg CO₂e/km
Diesel or Ropax 21-24 kn: .3 kg CO₂e/km

RESOURCES:

There are many possibilities when it comes to routes and modes of transportation! Here are some resources for finding your way:

Rome2Rio is a booking site that shows multiple travel variations including flight, train, bus, ferry, rideshare or rental car and includes estimated prices, journey durations, booking details and carbon footprint.

With EcoPassenger you can compare the energy consumption, the CO2 emissions and other environmental impacts of planes, cars and trains for passenger transport along routes of your choice.

The Helsingin Sanomat has created a counter that shows you how to travel in Europe by train and how much it costs (in Finnish).

The Man in Seat Sixty-One is a comprehensive guide for train and ferry travel world wide complete with photographs of the different travel options and route guides.

Maatapitkin specialises in ecological travel to and from Finland as well as further in Europe (in Finnish).



Slow travel from Helsinki to Venice

WHY TRAVEL SLOW?

It's perhaps obvious that a key reason for slow travel is to reduce the CO2 emissions and pollution that the travel causes. Furthermore, a decision to prioritise slow travel can also be helpful in pushing an organisation to make a big paradigm shift in its goals and operations.

In addition to being slow, traveling by sea / land can also be more expensive and does require more planning. These aspects contradict with the basic logic of small non-profit cultural organisations like HIAP, who often try to realise ambitious plans with shoestring budgets and resources. The agenda of pushing for ever more grand scale plans needs to be replaced with the agenda of doing less but in a more well considered manner.

One can also change the perspective, and see slow travel as an opportunity to achieve more. When traveling slow the journey itself can become a meaningful experience, rather than a blank moment between location A and B. HIAP and our collaborators are currently making plans for programmes that would more fully utilise the train journey (especially on long journeys, such as the Trans-Siberian train). Slow travel can also be very enjoyable! The trip from

Helsinki to Venice featured amazing views when traveling through the Alps, and time in the train can be spent on reading, writing and relaxing.

It should also be emphasised institutions are in the current situation in much better position to enable slow travel than individual persons. For many people the idea of slow travel seems like a luxury that they cannot afford, due to lack of time and money. The institutions have the power to change this – they can decide to invest money and time so that people can travel slow. Non-profit cultural organisations such as HIAP have the potential to be in the forefront of this change, since we have a lot of freedom in setting our goals and agenda.

THE EMISSIONS

From Helsinki to Venice the emissions with sea / land travel are approx 1/4 in comparison to flight travel, if one chooses the travel connections that produce low emissions. Finding out what these are is not entirely straightforward.

The most popular slow travel connection from Helsinki to Europe is via Turku-Stockholm-Copenhagen-Hamburg. On this route, the ferry connection between Turku and Stockholm



The Alps seen from the Zermatt-St Moritz-Tirano train. Photo by Janne Nabb / nabbteeri

produced a large share of all the emissions. What most calculators don't take into account is that recently new ships with significantly lower emissions started to operate between Turku and Stockholm, as well as between Helsinki and Tallinn. The new ferries that run with liquified natural gas produce approximately 98 g of CO2 per person per kilometre, in comparison to 143-456 of CO2 per person per kilometre for regular boats (these figures are from Lipasto database by VTT Technical Research Centre of Finland). The low emissions boat that operates between Turku and Stockholm is Viking Grace.

Furthermore, many emissions calculators give misleading (far too low) figures for flight emissions, especially the airline companies are keen to present low figures for their flights. The emissions from jet planes in high altitudes have a larger environmental impact and thus according to the researchers the emissions should be approximately doubled to get the right figures.

Based on calculator ecopassenger.hafas.de, the CO2 emissions for a Helsinki-Venice return flight are 171 kg if one uses the default settings. The small print on the site says that "This does not cover the whole global warming impact of the flight. To consider it totally, select "CO2-emissions with climate factor" in the settings.". If one changes this setting, then the CO2 emissions jump to 384 kg. Even this figure is low in comparison with the figure that atmosfair.de site gives for the same flight (448-505 kg, depending on the airplane type).

In comparison the figure for sea / land travel is 278 kg, but if one takes a closer look one can see that most of the emissions come from the ferry travel. The emissions of a standard ferry

ride is approx 200 kg, but if one takes the low emissions LNG powered ferry the emissions are only approx 30 kg.

So, as a summary taking a flight one way produces approx 380-505 kg of CO2 emissions while the trip with ferry + train can be made with just 100 kg of emissions.

If there is no low emission ferry available, does it then make any sense to choose the slow travel over taking a flight? Regarding this question we have been advised by Mustarinda residency (our collaborator in Post-Fossil Transition project) and other experts on the topic that taking the ferry is still a better choice than flying, since with sea travel there are much more options for making it a more environmentally sustainable travel solution. Furthermore, most of the big ferries that travel to Finland also carry cargo and the need for this sea cargo traffic is more likely to remain in future as well.

THE ROUTE AND THE TICKETS

The site [Rome2Rio](https://Rome2Rio.com) is useful for exploring various travel routes. As mentioned earlier, a popular route from Finland is via Turku-Stockholm-Copenhagen-Hamburg, from there one can continue further to Venice via Munich or Vienna. One can of course make a longer, more meandering journey and stop in for example Berlin on the way. Another interesting route would be via Baltics, Tallinn-Kaunas-Warsaw-Vienna-Venice. Unfortunately the connection between Kaunas and Warsaw is only available during weekends, due to the construction on the new Baltic Rail connection. The good news is that in a few year's time the connection via Baltic states further to Central Europe is going to be much easier and quicker.



Taking the ferry from Turku. Photo by Juha Huuskonen.

ABOUT THE COSTS-

An Interrail ticket with 5 travel days within a month costs 282 € for adults, thus the cost of one day of travel with this ticket is 56 €. On top of this one has to add seat reservations which are usually pretty cheap, 5-10 € per journey. On the other hand, if one books train tickets early enough then these can be cheaper than the Interrail option.

Booking the tickets can be surprisingly tricky and time-consuming operation in comparison with booking a flight with just a few clicks. One needs to use the sites of various national

railway companies to make the bookings, and in many cases it is necessary to install a mobile app of such a company to make the booking. In general buying tickets is pretty straightforward, but just reserving a seat (when one has an Interrail ticket) might require a bit research. The site [seat61](https://seat61.com) has useful advice for many situations, and luckily various support communities for slow travel have popped up (in Finland the FB group [Maata pitkin matkustavat](https://www.facebook.com/Maata-pitkin-matkustavat) is currently very active). It's of course possible to use a travel agent as well, there are some that are specialized in land / sea travel.

Miina Hujala &
Arttu Merimaa

Slow travel through Russia – tips for the Trans- Siberian train

Connecting Points is a program that aims at strengthening the collegial and curatorial activity in artistic and cultural realm in/within Finland and in Russia. The program is currently coordinated and curated by artist-curators Miina Hujala and Arttu Merimaa, who now share their tips on traveling by rails in Russia

Since HIAP's Connecting Points program is about exchange and connectivity, it involves a lot of travelling between Finland and Russia. Russia is the only country that one can enter from Finland with a direct passenger train access. Therefore, it seems very sensible to organize the travelling by rails. We see that it is our responsibility as coordinators of a residency program to consider the methods of travel from an environmental standpoint. This should be the premise of all activity in general. However, there are other aspects of this slower way of travelling that can become essential when trying to think about reorganizing our ways of moving and working, especially in the realm of art practices.

In Connecting Points, we try to consider the time and effort we use on travelling as tools for knowledge gathering – going from one location to another as a contemplative site-dependant

transition, the shifting between places as a locus to pursue comprehension. Practically, the time you spend on the move can be used on reading, writing, drawing, discussing – or it may be not used at all: also just staying still is recommended. In this profession we (aim to) have the possibility to shape our relationship towards time and to the way we decide to spend it. Slowness is thus not a negative attribute.

Train travelling in Russia opens up routes towards Asia. In recent years, the residency collaborations between Finnish and Asian partners have become more frequent. In air travel Finland has also become a hub for routes towards China, Japan and Korea. For us it seems integral to develop less carbon heavy (neither train travelling in Russia nor different ferry routes in Asia are carbon neutral) methods of travelling that can also become a

meaningful way for artists, curators, researchers, writers and thinkers to be “en route”.

We gathered some practical insights related to our previous trips from Helsinki to Moscow and to Vladivostok.

We have done the train trip to Siberia once leaving from Moscow, and then arriving at Vladivostok and travelling for 12 days (2018). We stopped at Nizhny Novgorod, Krasnoyarsk, Irkutsk, and Ulan-Ude. We booked our train tickets through the travel agent (Lähialuematkat). The second time we travelled the trip in 2019 for a month taking the train from Moscow and stopping overnight at Kazan and Yekaterinburg and then coming back from Vladivostok in one go (taking up almost seven consecutive days). Using a travel agent is useful, especially if one needs a visa for the trip. We also recommend for more comfortable settings of having a cabin just for two or three people.

Usually one can reserve a place in a cabin of four (2nd class) or a place in an open car (3rd class). Tickets can also be reserved directly from the website of Russian Railways. Hotels we reserved ourselves ahead of time online. It makes sense to take at least three stops one way. This depends of course if one has time: with the schedule that we had, having four stops took almost two weeks one way.

Taxi apps (like Gett, Yandex or Maxim) and portable mobilewifi (like Megafon, Beeline, MTS or Tele2) help when stepping “off board” to the cities (these help find the hotels and navigate the city). In the train the mobile network – or any network – doesn't function that well. In addition, electric sockets are also a bit case-dependent since in some trains they were in the cabin and in one train only one socket was found in the car, so we recommend

taking a reserve battery (power bank) or an extension cord with you. However, the sheets were clean and hot water was available in the samovar in the car. We strongly suggest that you travel light. Taking time, water and books is essential. Preloading audiobooks or podcasts is also good. The food you take with you on the train is also a big thing. The eating situation on the train resembles somewhat that of hiking.

We recommended to bring with you:

- Water
- Instant-porridge
- Instant-noodles (are a Russian train-institution)
- Tissue and / or toilet paper / Wet sheets/ hand sanitizer (hygiene can be an issue)
- Tea / coffee (instant)
- Fruit
- Garbage bags
- Cutlery

In addition, it makes sense to bring:

- Flip-flops that you can use in showers (that some trains have)
- Slippers and clothes that you can wear comfortably in the corridors and to the toilet.
- In a situation of reduced privacy ear plugs and sleeping masks are an aid

If one is not fluent in Russian, translator apps might be helpful. Trains stop at the stations according to a schedule, usually for a couple of minutes, sometimes about 15 minutes up to an hour or so. The schedule is viewable on the car or online (www.poezd.ru (only in Russian) www.tutu.ru, www.tutu.travel/poezda/ (in English)). Note that the schedule on board might be on Moscow time. During the stops one can go out and walk about a bit and purchase also some pies and such to eat (make sure to have cash with you on the train). Local ladies usually sell their produce outside the platform



Photo by Miina Hujala and Arttu Merimaa

area. There is a restaurant car on the train, of which the style, atmosphere and menu varies (we prefer the more nostalgic ones, of course). The real luxury is the time, the abundance of it, and the possibility to be at peace. When one sits on a train for several days, but still moves forward (on route to somewhere) one gets time to process the experiences as well as what one reads, and what one thinks. The stops are important for the change in rhythm and to relax in a different way. During our visits in the cities on the trip in 2018 we checked a local museum and then just went to eat somewhere. We didn't draft any particular programme and it worked well when things weren't so precise. The main thing was that this was a way to do the trip, a very long one geographically though, and not be 'touring' in the sense of as in tourism. The difference is that this is a way to make a trip, through places and between

them, not only to a place. In a project that we are starting to organize, relating to train travelling and residency activity, we will focus just on this. The travelling as durational. The project is centered around moving by train, in a time when the need to question the transport done through fossil fuels and the need to find solutions related to climate change is acute. Travelling as an essential part related to residency activity and bringing people together has been a tool in creating real contacts, communication and distributing knowledge, as well as enabling shared meetings and formulation of shared views together with a professional field. The residency activity is then a way to open and form new connections in where long distances traversed through by train or by ferry makes it visible, and then also strengthens the importance of making practical measures in the usage of methods of transportation and



Photo by Miina Hujala and Arttu Merimaa

routes sustainably climate-wise.

On the trip in 2019 we focused also on methods of working on board, we had some joint sessions with the group and also there were materials gathered, things produced and also presented together. Travelling as a group has its benefits in terms of providing security and company. Sharing thoughts and discussing as well as providing alternative rhythms and access points to various subject matters can benefit also for the personal project/focus that one might have. It also seems that themes related to Russia, Siberia and travel gain an additional interest whilst on board the train through the waste landscape.

We are aiming to use the train as a transport method towards Asia (Japan, Korea and well as China) when part of the trip would be done

by ferry. Our intention is then to add the duration, and also make cultural connections a bit more durational and deeper. For us travelling is also connected to the work we do, and through it we aim to observe how it is a part of our professional and global collaboration network. We therefore ask: What can a residency practice provide as a means of connection between places as well as a way of working artistically? What does moving between places mean in connection to this, and how options for travelling can pay attention to the environmental and climate effects and in an integral way support the practice? These questions we wish that every kind of organization would think in relation to travelling related to working.

Zuzana Janečková

Brno-Praha-Tallinn- Helsinki-Iisalmi- Hyrynsalmi-Kajaani- Helsinki-Tallinn- Praha-Brno

Miksi ei?

This was a trip full of miraculous situations and meetings. I didn't have a precise plan. I said to myself "whatever, whenever".

My research started 14 days before I started the residency. I travelled to Mustarinda from Brno (Czech Republic) using all different kinds of transport other than flying—but for most of the time I used 'flight mode' on my phone as a kind of eco/work protest. I took the train to Prague and continued by bus to Tallinn. We arrived at midnight so I decided against a hostel and just waited in the city for the early ferry. I went from the station to the center walking very slowly under the 16 kg of baggage I was carrying. I sat down several times to rest. At a market five older women were selling flowers (no-one bought one), speaking mostly about the weather in Russian. I sat close to them, observing the situation. As it got colder

I went to a nightclub, ordered one small Salmiakki and started to watch the series Dynasty on my notebook. There were just drinking men, one waitress, and me.

I then went to the ferry, slowly, enjoying having time. Mostly I rush on all kinds of transport—I don't have a sense of time. On the Eckero Line I spent most of my time outside watching the sea and sun and arrived in Helsinki in the morning. Putin visited on that day so divers were checking the harbours. I stayed the night on Suomenlinna, a beautiful island 20 minutes from Helsinki. I was tired, so I slept for two hours around lunch, then went swimming and was finally able to enjoy Helsinki; so much that I was a bit lost in the night and in the morning I was so tired that I didn't wake up with the alarm - "kiitos" to Robin (my host on the island) for waking me! I started to run in the opposite direction but Robin pointed me towards the



ferry and the train to Iisalmi. Uff. So this was the beginning of my trying to slow down. I continued with the train to Iisalmi and then walked ten days to Mustarinda. I asked Misa from Mustarinda for recommendations and Nyyskä found this beautiful way from Iisalmi through Vierämä, Talaskangas national park, Otanmäki, Manamansalo island, Kivesjärvi, Paljakka, and finally to Mustarinda. The first day of walking started in Iisalmi. It was rainy and I walked all day by the road. I came to Vierämä around 8 pm, went to the supermarket and bought an ITA-Suomi map. I then went to a rock bar to plan my way. Immediately five men came to help me find out how to continue my journey. The next day I continued with my new map and after two hours I met my first new friend Sepoo, who asked if I wanted a ride. We spent five hours together before he drove me to Talaskangas and showed me a beautiful place to sleep. It was a small wooden open kota around which was just a lake and forest. I didn't see anybody. He said "enjoy the silence" and continued on to visit his mother; his plan before he saw my big backpack on a rainy road. The night alone there was so magical. I made a fire and slept like in heaven. I walked through Talaskangas to Otanmäki and didn't meet anybody until 6 pm. I have never felt so free and connected with nature. I finally met my second new friend Matti (he was like Santa Claus) and asked him if I could have a rest by his lake, he said yes. He came back and asked if I would like coffee—we had it with homemade cake. He started to cook soup and asked if I was hungry. After dinner, he offered me a sauna. It was the best gift for my back and really helped me to continue in a better condition. I slept close to the lake. In the morning he gave me a soup for lunch and souvenir - two wooden self-growth spoons made by him and he took me to the Malamansalo

ferry. I walked all day through the island. By 8 pm my phone was almost out of battery and I couldn't find a place to sleep. Around 9 pm I found a resort where I met two women, Mia and her mother Maija, and their two dogs. I asked if I could sleep somewhere outside close to the house. In the morning they asked if I wanted to get breakfast with them at their camp Kultahiekat. We spent all day together planting strawberries, having pancakes and champagne and playing cards. Their friend was driving to Kajaani so he took me to the top of Kivesjärvi where I slept until morning. It was on the top of the hill so it was windy but the beautiful view over Oulujärvi lake in the morning was another big gift. I walked all day alone and slept by Osman-kajärvi lake and continued to Tormanmaki. I didn't find a place to charge my phone so I was without navigation and didn't know the time but slept by the lake near the parking in a wooden dressing room. In the morning it was so beautiful that I decided to do yoga for half an hour and then swim. Every day I slept by a lake, swam in the morning, ate what I found in nature, used the water from lakes, and picked up mushrooms and blueberries. Breakfast was porridge with blueberries and raspberries with tea or coffee, lunch was different mushroom soups, and dinner was porridge, chestnuts and fruit. I recorded the rhythm of walking, where I slept, where I got lost, where I had lunch, where I just sat and listened, or watched. I took pictures, and collected stones and feathers, which I took with me and I also wrote haikus almost every evening or morning. Every day I was better at packing and walking became more silent and slow. Most nights I have nightmares but the last night they had all gone away. The final day and night were very special, I walked still more and more slowly, the last four km was really



(night Tormanmaki



Cottage



Miksi the dog at Mustarinda's front door.

hard because Mustarinda is at the top of a hill but I really enjoyed it. It was really a grand finale with 15 kg on my back and a view of the sunset.

I arrived at Mustarinda on Sunday evening around 7 pm. Four sheep and a barking dog welcomed me. Marku's dog Miksi, the sheep's caretaker, became really important to me. Mostly because of him I also learned a few finnish words like "paikka" or "tassu" and he really liked it. I started another adventure by walking with him around the Paljakka area. I felt like I had come back home, even though I had never been there before.

On the way back I travelled by bus, train, ferry and then bus again. On the ferry to Tallinn there were big waves with stormy weather and great live music with atmosphere like from film by Aki Kaurismäki, some people were trying to dance, some were sleeping, some were on the toilet and a few of them were staying outside in the storm to feel the last touch of the north. I spent one day in Tallinn to see exhibitions and I have to say it was great even though it was very heavy rainy weather. I can really recommend staying in Tallinn for a few days. On the way back I met the same bus driver and it was a very nice dot of this trip.

First snow
Covered by forest
Miksi ei

MUSTARINDA TRAVEL STORIES

Emily Joy

Wandering

Written for Mustarinda, April 2018

In late March, we prepared ourselves to travel 2000 miles. There are apparently easy and quick ways to travel 2000 miles, namely flying. But we chose to travel by train and ferry because I don't fly.

We were travelling to Mustarinda, near Hyrynsalmi in Finland, from England for an artists residency. 'We' is myself, my husband and our 6 year old son. I left home feeling like I was dragging them too many miles around the world for my residency there; I was filled with doubts and fears, dark dreams about travel disasters and parental responsibility (would there be bears?).

We travelled this way because in 2007 I made my last flight (and it may be my last ever flight; with the caveat that if there is an emergency I would fly again). It came at a time of huge change for me, personally and physically. Things were moving and shifting in all aspects

of my life and I returned to the UK to a different home and job; it felt like deep-down everything had altered. Soon after I made new connections with local groups including the Transition network, who were discussing Peak oil and community sustainability. With so many changes I questioned everything; with so much thrown into chaos I was able to re-examine many aspects of my life.

When I applied to Mustarinda many years later, for a month-long artists residency, I did so from the warmth of an English September, I saw that they asked that their resident artists consider travelling by means other than flying. I felt my choice not to fly was supported and validated. I also knew it would either mean more time away because of the length of the journey, or a slightly shorter residency. We could have found a cheap flight, but I also knew that it would be cheaper only for our bank account, not for our emotional or physical states, or for our place within the world as a whole. Superficially I could see this ecological



impact, but understood deeply how a sense of connectedness and personal responsibility could benefit my being.

Due to work commitments, the residency in Mustarinda was for one short month. In the end, I compromised and scheduled our departure and our return, each 5 days of travel, slightly within the bounds of that month so the stay at Mustarinda was shorter. We had to return for work commitments, but somehow i felt guilty because more than a month away seemed like such a long time to pull my husband and son from their work, friends and routines. As 10 days getting to and from a residency is a big percentage of the static residency duration itself, I cultivated a shift in the way I thought about the whole event; the travel was an important part of being an artist in residence in a distant land and that during the period of travel I was simply in a fluid place of ‘residency’ for 10 days. Now I could think about how the changes we experienced on the way affected the work I made; how I could use the time moving to examine my emotional state of nervousness or see how my projected imaginings were accurate, altered along the way or were incorrect. The journey - as all slow and conscious journeys do - became an exciting and vital part of the residency, not a means to an end.

The journey was made up of long days. We travelled on average 12 hours each day, but with many stops and changes. Sometimes when we arrived in our hotel in the evening it felt like it was to yet another ubiquitous bed in yet another city, but by breakfast we were rested enough to open our eyes, listen to the new language and try some new breakfast delicacies! Some days we used three languages, other days just one. There is so much to see from a train, so many stations to mark on the

map, so many people to chat to. On one lovely stretch, we unwittingly sat in the animal compartment and were surrounded by 5 friendly dogs and one cat, with their various owners. We experienced several wonderful buffet carriages and, because of the relatively low cost of our tickets we drank wine and ate delicious meals, feeding our bodies and our senses. The days passed quickly with no real need to entertain our son other than the odd story or game when he was tired. We arrived exhausted but understanding where we were in some deep way.

We have been travelling long distances with our son, on trains, since he was a baby. We became used to the challenges of tiny train toilets, of changing nappies in quiet carriages, of whisking a screaming toddler into the foyer to spare us the other passengers’ glares. It can be hard work, but let me qualify that; hard work here means that we keep a constant connection with our child (and through him a conscious connection with the journey), that we are ‘right there’ in the experience with him. With two adults it is easier, we used to do shifts with one of us being with our child in all ways and one able to rest and switch off. And now he is older it is easier still, nearly as simple as travelling with a third adult (as long as we all remember the golden rule of long distance travel: to eat and drink plentifully and very often!). He has seen many places and spoken to many diverse and fascinating people on the way. I hope he is learning that the world is exciting and open; that most people, no matter their age or background are basically friendly; that he is generally safe.

We made many mistakes when starting to travel like this. We worried unnecessarily about bookings, about where we would sleep each night, but this simply reflected the anxiety of

being responsible for a baby or a child. We soon became familiar with the often complex and opaque methods of booking cheap tickets. We found our way around obscure websites and each time we made a long distance journey our planning time got shorter. We spent many hours in the months before travelling to Mustarinda researching complicated routes; looking for the best departure times, arrival times, the best tickets and the most comfortable balance between cost and speed and stops. It is not easy at first to navigate these things and we are still challenged sometimes by online bookings.

The actual experience of traveling by train is typically enjoyable and often unexpectedly delightful; like when we boarded the first train in Finland and discovered the children’s carriage with a slide and books! Or the time we travelled home from Greece and the final tired stretch from London to our home town was eased by our son chatting the entire journey to a lovely man. Like the excitement of trying to sleep in an overnight train crossing the Alps and ending up staying awake until 3am watching the dark shadows of the mountains slip by. Like the singing Ethiopian priest, the chatty Italian woman, the many other families with friendly children. Then there are the panics of running with heavy bags for a 2-minute train change, or the cancelled trains, misunderstood timetables, delays and overfull carriages. But you develop a sense of calm and patience when you realise that things are always basically ok. That some things are out of your control, but things mostly work out and the world holds you. And when you find another chocolate bar in your bag and suddenly things aren’t so bad after all.

We experienced so much on the journey: We sailed through the frozen gulf of Bothnia,

experienced the many greys of the archipelago in April, heard the gentle tinkle and slush of ice in Stockholm harbour, sat in a sauna on the ferry looking out over the sea, watched the endless logging trains in Finland roll by. We trod a labyrinth in the newly fallen snow on Pieksämäki platform, we were fascinated by the Finnish Roma women’s dresses and we lay awake through a thunderstorm in Cologne hearing the thunder and the reciprocal rumble of trains leaving the central station. We ate terva bread (and cream cakes) in Kajaani to soften the painful blow of leaving.

Increasingly I find that there is something very disturbing about travelling to a place within a sealed unit, arriving and experiencing something very different to 2 hours ago, 10 minutes ago or 12 hours ago, then returning once again to a sealed unit. The time spent in the destination is like a packaged ‘experience’; one of those ‘experiences’ you can buy as a present for a friend.

It breaks life into travel and destination, where one element is not really meant to be enjoyed or even experienced at all. In fact the more we protect ourselves from the movement and turbulence of travel – through earplugs, blankets, music on headphones, our plush car interiors with thick windows, with films on screens instead of views through glass – the less we allow ourselves to engage, to experience the environment around us and recognise what we are feeling inside ourselves. Which can mean that when we arrive at the destination we disembark still buffered emotionally and physically, and can only view the place in which we have landed rather than allow it to affect and permeate our way of being. Or else we are expected to suddenly switch ‘on’ emotionally - allow a level of porosity and look beyond our nervous impulses, our familiar habitual



behaviours - then switch off again, ignoring the shock of returning to the sealed unit of travel. One clear, freezing, sunny day in Finland we travelled to a lake a short distance from Mustarinda, by car. It seemed to be in many ways a tourist experience, moderated only by a lighting of a fire and cooking a meal. Then suddenly back into the sealed unit of the car again. No slow transition from the subtleties, the sublime peace, the light, sounds, smell and *feeling* of the environment, just a sudden closing of a thick sealed car door, the radio switched on and the engine tuning anything else out. The 'afternoon by the lake' has been visited, packaged, sandwiched between car journeys. It is a destination, not a fluid or connected part of the place in which we live. We can now talk about it as a trip. It is something distinct from the rest of the day which rumbles gently on, on either side.

I have started feeling that I am porous. Not only can I often not help being affected by things but also, I *want* to be affected by what is around me and I want to know what I am feeling in response to different situations because this is infinitely healthier for me. I find it hard to switch my connections to places, smells, people and noise on and off. I am not a sealed unit, nor do I want to experience the world as if I am in one. I do not want to disconnect from being in the world with the enforced emotional responses created by a controlled environment. I welcome the flux of people, smells, noise and movement on a train/bus/street because it happens around and with me, and I am within a dynamic and changing environment within which I have autonomy rather than being static within a controlled space. Within my practice over the last 10 years there have been growing references to the earth, to soil, to our sense of place and self. Travelling slowly with a connection to the ground, people,

smells, tastes and feelings, also connects me to the fluid and enormous world we are part of. I am not separated from it, and the places through which I travel are not fractured into a series of destinations. This way of travelling demands that we are porous, even when this feels uncomfortable or difficult. Travelling by train is still fast. It is still fragmented, but it is full of the possibility of sensuous engagement with the differences of many situations along the way. The journey is not separate from the destination, places are experienced and ground is covered viscerally, and in a way that is easier for the body to comprehend.

I understand the countries that we have travelled through to get here a little more than before, even if our stay there was only one day. I understand the geography of our journey a little better and I don't feel like we arrived in the end country like we had switched on a film or were looking at a postcard. There has been a smooth transition from 'home' stuff to 'residency' stuff, plenty of time to leave certain things behind and in which to experience increasing unfamiliarity, foreignness, languages we don't know and progressively different weather. My body knows it has travelled a long way.

There has been no physical or mental breaking up of the world, one country has flowed smoothly into another, joined physically by land or sea. I can imagine walking those countries. I feel that I could find my way back home along the trail we laid on the way out here, which, being land-based have not been dispersed like clouds in the wind.

At the end of April we left the quiet place that had been so warmly our home. We transitioned from place to place in a way that our minds and bodies could comprehend. We saw some

familiar places, some new places, and experienced many fascinating connections in the 5 days until we were back home.

Information about how we travelled from the UK to Mustarinda: We travelled using global interrail tickets which – due to the duration of our stay including travel being just over one month – meant we had to buy two family global passes, each valid for 5 days travel within a month. The cost for all of us for this was around £800 (raised through a crowd-funding campaign) almost door to door (plus a small amount for a bus for the final stretch in Finland). For some faster trains, we had to also pay for seat reservations although this can be avoided by using slower regional trains. There is an incredible sense of freedom knowing you could travel anywhere in (most of) Europe on this ticket, although we had a route planned and a time limit, plus a child who we wanted rested and safe each night, so we didn't explore this freedom as much as we could have.

CO2 emissions: Roughly calculated using an online calculator. Our family CO2 emissions for travel by train, ferry, bus and car for a total of 2100 miles came to 0.15 tonnes, one way. 0.30 return.
If we had flown our CO2 emissions would have totalled 0.97 tonnes one way. 1.94 tonnes return.

Staff

Juha Huuskonen
Director

Eleni Tsitsirikou
Residency Manager

Stephanie Roiko
Administration & Partnerships

Paul Flanders
Technician

Dana Neilson
Project Coordinator

Saara Korpela
Eco-coordinator

Visiting HIAP

HIAP Gallery Augusta, office and Suomenlinna residency studios are located on Suomenlinna island, near the centre of Helsinki. There is a regular connection from the Market Square (Kauppatori) to Suomenlinna. Find the HSL ferry (operating all year round) timetable here and the JT-Line waterbus (operating only May–September) timetable here.

For questions related to HIAP residency programmes, open calls and partnerships: [programme\(at\)hiap.fi](mailto:programme(at)hiap.fi)

INTERNS 2018-2020
Helena Aleksandrova
Paola Jalili
Barbora Kachlikova
Vera Kavaleuskaya
Miina Pohjolainen
Alice Orlandi
Dana Neilson
Emma Clear
Scarlet Nieschmidt
Eveliina Tuulonen
Jakub Bobrowski
Philipp Dochantschi

VISITING / POSTAL ADDRESS

HIAP – Helsinki International Artist Programme
Suomenlinna B 28/2
FIN-00190 Helsinki
FINLAND

