OCCUPY EARTH

Ecologies, (Re)constructions and Illusions

Aalto University

ViCCA

X



Parsons Design and Technology





OCCUPY EARTH

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Occupy Earth is collaborative course organised by Visual Cultures, Curating & Contemporary Art (ViCCA) and MediaLab at Aalto University, School of Arts, Design and Architecture and MFA Design and Technology at The New School, Parsons School of Design from autumn 2018 to spring 2019.

The course explores environmental disruption, non-human agency and differing philosophies of ecology, using various forms of interactive media, material, and process.

Occupy Earth

Occupy Earth is a collaborative course organized for the second time during the academic year 2018-19 by Aalto University in Helsinki and Parsons School of Design in New York. The course explores the polarized discussions of climates, both political and ecological, we now face as an earth-bound species in the 21st century. Through the process of creating various physical and/or virtual "mixed reality" hybrids, the course addresses various themes including climate disruption, our complex relation with various non-human entities, and potential conceptions of an ecology without nature.

Occupy Earth is also a project that supports the development of a model for part-

nership between universities; it facilitates artistic research and exhibition opportunities that bridge the two universities. Students and faculty have been actively engaged in developing best practices for collaboration and communication through the enactment of the course for two years. During the academic year 2018-19 productive students from 16 different countries have explored the course thematics from multiple perspectives, and developed their artistic and research trajectories into a series of diverse projects that exist across physical and virtual domains.

Aalto University visited Parsons in New York for a multi-day research and prototyping work-

shop in early October 2018, and the course now culminates with the Parsons group visiting Finland to mount an exhibition at the Aalto Campus in Otaniemi in March 2019. Speculation on Ecologies, (Re)constructions and Illusions

Melanie Crean, Tyler Henry and Petri Ruikka Occupy Earth examines how spheres of technology, ecology, and human society form a complex system that inter-operates at varied scales of time and cultural representation.

The course began by investigating the emerging form of "mixed reality" as platform for exploring these topics. Our goals were to expand the notion of what might constitute a "mixed reality" beyond the marketing jargon, to speculate about the broader implications of increasingly hybridized "realities," and find new connections between human and non-human realms of experience. Just as we see borders blurring between virtual and actual realities, we imagine the blurring of geopolitical boundaries, and a dismantling of the distinction between natural ecologies and constructed environments.

One central theme for the course was the objectification of nature. Several discussions challenged the idea, and explored the thinking behind the notion that environment, or nature, could somehow be seen as separate from the human. Throughout the course, we elaborated on these inquiries through multiple forms of representation and expressive media.

Student projects address various conceptual trajectories through sculptural works, immersive and interactive media installations and games. Some themes were more metaphysical, including questioning the nature of the Anthropocene and the very composition of what is human, by exploring the interconnections between

humans and other organisms. Others are more direct investigations about human's long term impact on the environment, and the effects of agriculture, industry and political entanglement on climate change.

In another project, students chose a speculative approach to contemplate the consequence of human activity on the environment from the perspective of artefacts from the future. The group uses this methodology to extrapolate on current trends and predict long term impacts, shifting perspective as a means to promote objectivity, and inform viewers about the consequences of their actions.

Complications linked to the question of responsibility, affect and climate disruption arise from works asking what happens to the individual in a world of increasingly scrutinized choices and (in)actions. Student projects also explore the relation of personal and political boundaries, as formed by polarized discussion of climate. Conflict zones contribute to extinction, while in some demilitarized zones, species flourish. Polarized political rhetoric concerning climate create boundaries that seem impossible to breach, while also creating unexpected alliances.

Students hailing from 16 different countries currently living and studying in the United States and Finland, gave serious consideration to the current state of global war and cli-

mate disruption, and their resulting interrelated effects on migration, political speech, assembly and negotiation. Much of this problematic can be seen in the stagnation of major political powers to address climate change, such as the Trump administration's refusal to abide by United Nations Climate Change Conference from Paris in 2015, better known as COP21. European writers such as Bruno Latour have suggested that Americans, as well as other large industrialized nations, have two choices. We must either acknowledge that the current system of globalism will very soon run out of resources to consume, and make a large scale commitment to restructure the extractive nature of capitalism - or sink into denial.

We propose a third choice; efforts to leverage and maximize the consequences of individual and collective action. Embracing the multitude of actors and the complexity of ecological systems that we are a part of as individuals and human societies, might give us better insight about our relations within what philosopher Timothy Morton describes as the 'ecological mesh.' How might we better acknowledge our position and interconnectedness within this mesh, especially when reflecting on the larger Body Politic that extends from it's conventional human-centrism?

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About the Collaborating Universities

AALTO UNIVERSITY

Aalto University is a multidisciplinary community where science and art meet technology and business. We are committed to identifying and solving grand societal challenges and building an innovative future.

VICCA (MA)

Visual Cultures, Curating and Contemporary Art (ViCCA) is a transdisciplinary Master's Degree Programme at Aalto University School of Arts, Design and Architecture in Finland. The program explores emerging knowledges and practices at the intersections of visual cultures, curating and contemporary art. We facilitate students to develop and contextualize their own practices within and in between these contexts.

MEDIALAB (MA)

The mission of the Media Lab is to explore, discover and comprehend the new digital technology and its impact in society; to find and exploit the possibilities it opens to communication, interaction and expression and to evaluate, understand and deal with the challenges it poses to design and creative production.

THE NEW SCHOOL PARSONS SCHOOL OF DESIGN

Parsons School of Design enables students to develop the knowledge and skills they need to succeed in a rapidly changing society. Students collaborate with peers throughout The New School, industry partners, and communities around the world and in New York City, a global center of art, design, and business.

PARSONS DESIGN AND TECHNOLOGY (MFA)

Designers today face two fundamental challenges: the expanding influence of design within society and the increasing role of technology within design. The Master of Fine Arts in Design and Technology program provides a dynamic, challenging, and idea-driven environment in which to address these challenges.



Adrian *Mc Grath*

(MA) VISUAL CULTURE CURATING AND CONTEMPORARY ART

INVOLUNTARY
IMMERSION
(FIVE STATIONS
OF A RAFT,
AFTER
GÉRICAULT)



steel



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"You must go on,
I can't go on,
I'll go on."

Samuel Beckett, *The Unnamable*

Carmela Wilkins

(BFA) INTEGRATED
DESIGN IN SOCIAL
PRACTICE

MOTHER-LANDIA

Backing paper,

chipboard,

plexiglass,

glossy paper

Parsons

COMMENTS AND FEEDBACK ON MOTHERLANDIA

A board game exploring the interconnectedness of Climate change, Sacred geometry, Agriculture, and Indigeneity.

"Maslow hierarchy of need, figure out visually what the [game's] resource list looks like, correspond to the hierarchy of needs. What's the earth's hierarchy of needs?"

TONY PATRICK
WRITER/WORLD-BUILDER

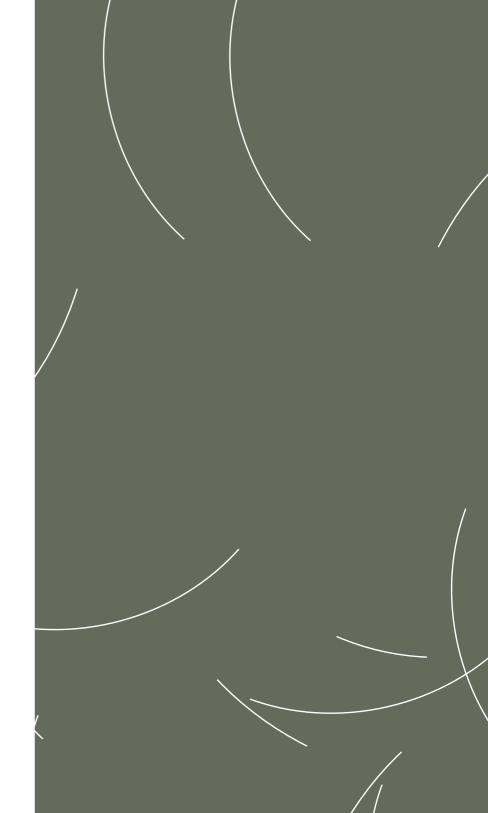
"It's hard to convey the work together [after the war card is played, thus turning the game from mainly co-operative to player versus player temporarily] because we need to, but now we're at war, but oh hey let's work together again."

RANDY VASQUEZ SENIOR GAME DESIGNER AT UBISOFT SINGAPORE "For my own tribe we have sustained [farming techniques] them through storytelling, we have in our stories, our handicrafts, petroglyph's...stories about how things came to be and behind the myth, in place of the object are a series of scientific realities that allow people to have sustainable farming practices."

AMELIA WINGER -BEARSKIN ARTIST/TECHNOLOGIST

"We are from the Bassa and Conga people of West Africa. Our indigenous roots was before slavery."

> MY AUNT FLOSSY TAYLOR NURSE & PASTOR



Carolina *Melo*

(MFA) DESIGN AND TECHNOLOGY

BIOTIDE

Projector,

Kinect Xbox 360,

Acrylic bowl,

MadMapper,

Processing

Parsons

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RED BIOLUMINESCENT TIDE

Fins in motion, curling ripples
A flicker. A glimmer.
A droplet slides across bright scales
Reflection of the sky's depths
Refracted by the water, the sun traverses the ocean layer by layer

Down,

Down,

Down...

Into unforgivable depths, where light no longer reflects.

A minute, an hour, the sun goes down

A pinprick of light floats upward, and then thousands join in dance

Brushing the surface, driven by the waves

Amidst the foam, back and forth they sway

Circadian rhythms lead the waltz,

A nighttime spell.

Marine organic light comes in shades of blue,

Tuned to the wavelengths that travel furthest

through the water (1)

Ethereal blue, esoteric in nature

Blue that calms, and swirls, and charms.

Night turns into day, blue turns into red

Paralyzing red of uncertainty.

Noxious blooms,

Flowers of destruction

Old anomaly of toxicity.

Midas touch of civilization
Only helps to deepen the red.
Red that chills, and spreads, and kills.
It washes life away as it expands.
Marine organic impact comes in shades of red.

(1) Valiadi, Martha, and Debora Iglesias-Rodriguez. "Understanding Bioluminescence In Dinoflagellates - How Far Have We Come?" Microorganisms 1.1 (2013): 3_25. Pmc. Web. 13 Sept. 2018.

ABSTRACT

Merging projection mapping, creative coding, and a kinect interface, BioTide is an installation that displays a piece of outer space with half a sphere protruding from one of its sides. The sphere, meant to be allusive of planet earth, contains real water inside but also functions as the surface area for a projection of the ocean decorated by bioluminescence. When users approach the installation, their presence is detected and displayed on the sphere as a red silhouette, representative of human's impact on the marine environment.

MATERIALS

Projector
Kinect Xbox 360 (Model 1414)
Wall Mounted Acrylic Fish Bowl
MadMapper (Projection Mapping Software)
Processing (Programming Language)





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CONCEPT, DESIGN QUESTIONS, GOAL

BioTide explores the contrast between marine plankton's capacity for both immense beauty and massive destruction. Marine plankton, or dinoflagellates, can create their own organic light called bioluminescence, which is usually blue. They also play a huge role in the phenomenon known as red tide. BioTide also seeks to emphasize the role humans play in further augmenting the effects of the red tide. The idea behind the installation is to acknowledge and appreciate the power nature has to create or destroy, while also reminding the user that human presence itself can be enough to throw a whole organic balance out of order. The technology used in this project also further enhances this idea.

The kinect works as a digital mirror of the audience (the human), while the projections serve to exhibit things that are usually too big picture for us to grasp within our quotidian human experience.

RESEARCH

Behind the concept explored in BioTide lies a stark reality, one of climate change, and agricultural and industrial pollution. Red tide is a common name for the phenomenon known as toxic algal bloom, which is caused by several different factors. It happens when there is an abundance of nutrients in the ocean and higher temperatures, which cause marine plankton populations to boom. The overabundance of these microscopic algae causes the discoloration of ocean water making it look red. Furthermore, although the biological reason behind it is not quite understood yet, when algae populations surpass a certain threshold they begin to release a potent natural toxin, which is deadly to most marine life and can be harmful and even fatal if consumed by humans. It is important to understand that the red tide is a global phenomenon and is not a new occurrence, but since the 80s it has been starting to strike more frequently and last longer. This is due to a combination of agricultural and industrial runoff into the oceans, as well as rising ocean temperatures due to climate change.

These same dinoflagellates, or marine algae, also possess the ability to generate their own light. Marine bioluminescence is mainly blue, and can be mostly attributed to dinoflagellates, with the exception of a few other marine species that are capable of bioluminescence like some jellyfish and anglerfish. Learning about these phenomenons in nature spiked my interest in not just the reasons behind them, but also our inherent connection to nature, as far-removed as it may seem to some.

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AUDIENCE & EXPERIENCE:

While the installation is meant to be an experience open to anyone, the idea is to reach a target audience of people that usually don't think about the influence of human presence on the environment. The ideal scenario is for the installation to initially spark a sense of curiosity. The projection of outer space is meant to look like a painting from far away, but the uncommon combination of a 2D projection and a 3D object superimposed on this projection is what should capture the attention of a user nearby. As a user gets closer, they'll notice the 3D object isn't just hung on the wall but it is filled with water as well. In wanting to examine what's inside this water orb further, the user will unknowingly trigger the interaction and witness their reflection in the form of a red silhouette blotching over the beautiful bioluminescent ocean.

TECHNICAL PRODUCTION

There is a plexiglass half orb suspended on the wall. Through MadMapper, two videos are projected on the wall, one of outer space, and a smaller one of a bioluminescent ocean on top of the orb. The latter is a processing sketch, where the code dictates the movement of bioluminescent particles floating on top of the ocean. The sketch also communicates with a kinect

through an open kinect library, and MadMapper through a syphon library. The function of the kinect is to register a person getting up close and to project their silhouette onto the plexiglass orb by communicating this to MadMapper and the projector. The sketch also uses video and sound libraries in order to be able to play the ocean video, as well as underwater sounds.

PROTOTYPING & TESTING

Getting the kinect, processing and Mad-Mapper to communicate with each other was definitely a big challenge. Each one required a specific library, as well as unique logistics. The next biggest challenge for me was that of removing the background from the processing sketch. This required getting rid of any pixels that weren't being read as the person's silhouette, which wasn't an easy task. I was ableto solve it through a lot of research and looking at different code forums. Going through the different prototypes of this project definitely shaped the final product to be entirely different than what I had originally began with. Ultimately this ended up being for the best.

There are still many technical difficulties I am trying to work out, like pixilation issues with the projection itself, or placement of the kinect without compromising the aesthetic of the final installation. These issues are what I plan to work on and improve for the future iterations of this project.

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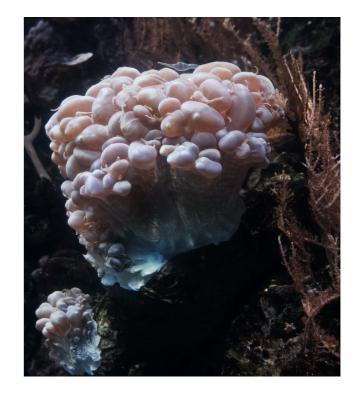
Eerika Jalasaho

(MA) NEW MEDIA DESIGN AND PRODUCTION

MINDING **CORALS**

Full HD-video, plaster cast,

sound



COMPOSING, SOUND AND INSTRUMENTS:

Noora Kauppila

RECORDING AND SOUND PRODUCTION: Miranda Kastemaa

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The work is an attempt to understand a transition phase which corals are going through from a perspective with having no natural environmental relationship towards corals as a species but still finding their beauty, fragileness and diversity touching. In Finland we can only experience their presence in a constructed environment without travelling very far.

People don't want to believe in climate change or are reluctant in change whatsoever in our local environment. It's too close, its too painful. Corals and polar bears are somewhere far and non-reachable and that makes it easier to grieve their loss.

The work is about the powerlessness towards this big phase that we are going through and smallness of a single person and their feelings in front of it. It's about an illusion of beauty, romanticism and projection of emotions towards symbols of destruction, human centrality, our contradictory role in climate change and a relationship between a transition and stability, motion and stillness.

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Jennifer Greb

AND PRODUCTION (MA) NEW MEDIA DESIGN

TONGUE AND LOTUS **MORPH**

Graphite Drawing, Augmented Reality

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It is like becoming accustomed to something strange, yet it is also becoming accustomed to strangeness that doesn't become less strange through acclimation."

> Timothy Morton "Dark Ecology"

Liisi Soroush

(MA) NEW MEDIA DESIGN

Mixed media interactive installation

AND PRODUCTION

WORK BY

Bogyeong Kim and

Liisi Soroush

CONCEPT DESIGN

Bogyeong Kim/Keist University & Media

Lab Aalto and Liisi Soroush/Media Lab

Aalto

CONCEPTUAL

PHILOSOPHY AND

RESEARCH

Liisi Soroush

DESIGN, TECHNO-

LOGY, CODE

Bogyeong Kim

TECH TEAM AND CONSULTATION

Krisjanis Rijnieks/Aalto Fablab, Avner

Peled/ Media Lab Aalto

SOUND DESIGN

Camilo Sánchez Carranco / Media Lab

Aalto and Liisi Soroush Sound design execution: Camilo Sánchez Carranco

CONSULTATION AND Roberto Pugliese, Matti Niinimäki /

THANKS TO

Aalto Media Lab

Lauri Brask / Aalto Fablab

THANKS TO

Otto Sarpaniemi/Ruoto Catering, Matti

Nelimarkka/PhD HIIT, Jussi T. Eronen/

Ph.D. University of Helsinki

DATA RESOURCE

The Finnish Environment Institute SYKE Carbon Dioxide Emissions and Their Fate

Since 1750 https://cdiac.ess-dive.lbl.gov/

trends/emis/meth_reg.html

TWITTER HASHTAG

RESOURCE

WWF Finland. Greenpeace Finland

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Marjolein van der Loo

(MA) VISUAL CULTURE CURATING AND CONTEMPORARY ART

SPECULATIONS ON A WILD STRAWBERRY

Three prints on paper, one dried specimen on paper.

alto





(1) Wieger Wamelink, 'Voor ⁴⁰ procent plantensoorten wordt Nederland te warm', Nature Today, Nov. ²⁰¹⁸.
 (2) Alejandro E. Camacho, Assisted Migration:
 Redefining nature and natural resource law under climate change, ²⁰¹⁰.

(3) R.M.C.S. Ratnayake, 'Why plant species become invasive?', ²⁰¹⁴.

The UN delegation that evaluates climate change implications, the Intergovernmental Panel on Climate Change, IPCC, has been discussing two scenarios for the year 2050: the first is a 1.5° C increase in average global temperature, compared to pre-industrial levels, and the second is a 2.0° C increase. The former seems manageable and inescapable, the latter disastrous and probable. The predicted impacts of climate change on this planet, its ecology, and our daily existence are overwhelming and leave many feeling paralyzed.

The impact of climate change has a direct influence on many plants. The assemblage of plant species in a certain location can reveal the bigger picture of climate change. As their environment changes, sensitive species are not able to survive in their current habitat. Many plants and seeds are able to travel independently, although for several the possible rate and distance that they are able to migrate is not sufficient for survival. (1)

To overcome this, a discussion of 'assisted migration' has arisen; assisted migration is the transportation and relocation of vulnerable plants to a location that meets their needs. Arguments supporting assisted migration point out that human responsibility and effects of climate change do not leave any other option and assisted migration is the last defense to preserve many endangered plant species. (2) On the other hand, there is a chance that sensitive and threatened

species in a new environment develop invasive behavior, becoming a threat to the existing flora and fauna and potentially a decrease of local biodiversity. (3)

The ongoing discussion about assisted migration creates an opportunity to speculate on the possibilities of what future local assemblage of vegetation might look like and thus might smell like. Within the Speculations on a Wild Strawberry research project, I have formulated recipes for scents based on current plant assemblages and future assemblages as they may be impacted by both climate change and assisted migration. In Speculations on a Wild Strawberry the ephemeral and ineffable qualities of scent become ways of comparing and experiencing speculative futures. To develop the speculative scent, I look at which local plant species are vulnerable to climate change and which plant species might travel with or without organized human assistance.

In this research on the effect of climate change on local vegetation I chose two locations, one in Schinveld, NL and the other in Espoo, FI. The numbers above, of 1.5 or 2.0 degrees, are global averages; an increase of 2.0 degrees globally can relate to much higher local variations, of 2 to 3 times. For example, in the Netherlands a global increase in 2.0 degrees is estimated to increase local temperatures by 6.0 degrees. (4) The

OCCUPY EARTH

same is true in Finland. So, in 2050 the southern region of Finland including Espoo will have a temperature similar to the Netherlands in 2019. As a Dutch person, I was struck to find out that the Finnish landscape in the future might start to look more like the surroundings where I grew up. But at the same time that environment from my memories may have changed beyond recognition with the loss of species and arrival of new species, as the temperature rises.

I collected and identified the local species in the environments of the Netherlands and Finland; I then researched their survival capacity in different climate scenarios. This enabled me to speculate on the future of each location's vegetal inhabitants, given that Finland may look – and smell – a lot more like the Netherlands in 2050.

For example, in Schinveld, the Leontodon hispidus, and Senecio viscosus are expected to be vulnerable for an increase of 5 degrees Celsius and Agrostis capillaris and Cerastium montanum will be affected by an increase of 6 degrees Celsius.

In Espoo, the plants Dryopteris filix-mas gr., Geum rivale and Oxalis acetosella, are vulnerable to climate change and will not be able to survive their current location in case of an increase of 3.5, 4 and 5.5 degrees Celsius.

For Occupy Earth, I have produced three recipes for scents: one reflects the current situation in Schinveld, the second reflects the current situation in Espoo, and the third composes a speculation of the local smell in Espoo related to the estimated scenarios by IPCC for 2050.

In the Laajalahti 2050 scent, I have excluded the plants that are not likely to survive an increase of 5.5 degrees Celsius. Consequently, I have included the species that would not survive their local habitat in Schinveld, NL and will be more likely to survive in the future climate of Espoo, FI. Furthermore, I have added three species being scientifically assessed as potential plants for assisted migration, Hottonia palustris, Primula farinosa and Sisymbrium supinum, that are not common to Finland yet. In 30 years, Espoo may suit their climate needs well.

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Miradonna Sirkka

(MA) VISUAL CULTURE, CURATING AND CONTEMPORARY ART

CARPE DIEM
AND
GOODBYE,
LIVING LIKE
THERE'S NO
TOMORROW

Performance, video,

Aalto

sound







TOP Still, Greece, video shot by Tuomas t
MIDDLE Still, Lapland, video shot by Tuomas Lehtomaa
BOTTOM Still, Greece, video shot by Tuomas Lehtomaa

LOCATIONS Finland (Kittilä, Helsinki)

Spain (Fuengirola)
Greece (Athens)
Sweden (Stockholm)
Germany (Berlin)
USA (San Francisco)

SOUND Aleksi Kinnunen

TEXT Miradonna Sirkka

SPEECH Nora Rose

Videos shot by the one who

was there.

THANK YOU Tuomas Lehtomaa, Inna

Huttunen, Anna Pesonen, Sofi Häkkinen, Aleksi Kinnunen The plastic tube keeps on spinning around my belly I keep on traveling the world
The round, white, plastic tube turns around
World is full of too much
It's always too much to carry a plastic tube around the world
Be the best version of yourself
World around me is getting a burn-out

The tube keeps on spinning

DO YOU LIKE TRAVELLING?
WHERE WOULD YOU LIKE TO GO NEXT?
ARE YOU SATISFIED WITH YOUR PASSPORT PICTURE OF ASHAMED OF IT?
WHAT'S YOUR FAVOURITE BEACH?

"Carpe Diem and goodbye" is a compilation of videos shot in different environments using main media – hula hoops / plastic tubes. The project is about facing the climate crisis and inner conflict trough individuals eyes in different kind of environments. How to be a better version of yourself everyday? It is a humorous and awkward comment about an individual trying to achieve everything, while not getting anywhere. All good, let's move on. Carpe Diem and goodbye.

The hoop keeps spinning around. Individual tries to be as effective as possible: studies through the night, practices yoga in the morning, listens to a podcast while driving a city bike, attends in a workshop but writes emails at the

same time. The individual loves poke bowls, wears DR. Martens, never commits to anyone but at the same time is committed to everything. The individual is vegan, avoids flying but is at the same time professional athlete and globally known artist, flying from stage to another.

At the same time the individual understands the position where the individual is standing. The individual walks on the street and faces poverty, homelessness and reads about forest fires, floods and environmental refugees. At the same time the individual is constantly training to be the best version at theirselves carrying privileges built on cost of the shoulders of others, at cost of the surrounding environment. They are painfully aware of that. And the flying continues.

The videos are shot in different structures enabling extremes: an airport, far right demonstration, on a beach, an all-inclusive hotel in Fuengirola, abandoned tourist village in Greece, in front of the Golden Gate in San Francisco, in Berlin in front of the club holding most street cred for a techno-loving hipster, and in Finnish Lapland, Kittilä, on top of a fell in the deepest polar night.

DO YOU STORAGE YOUR PICTURES IN THE CLOUD?WHAT IF YOU FALL OFF FROM THE COULD? DOES IT HURT?







TOP Still, Helsinki, video shot by Tuomas Lehtomaa MIDDLE Still, Spain, video shot by Inna Huttunen BOTTOM Still, San Francisco, video shot by Inna Huttunen

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It is possible for me to make these artworks, because I am a Finnish citizen, holding the second best passport in the world. I am an international artist with good networks, I am open and socially talented, I don't feel bad when I feel awkward. Also I happen to have just the amount of money that makes it possible for me to travel and eat. Some of it is because of my hard work, but also a lot of it is not. This is unfair and disgusting and I should hide it. This work uses my privileges and status.

At the same time I am considered as a societally problematic case in Finland. I have run out of my student benefit months, I live on unemployment support and I work too much with no free days. I am 27 years old and I needed to take sick leave plenty of times because of exhaustion. I don't have a permanent address, I won't get married. I am not planning to have kids and sometimes I take hot baths. I fly to the other side of the world, sometimes I stay up for the whole weekend.

I am seen both living my dream and a burden. My life is build on paradoxes. I feel you, world. All the time better and more, while getting torn apart because of it. The welfare society is on it's limit and living in on-going burnout.

What now? What next? Always something?

The life as an individual in a welfare society is paradoxal in the middle of climate change and political problems. We live in extremes. I am trying to wrap my head around all this from the point of view of an individual (which is all I have) and share my current thinking while being as honest as possible.

How does the voice inside of your head sound like?
Is there a constant voice?
Is this the voice?
Whos' voice is this?
What is the end?
Is this the end?
Where does it end?

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Olga Kornilova

(MA) HUMAN COMPUTER INTERACTIONS AND DESIGN

EMBRACING THE ANTHROPOCENE



beans





The purpose of defining the Anthropocene as a separate geological period is to underline the impact of humanity on the Earth's geology and ecosystem, and to separate it from all other type of changes that have occurred throughout the history of the planet.

It is commonly understood that the human impact on the planet is "unnatural" compared to previous geological periods where "natural" changes have happened to the planet, included but not limited to multiple mass extinction events, ice ages and cataclysms, which had caused such dramatically huge changes to the planet, that all human impact in comparison would seem as just scratching the surface.

It is also commonly understood in our culture that since humans possess the ability to control and change the world around, they are assumed to take ownership and decide what they chose to make of it.

Whether humanity is in control of its behavior or not leads to the question of the existence of free will, which still hasn't been answered one way or another.

It is also remains to be seen how bad the environment should become, so that a critical mass of people, required to cause a meaningful change, would actually started to care enough to sacrifice their current lifestyle for the better of the environment.

However, if we would change our perspective of the Anthropocene as a "special" and "unnatural" period in Earth's history, and would consider it as a natural course of evolution, including all possible different futures of humanity's impact on Earth's ecosystem — we will see things in a whole new light, which wouldn't seems as tragic and dramatic.

Let's consider, for example, garbage, and plastic in particular. If we would think of the appearance and the growth of the amount of plastic on the planet to be as natural as the appearance of crude oil (which in fact is also toxic for most living organisms) then there wouldn't be any difference. Yes, plastic would create conditions incompatible with life for many animals, and probably would even cause some species to become extinct, but since we consider it as natural as any other cause of extinction, like an ice age or a meteorite — it doesn't seem so tragic anymore, just another Mother Nature's "business as usual".

Moreover, if we would consider such mechanisms of evolution as Adaptation and Coevolution, we would be able to predict that in fact many species will adapt to live together with plastic as a part of their ecosystem and some would even integrate it into their lifecycle, which may even become their competitive advantage.

For most people it would be hard to accept such a perspective, as it requires thinking about humans not as almighty, meaningful and important "kings of nature", but just as the current period in the natural evolution of life on Earth, as important as early bacteria or dinosaurs.

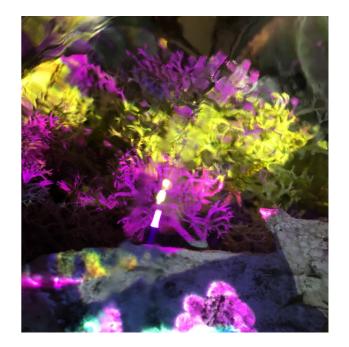
Reishab Kailey

(MA) NEW MEDIA DESIGN

THE SHIFTING ONTOLOGY OF REINDEER LICHEN (CLADONIA RANGIFERINA)

Lichen (Cladonia Rangiferina), Moss, Birch bark, Aalto

Electron Microscopy





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THE SHIFTING ONTOLOGY OF REINDEER LICHEN (CLADONIA RANGIFERINA)

This project is an assembly of layers. My role as an artist has been to identify, research and curate each layer. Different facets of the project were identified through discussions, meandering research, some readings, a lot of YouTube videos and a few impulses.

Before I unravel each layer, it is important to mention Timothy Morton and his theory of Dark Ecology (1). Specifically his ideas about the illusionary binary of Man vs Nature, were instrumental at the beginning of this project. I quickly skimmed through the readings and went straight to YouTube. While his lectures helped clean up some marinating concepts in my head, they also led to a whole new set of ideological confusions. These confusions were a strong influence.

LICHEN:

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The lichen in question, Cladonia Rangiferina, changes its ontology across realities. It exists as myth, in the minds of humans as the beard of a mighty forest spirit. It exists as food, for reindeer. It also exists as a detector of radiation since it doesn't have any roots and absorbs all its nutrition from air, making it a 'radioactive sponge'. After the Chernobyl disaster in Ukraine,

Cladonia Rangiferina was used to measure the radiation levels in surrounding areas. In fact, Chernobyl's far-reaching effects all the way in the Nordic countries were understood through testing the lichen.

THE SÁMI:

The absorption of the major Chernobyl pollutant, cesium 137 (with a half-life of 30 years), has meant serious long-term contamination of many northern Scandinavian pasturelands and thus has had an intensely detrimental effect on the lifestyle and livelihoods of the Sámi people. Since lichen is the primary food source for Reindeer (Cladonia Rangiferina is colloquially known as Reindeer Moss for this reason), the toxicity travelled through the food chain to animals and eventually humans. Not only do studies show increased level of radiation among the Sámi, many families were forced to abandon their herds due to increasing toxicity(2). This simultaneously killed an important source of food, livelihood as well as practices relating to ancient herding traditions.

TAPIO:

Tapio is the forest spirit from the Kalevala tales of Karelian folklore. Fitting the Green Man archetype, Tapio has a beard of lichen and eyebrows of moss. Found in many

cultures from many ages around the world, the Green Man is often related to natural vegetative deities, representing the cycle of growth each spring.

TERRARIUMS:

An increasing fascination by glass jars and through some gardening tutorials, I learned how to make tiny terrariums. Aiming to keep the lichen alive, I made 7 experimental terrariums to test the ideal conditions suited for their survival. Terrariums usually consist of some gravel, a layer of activated carbon and some form of soil/substrate. After much adjusting of different factors like air, water and microbes, an almost ideal solution was to just leave the terrariums out in the snow, which preserved the lichen perfectly.

ULTRA VIOLET EXPOSURE:

UV rays range from a wavelength 10 to 400 nanometres, shorter than visible light but longer than X-rays. Prolonged exposure can be harmful to humans in some cases, but UV is the closest I could get to some form of relatively safe radiation to experiment with. I used a 150W UV-B reptile basking light for the setup. The lights are usually used for pet reptiles since they need UV-B rays for metabolic activities. Another quick little terrarium was made with a handful of lichen and the UV exposure began in 12 hour

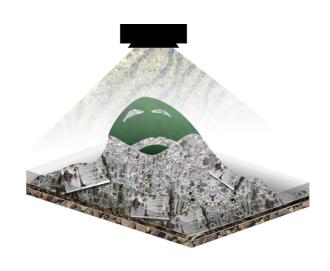
cycles of light. Everyday, I removed a small sample and kept it aside.

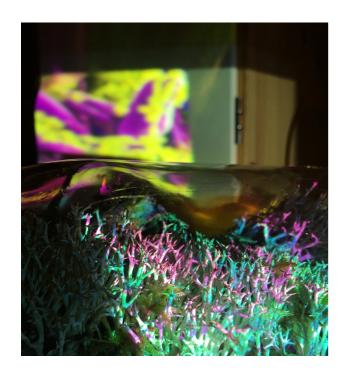
SCANNING ELECTRON MICROSCOPY (SEM):

SEM is a type of electron microscope that produces images of a sample by scanning the surface with a focused beam of electrons. The electrons interact with the atoms in the sample, creating signals that describe the topography and create the image down to the resolution of a single nanometer. I wanted to create images of the lichen topography at every stage of UV exposure, with the aim of making a one second time-lapse animation of morphing cellular structures. Inside the lichen, or on its surface, how exactly would UV-B rays affect its physical composition?

These layers assimilate, one on top of the other, in an attempt to reveal some kind of 'hidden reality'. What if we could literally see into the cellular structures of the lichen? The artefact presented is the current manifestation of these layers. Aesthetically tying back to some of my initial ideological enquiries about humans, shifting perspectives and control, the work offers a juxtaposition between an obsessive need for unattainable perfection and the wilderness that is bound to reign.

64 OCCUPY EARTH 65







Tomas *Correa*

(BFA) DRAMATIC ARTS
WITH A MINOR IN
IMMERSIVE STORYTELLING

ARROGANCE



SEN. JIM INHOFE (R-OK)



REP. TIM WALBERG (R-MI)

Projection on wall,

bucket,

mop, water

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Arrogance is a performance based projection piece that explores the claims of government officials and exposes the hypocrisy and danger of their claims. Arrogance revolves around this quote taken from Tim Walberg and Jim Inhofe who are state representatives in the United States federal government.

"The arrogance of people to think that we, human beings, would be able to change what God is doing in the climate is to me outrageous. I'm confident that, if there's a real problem, God can take care of it."

If this statement were true, it would exclude any human from contributing to global warming. It would would also exclude any humans responsibility to mend the damages of global warming. With such an audacious claim coming from two prominent government officials, the main area of research for this piece became the political backgrounds of Tim Walberg and Jim Inhofe.

Looking into the campaign finances of both representatives, both of their main contributors were from the Coal, Oil, and Steel industry, specifically; Alro Steel, Murray Energy, and Exxonmobil. The total contributions from these three companies totalled over \$55,000.

All three of these companies have been accused by the EPA of causing environmental damage. In 2010 Alro Steel settled with the EPA after being accused of hazardous storage conditions of toxic chemicals, in 2014 Murray Energy went to court with the EPA after failing to comply with the Clean Air Act, and in 2017 ExxonMobil finally came to a settlement with the EPA for violating the same Clean Air Act. To incorporate this information into my piece, industrial footage from the Coal, Oil, and Steel Industry became the backdrop of the piece. The audio during the piece was deposition of Kathleen Hartnett White who was President Trump's nominee to head the Council of Environmental Quality.

Arrogance was put together using Mad-Mapper and Ableton Live 9.

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Tuomas *Lehtomaa*

(MA) VISUAL CULTURE, CURATING AND CONTEMPORARY ART

THERE IS
NOTHING
BUT THE
TRUTH WE
CANNOT
TOUCH

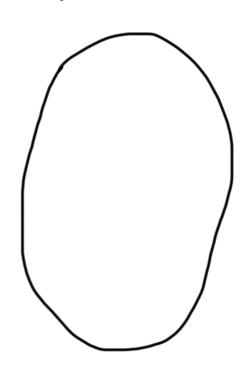
Mixed technique

Aalto

OCCUPY EARTH

THERE IS NOTHING BUT THE TRUTH WE CANNOT TOUCH

I made this portal



So that if you like you can through it jump into a different reality, something defined by you. Though probably that reality wouldn't be too far off from the one we live in now. Not to like understate the potential of imagination but we are all humans with minds and bodies tied to this material reality and there is no escape from it. And i don't know if there needs to be either. It's ok to jump back to our reality.

I don't think I can ever understand anything thats not very directly connected with the human experience of life. If the earth would like die, would it really matter to us? I mean we just like the earth because it has been our home for so long but im sure if humans were hanging out in some other planet they couldnt care less if a meteorite hit earth and the whole thing exploded.. im not saying we shouldnt care about nature or earth in general, but just that i think its better to admit that we want it to survive cause we are here and we want to keep ourselves existing. Which totally makes sense. And probably we need plants and stuff for eating so maybe keep those unless we create some really nice artificial foods that don't kill us slowly like the ones we got now do.

Humans are also nature and the way we mould and create things around us are also part of nature in the same way everything else is. It's kinda sad if some plants and animals go extinct, but also a part of some kind of natural development i guess.

Dinosaurs stayed here way longer than we did so they kinda knew what they were doing but they didn't have all these existential problems we got.. so it was also easier for them maybe or how should i know im a human not a dinosaur. But we can't go back to the nature anymore,

too late for that and I think nobody really wants to either cause you could just go and live in the forest now but nobody does it. And it doesn't count if you like go hiking in the weekends.

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Verna Kuusniemi

(MA) VISUAL CULTURE, CURATING AND CONTEMPORARY ART

THE ENDOCINE

Video,

promotional

material







Aalto

76 OCCUPY EARTH

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THE ENDOCINE

The Anthropocene is out, the Eremocine is in —— the Endocine is now.

#passion #synergies #change

#innovation #notusersbuthumans #humanrights

TWO individuals
ONE mission

THINK AROUND IT TM

MULTIMEDIATED PERFORMANCE BY Verna Kuusniemi & Liisi Soroush

WE ARE LIVING in the main topological era beyond dictionary definitions, let us be saved by wearable considering as we integrate the what-if contactless tech solutions and adaptable framework hypersynergies. INFINITE PROGRESSES. Can we leverage ends to make new beginnings in regard to making ends meet, remembering the ontological virtue harness, technologies, enabling eyeball datamine, value relationship add the traction of our future custom loneliness, dancing on your restricted beliefs, ryhtmic patterns of circadian consumerism drop touchscreens, noticing cloud trends, INTEGRATING HANDS DOWN THE BEST HANDS-ON HUMAN FUTURISM?

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Yang Xu

WALL OF ATTRACTION

(MA) VISUAL CULTURE, CURATING AND CONTEMPORARY ART



Latex rubber

Aalto

Who is the coloniser and who is the colonised?

While humans are busy conquering the planet Earth, leaving traces everywhere we have been, as diligently as a dog pees on every post it encounters,

Do you know how much of the human body is human?

Turns out we only call 10% of ourselves ours and the rest are microbial.

Seems that our body is just a walking housing complex for bacterial cells.

The coloniser is being colonised



Allison *Ing*Shirley *Leung*

TECHNOLOGY (MFA) DESIGN AND

(POLLY)-ETHYLENE

Acrylic,

video,

microcontroller

OCCUPY EARTH

(POLLY) ETHYLENE, 2018

ABSTRACT

(polly)ethylene is an interactive mixed media installation that highlights both the beauty andtoxicity found in the cyclical aesthetic of The Great Pacific Garbage Patch (GPGP). The mobile sculpture adopts the molecular composition of polyethylene, the most commonly used polymer in the world. This sculpture brings to question the human cause for the creation of manufactured waste, and the infinite lifecycle endured by these plastics. In captivating viewers' attention through the beauty and mystery of the experience, the work evokes the tension that exists between humanity and natural ecosystems. The suspended sculptures are composed of acrylic. Video is projected against the sculpture to further highlight the context, life, and dimensionality of the manufactured landscape, and its cyclical nature.

DESIGN CONCEPT

This project originated in our desire to explore the continuous degradation of spaces in manufactured environments. In observing the scale of society's ability to destroy with a lack of care, we questioned what sorts of manufactured cycles have grown within anthropogenic ecosystems. How has humanity been able to simultaneously destroy natural beauty and systems, yet be responsible for the creation of artificial systems that in itself evoke awe andwonder through their vast, visual allure?

With a focus on the phenomena of the GPGP, we express that human pollution builds environments that thrive with the construction of artificiality. In the case of plastic pollution, these readymade plastics eventually degrade into their original microplastic form. These microplastics are then collectively brought together by the converging waves to form the GPGP. Through abstraction, we narrate the infinite life that these microplastics assume made possible by human consumption.

In choosing non-traditional mediums of mixed reality, including the use of video projection and sculpture, we converge art, design, and technology to evoke tension, disbelief, and the sublime.

RESEARCH

The project intends to provoke thought and discussion about the creation of manufactured landscapes within natural environments, recognizing both its terror, resilience, and aesthetic beauty. We focused on cyclical systems, and how varying nodes are interconnected. In thinking further about the dependency on humanity as the fuel for manufactured landscapes, we researched multiple case studies. These include electronic waste in China, the Blue Lagoon in Iceland, and the Great Pacific Garbage Patch. We were shocked to discover the scale of the

GPGP and the lifecycle plastics assume in our oceans. The sheer vastness of the Pacific serves as a humble signifier of natural beauty and the assumption of its unchanging, everlasting state.

In the work itself, we were curious to use mediums that evoke calm, awe, and beauty. We drew inspiration from the work of photographer Edward Burtynsky, and his exploration into visualizing the beauty of what he coined as 'manufactured landscapes'. Along with Burtynsky's work, we investigated Pierre Huyghe's, After Alife Ahead . Both artists navigate means of translating natural cycles in their art. We also took aesthetic inspiration from the likes of Alexander Calder, as well as Pipilotti Rist. Both these artists heighten experience through unconventional mediums of narration by altering perceptions of how their respective media should look, feel, and act.

MATERIALS, TECHNICAL PRODUCTION

The multiple sculptures are constructed out of laser-cut acrylic and suspended by metal wires. The mixed video borrows free licensed material found online with its content originally rendered in post-production. The video is displayed through the use of projection mapping. A microcontroller is used to trigger the technical interactivity between the viewer and the piece, (polly)ethylene.



Occupy Earth is collaborative course organised by Visual Cultures, Curating & Contemporary Art (ViCCA) and MediaLab at Aalto University, School of Arts, Design and Architecture and MFA Design and Technology at The New School, Parsons School of Design from autumn 2018 to spring 2019.

The course explores environmental disruption, non-human agency and differing philosophies of ecology, using various forms of interactive media, material, and process.



