Ecosystems 20/21

Detailed Project Descriptions

Themes

Modes of Connection

Artists	Exhibitions	Performances	Seminars/ Workshops	Talks	Installations	Residencies
13	1	4	5	-	5	1

Radio Rocher – Telenatura Lab (Amanda Lewis, Bidisha Das, Dorota Orlof)
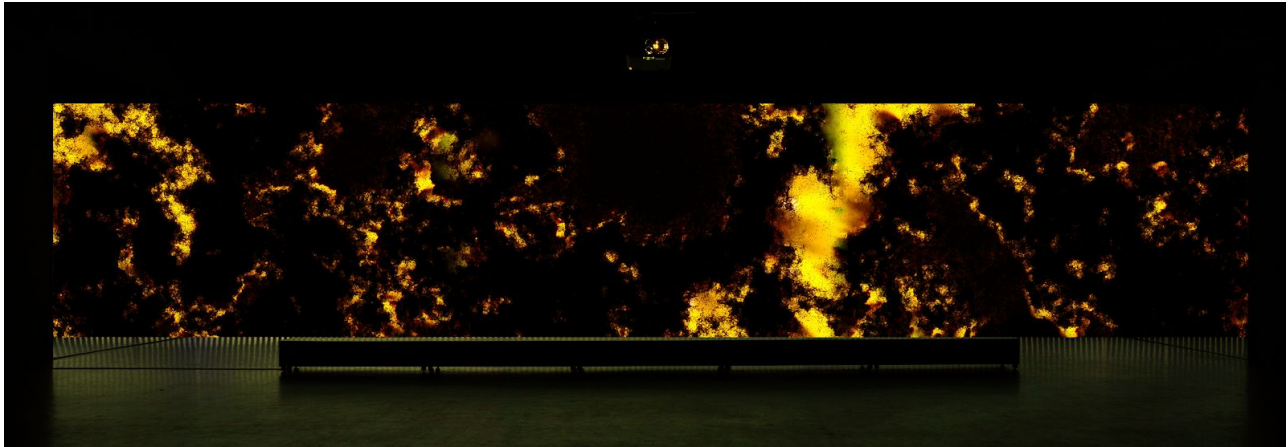
INSTALLATION

In **Radio Rocher**, Telenatura Lab streams real time audio from microphones placed in the forests of central Japan, the bustling streets of New York City, the Camp, France and Berlin. They include a series of diverse soundscapes that represent radically different environments with varying levels of biodiversity and human intervention. Through live audio streaming the artwork builds an auditory and virtual link between the installation and the spaces it is trying to establish a (sensual) connection with. The live audio is accompanied by a voiceover layer of questions and observations posed to the user, asking them to consider their own relationship with the space they are connected to: Do they ever think about the similarities between humans and raccoons? Do they ever consider how they breathe the same air as snakes? Telenatura Lab challenges the visitors to find their own inter-species connections through sound.

Radio Rocher Listening to sounds in real-time from all over the world

The Ephemeral Perception – Sahar Homami

The Ephemeral Perception Concept sketch

The Ephemeral Perception is a 2-channel real-time audiovisual installation that explores digital/virtual nature. It examines the processes that are applied in generative computer art that is modeled and inspired by similar processes in nature. Nature remains a constant reference in Generative Art, while computational processes also point towards a kind of *"second nature"*. Software processes are the perfect answer to a new experience of human existence where real and virtual spaces are irreversibly intertwined. ***The Ephemeral Perception*** is a series of experiments that invites the audience to explore questions about utopia or dystopia, appearance, motion, and disappearance in nature, both physically and virtually.

Duality and Balance in Times of Struggle – Nuño de la Serna
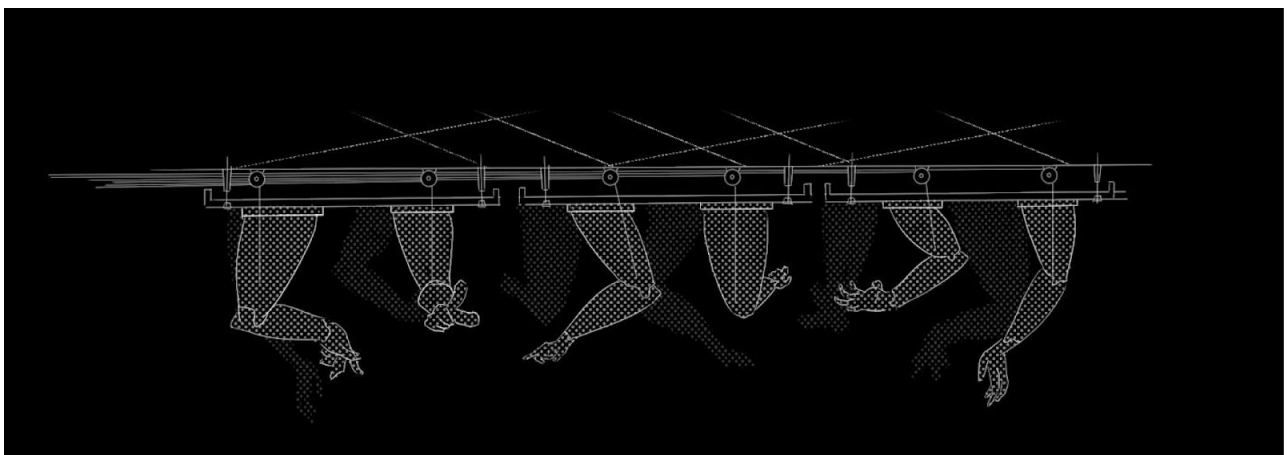
Duality and Balance in Times of Struggle Concept sketch

Duality and Balance in Times of Struggle is a sculptural kinetic installation. Nuño de la Serna aims to channel self conflicts, internal dialogues and hesitation to create an "Automata", an automatic mechanism, loaded with symbolisms and metaphors. The sculpture is composed of a series of mechanical pieces in the form of prosthetic limbs responding to a single string which is connected to a central control arrangement. Each of the strings is pushed and pulled in a randomized order by a combination of gears and programming mechanism. The central control system functions as a driver of decisions.

Raster's Gaze (Please Stand By) – Gilbert Sinnot, Jutro Wydajność

INSTALLATION / PERFORMANCE

Raster's Gaze by Gilbert Sinnott is an installation exploring technological superannuation and acceleration. Informed by the history of the moving image / video, it is juxtaposing contemporary and obsolete video technologies. An array of cathode ray tube televisions is modified and repurposed to draw lissajous and oscilloscopic forms controlled via external voltages. Using stereoscopic cameras, machine learning algorithms, and environmental sensors, the viewers presence and motions are encoded into these forms, creating a new and hybridised form of television image. An accompanying physical performance – *Please Stand By* – with Jutro Wydajność extends the installation capabilities, combining wearable sensors, radiophonic sound and choreographed movement.

Raster's Gaze Previous installation setup

**Video Excursions** Meet-up at Lacuna Lab

Video Excursions – Gilbert Sinnot

EVENT SERIES (PERFORMANCES/WORKSHOPS)

Video Excursions is an event and workshop series bringing together practitioners of media production that exist outside of software or proprietary paradigms. This includes the development of open source software, self-built machinery, and repurposing of electronics for artistic means. As a subject of networked ecosystems, diverse communities exist and exchange online, with *Video Circuits Berlin* being one to manifest as a regular physical meet-up at Lacuna Lab. A series of two events in autumn 2020 is planned. The first with performances by Olivia Jack and Autr, and a workshop exploring Olivia Jack's collaborative live coding platform, *Hydra*. The second event weekend concludes with workshop creating modular and DIY audio-visual devices with Wolfgang Spahn, and performances by Wolfgang and Kasia Justka. Here, the focus will be upon process and improvisational outcomes in live performance, alongside workshops exploring tools that are inherently accessible and low-cost, yet able to create sophisticated and unique outcomes.

Ritual Science – Nayeli Vegas
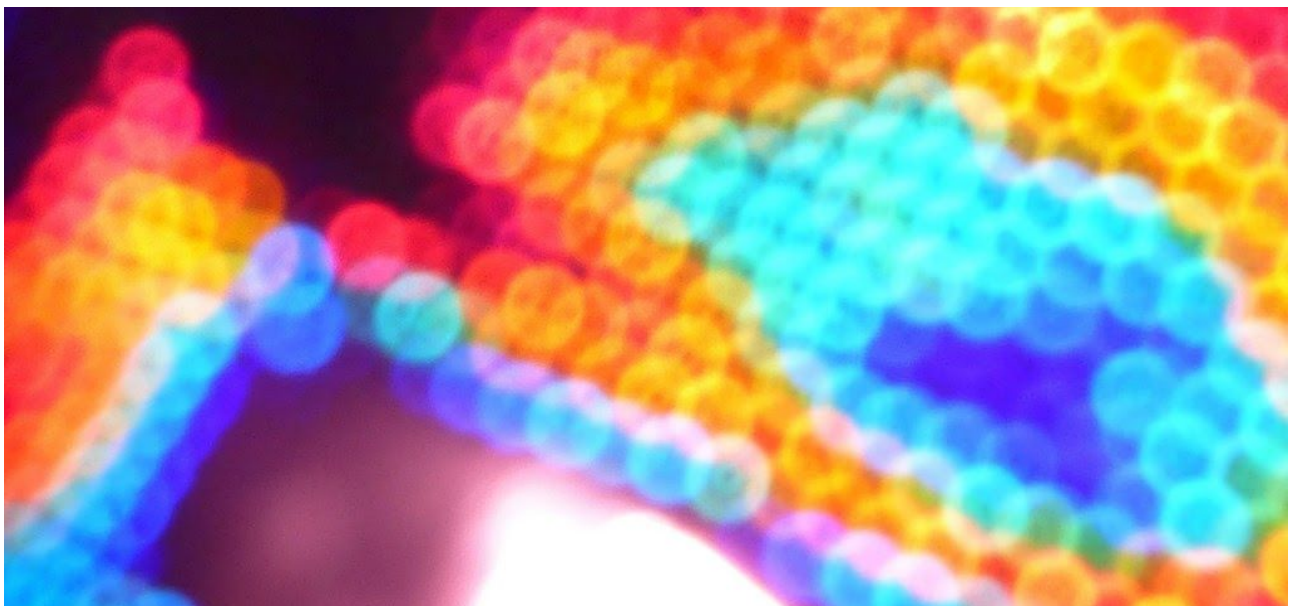
WORKSHOP
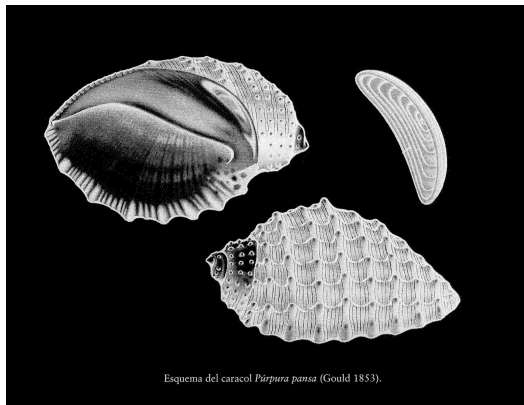
Ritual-Science Plicopurpura Pansa (left) in indigenous rituals (right)

Since ancient times, traditional textiles created by indigenous cultures have materialized human's relationship with nature. *Ritual-Science*, a workshop by Nayeli Vega, will explore the case of *Plicopurpura Pansa*, a gastropod used by a few southern Mexico's communities to dye cotton and fabric by means of rituals. Indigenous people's relation with nature-space-time through rituals has been made invisible in the name of progress, economic growth, etc. The purpose of this activity is to review some rituals and science related to dyeing textiles and to expose how does these relations human-nature are threatened because of colonial structures, racism, migration and its social, ecological and political implications.

## What Values Matter? – Vincent Van Uffelen

WORKSHOP

What Values Matter? Visualization Demo

Vincent Van Uffelen's workshop *What Values Matter?* looks at the exchanges that happen between agents on the various layers that constitute an ecosystem. Subject of these exchanges can be little molecules of

sugar, interactions, goods, services, or even a thought. The workshop will introduce a simple stack of (software) tools and practices that allow to simulate the process of measurement, analysis, visualization, and prediction of the behaviour of complex multi-agent systems. It's aim is not only to reveal potential sites of conflict in making values, trust, and reputation computational available. But, also, to explore in which ways visual representations can be creatively used to make values and their exchanges (computationally) perceivable while giving the represented a respectful dignity of ambiguity.

Expanded Cinema 2020 – Sahar Homami

WORKSHOP
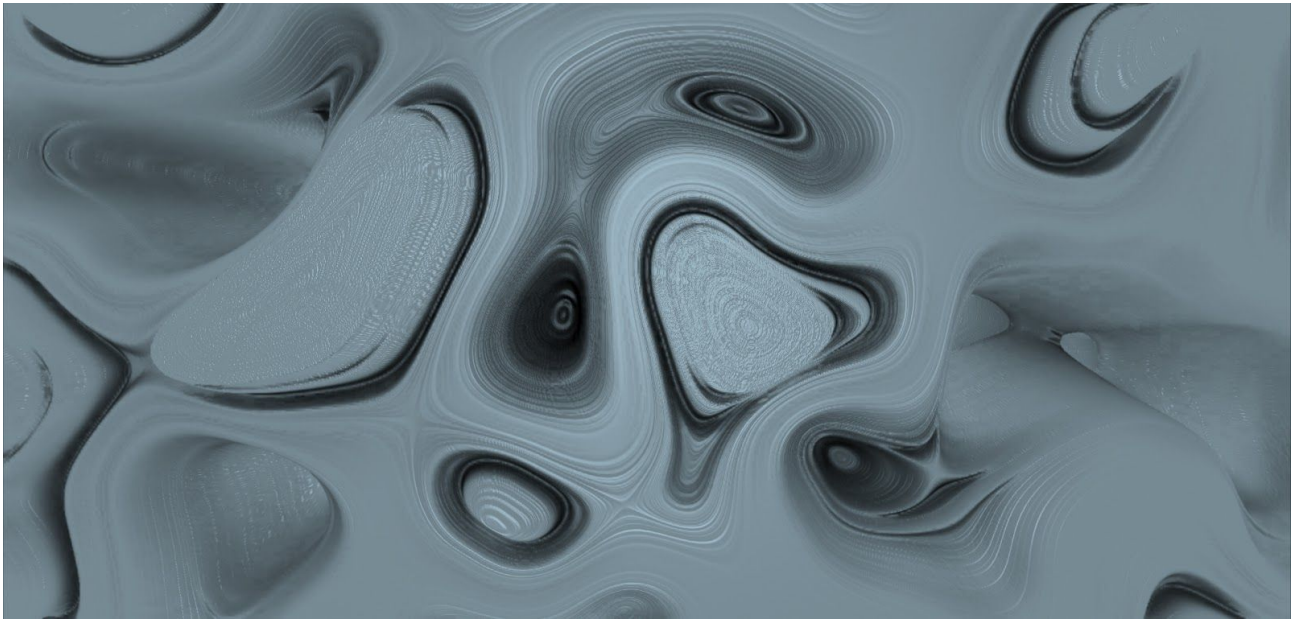
Expanded Cinema 2020 Concept sketch

In this one-day introductory workshop, participants will be guided through basic theories and concepts of generative visual creation drawing from art, technology and science, along with an in-depth look at how to set up such projects and workflow in Touchdesigner software.

Gene Youngblood argued in his book Expanded Cinema (1970) that a new, expanded cinema is required for a new consciousness. Youngblood defined the technosphere as a symbiosis between human and machine. He foresaw a future where creativity will be shared between human and machine and pointed to the links between computer art and conceptualism.

Today, it is almost 50 years since early experiments using computers to draw and make films. Generative systems are used in projects crossing art, technology and science. Generativity is (or might become) a way for art to deal with this brave new post-human world that is dawning upon us.
In Expanded Cinema in 2020, we will focus on understanding real time and generative storytelling, explore non-narrative/non-figurative forms and dive into generative content creation.

New Future Narratives

Artists	Exhibitions	Performances	Seminars/ Workshops	Talks	Installations	Residencies
10	2	3	2	4	4	1

TAGSAM – Thomas Heidtmann, Jemma Woolmore, Vincent Van Uffelen

INSTALLATION / PERFORMANCE
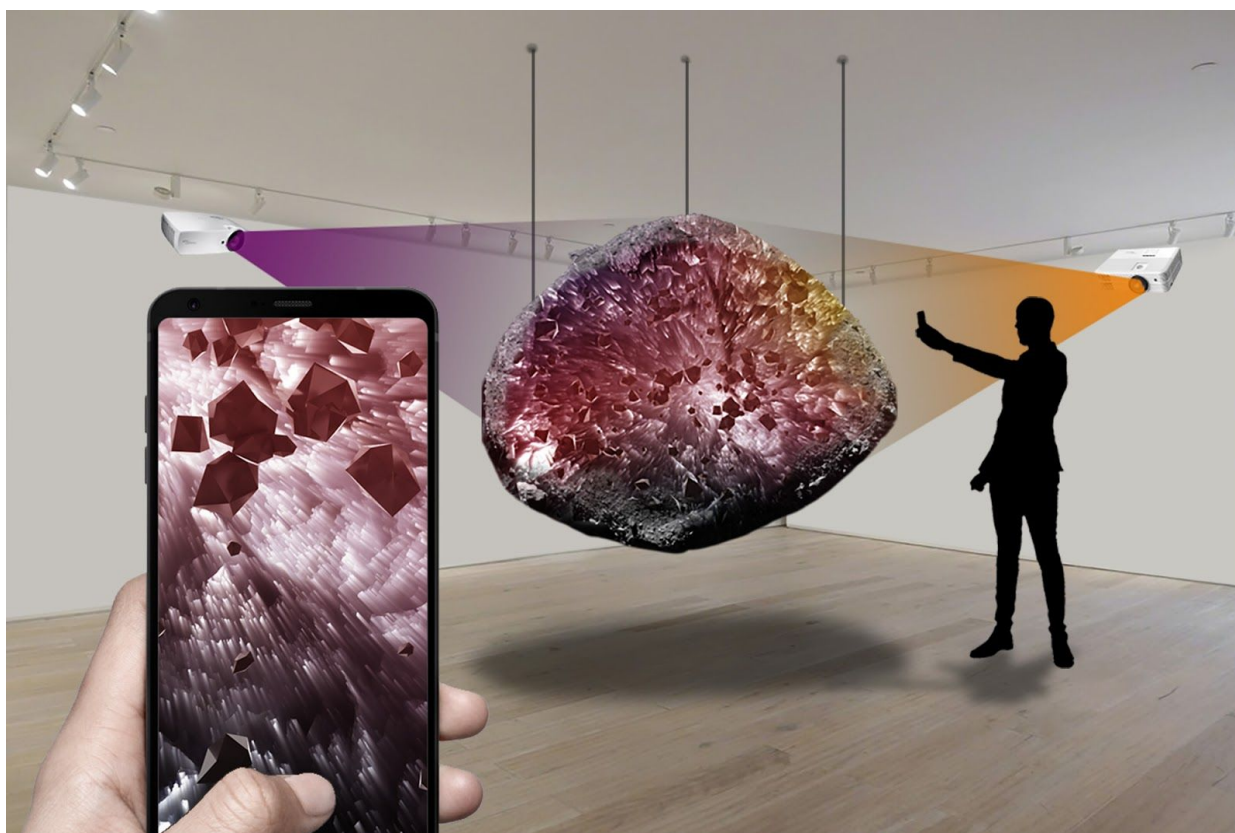
TAGSAM Mockup of installation setup

TAGSAM is a sculptural installation and performance that draws connections between big data, space exploration and blockchain. It brings together audio-visual elements with a sculptural object shaped like an asteroid where projected video across the sculpture surface changes the texture.
Touch-and-Go-Sample-Acquisition-Mechanism (TAGSAM) is the material collection manoeuvre for the OSIRIS-REx mission on asteroid Bennu. It is described as a simple way to collect samples on planetary bodies. Through this project the artists – Thomas Heidtmann accompanied by Jemma Woolmore and Vincent Van Uffelen – follow the OSIRIS-REx asteroid sample mission as it implements the Touch and Go process to grab a small sample of surface material from the asteroid Bennu. In a virtual Touch and Go procedure, the visitor connects with his smartphone to the sculpture. Data is being exchanged. The visitor takes a fragment of an art piece home, accessible for contemplation and study. Each piece is uniquely created by an algorithm and tracked for reference in a blockchain.

Ouroboros – Paul Wiersbinsk, Merlin Carter

INSTALLATION / PERFORMANCE

Ouroboros AI image generation

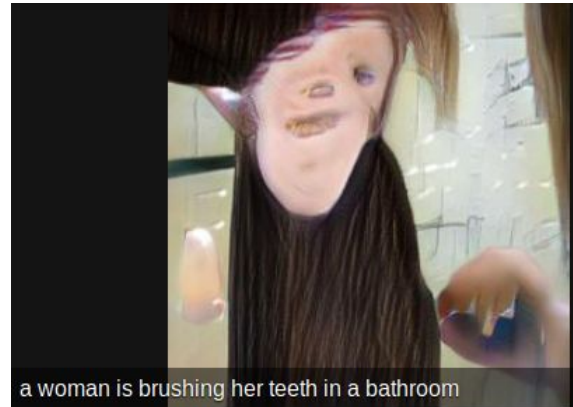Text generated by an AI from a stock image   →   Image created by the AI from the generated text

An **Ouroboros** is the ancient symbol for a snake eating its own tail. The artist's approach of Artificial Intelligence is looking at the intertwined nature of how this technology is slowly connecting to all aspects of social and economic life, as Donna Haraway states *"It matters which thoughts think thoughts"*, maybe even more so in a time when machines learn to think. Current AI research in the field of Generative Adversarial Networks (GAN) can be used to create text from images or videos or the other way around. Based on this technology, the project aims to come up with a mechanical theater, in which a feedback loop between user and machine is used to write a story / create an image or short video together with the algorithm and at the same the audience can learn about the actual workings of current AI and thereby de-mystify its workings.

Overshot – Magdalena Kovarik, Natalia Cabrera

INSTALLATION
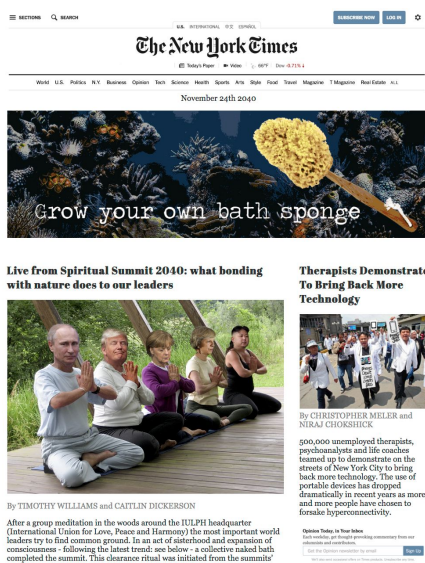
**Overshot** Algorithm-based newspaper mockup

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Overshot is an online storytelling generator which calculates the newspaper's front page in the future based on some simple questions about the user's lifestyle choices in the presence. The resulting scenarios – and content in the newspaper – range from a flooded super apocalyptic world to a *Hippietopia*, where politicians meet for yoga. The project is an attempt to point out in a humorous way how much personal decisions and our consumption behavior influence pressing issues of our times such as climate change, energy or mass production.

Trial Systems for an Open Future – Vanessa Farfán

INSTALLATION / TALK
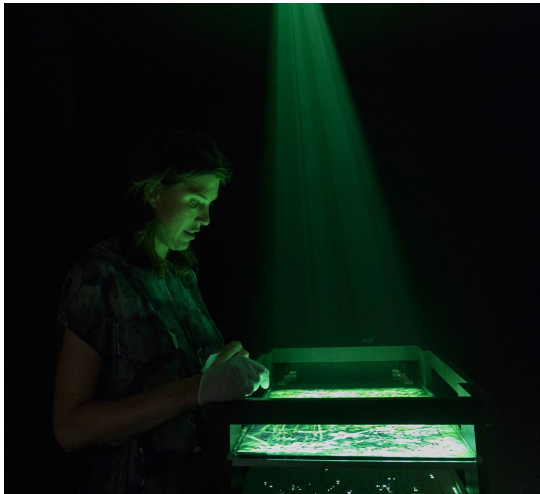
Trial Systems for an Open Future Installation view

Like a rhizomatic structure (Deleuze/Guattari, 1972–1980) or a basic form of algorithmic geometry in which recursivity and contingency play a crucial role (Yuk Hui, 2019)*, Machine with Organs (MwO)* by Vanessa Farfán is a trial System. It's structure consist of at least: one organic, one digital and one physical component. In this system, digital information is processed through computable and unpredictable processes to create the representation of a model of human-machine-space interaction. ***Trial Systems for an Open Future: A Machine with Organs*** is a spatial experiment consisting of an installation piece and a Lecture-discussion about new possibilities of human-machine-space configurations.

Cooking New Materials – Youyang Song

WORKSHOP

In Youyang Song's workshop ***Cooking New Materials*** the process of an independently developed technique is shown which aims to process bio-waste into a soft, yet robust leather-like material. The seemingly useless food wastes will be given a second life. Banana and orange peel or soy-milk are combined with a natural binding agent as the substrate. The resulting composite is fully biodegradable and can be easily reused after the re-cooking process. It is a 100% biodegradable, zero-waste natural product. Moreover, the bio-material provides similar toughness, durability and water resistance as normal leather material.

Dreaming of a world anew – KOSMICA Institute, SPARTH

EVENT SERIES (TALKS/PERFORMANCES)

KOSMICA Institute and *SPARTH* propose two events that will include music, performance and talks. The first event will include two talks and will end with a concert/performance. The second one will be part of the symposium in April 2020. Throughout these activities **Dreaming of a world anew** will explore the future imaginaries of humanity in outer space under a critical lens. While space activities are often imagined as a continuation of older logics and practices of Western power, inventing new alternatives to colonialism, exploitation and occupation becomes crucial if we are to live in a more equitable society.

Body and Nature

Artists	Exhibitions	Performances	Seminars/ Workshops	Talks	Installations	Residencies
11	1	2	2	2	6	1

Slug love song – Margherita Pevere

INSTALLATION
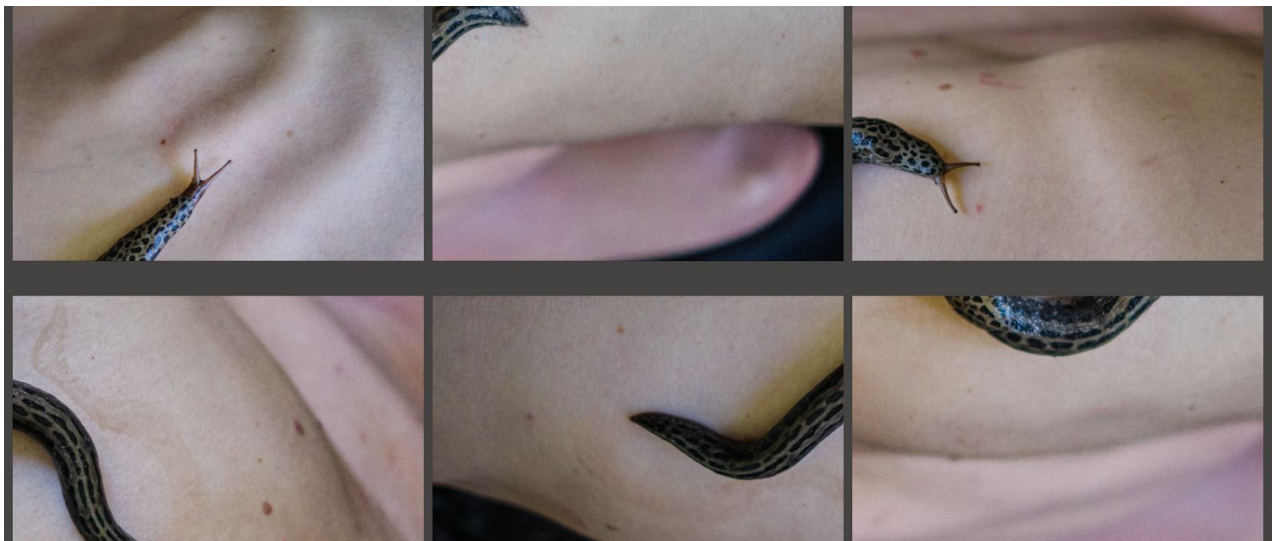
Slug love song Artist Impression

The work draws from the research underpinning my previous work Wombs (2019), which focused on absence of maternity and human / slug hormonal interference. The presented project is framed within a broader research project (2019-2024?) on post-human embodiment and multispecies ecologies. Such themes will be developed through artistic strategies merging performance and biological art.

v.1 Gastropods like slugs and snails are hermaphroditic and display a variety of mating rituals, including, for instance, the hanging copulation dance of the leopard slug. Other species' mating behaviour feature love darts, a chitinous or calcareous dart of <10mm size that are shot into the partner's body during mating. The purpose of such behaviour is yet scientifically unresolved. Such love darts differ across species and are, although minuscule, elaborate objects. The project involves the collaboration with a malacologist (dr. Thomas von Rintelen at the Naturkundemuseum?), the scanning of love darts specimen, the creation of 3d models and printing of metal copies of about 50cm length. During the performance, I will perform a "love dart" perforation ritual on my own skin. Pain, tenderness, eroticisms, softness and hardness of tissues and materials will catalyse the relationship with the audience. After the performance, I will invite the audience to have dinner with myself, curators, and slugs collected in the neighbourhood. Considered mainly as competitors for food in vegetable gardens and hence pest to be exterminated, slugs will be our guests of honour. Raw fresh vegetables will be served both to human and gastropod commensals, who will be free to interact with other guests. Sanitation will be provided with the standard procedures that are taken when picking vegetables from the garden. Who would not eat an apple straight from the tree?

Navigable Borders – Kat Austen

INSTALLATION

For Ecosystems 2020 I propose elements of my project *Navigating Boundaries*. The work stems from explorations into our relationship with the environment, and particularly with the hyperobject of climate change. The work explores how, in order to live collaboratively with not only other humans but with non-human and more-than-human agents, we require a sophisticated approach to the definition of the self amongst the other. Part of this requires dynamic navigation of the boundary of the self. I would suggest exhibition of either my sound installation *Flow Over Water Borders*, or my video work *Navigable Borders*, alongside a series of four paintings, *Control of Permeability,* which I am currently developing. I would complement this exhibition with a talk "Encounters with Truth Seeking in Environmental Art".

Flow Over Water Borders: 5-channel audio installation
Navigable Borders: Single channel video projection
Control of Permeability: Four paintings

Signals – Alanna Lynch

INSTALLATION

**Signals** Former installation setup

This is a new work based on ongoing research to create an ecosystem of smells via installation and performance. These smells represent non-visible chemical signals, metabolic wastes that facilitate intra and inter species communication. The smells derive from chemicals produced by a human body via bacteria.

Smells are invisible, immaterial, and ephemeral yet powerful, they take up space, they cling, they evoke emotions. They stay with you even once the source has disappeared. My research looks at the durability and intensity of smells, how they speak to issues of (non)visibility, traces of the human body (presence and absence). These smells carry non-conscious, embodied information. These are smells "from below."

These ideas develop from a paper I have recently written on the politics of smell within my work to be published in Olfactory Art and the Political in an Age of Resistance, forthcoming, Routledge. I have previously worked extensively with smells from the body. Earlier this year I cultured my gut bacteria to produce smells at the open lab space Hackuarium in Eclubens, Switzerland as part of a residency in Geneva supported by the Canada Council of the Arts.

Gut Feelings – Alanna Lynch

INSTALLATION
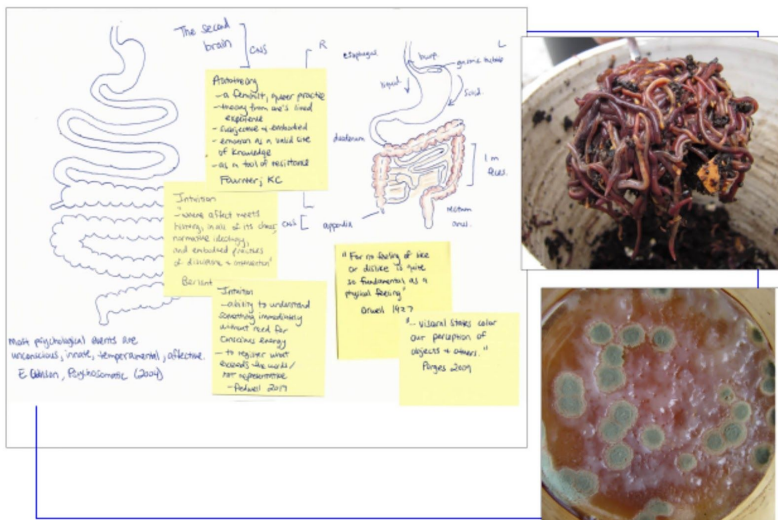
Gut Feelings Former installation detail

This most recent installation I have shown under the same name at Art Laboratory Berlin in 2017, as part of the Nonhuman Agents series however it is the development of that work over the past few years. A gut feeling, or intuition, is information that is processed in the brain not rationally but on a subjective/emotional level and tied to a bodily response. Considering the connection between the microbiome, gut and brain, what knowledge can be created through more-than-human interactions within the gut?

Gut Feelings is a research-based project informed by rapidly developing research on the microbiome that challenges the self-contained body and binary categories like subject/object, human/nonhuman and mind/body. For the past 4 years, I have been working with various microorganisms: fermenting, consuming, observing, accumulating, manipulating, and then presenting my research through performance and experimental formats. My current research relates to questions surrounding wider notions of symbiosis, hierarchies in the classification of life, care and imbalances in power, contamination and vulnerability, the gut and intuition, and embodied knowledge. Working through collaborations, with both human and other agents, and direct material engagement I want to find the generative potential within our reactions to difference.

I present an installation representing my ongoing interdisciplinary research and including living elements such as vermicompost, fermented food and inquiries into my own gut microbiome while examining the links between these in terms of symbiosis, viscosity and affect.

Memory Matter – Fara Peluso

Memory Matter Former installation detail

Memory Matter is a project realized by Fara Peluso as result of an ongoing research on algae organisms and the Algal Bloom phenomenon. The intent is to recount the reasons linked with an event of climate changes, the factors who determine it, representing the changes of a natural landscape and its connections with human beings daily activities. The installation simulates a scenario where an aquatic ecosystem and its pollution are main protagonists, hoping to contribute for a public awareness and the building of a historical memory. It also shows an almost imperceptible matter like the algae pigments, its traces and memories impressed on a textile landscape. The talk 'Comprehensive thinkers for the Post-Anthropocene. How art and design can be mediators between science and public to build a collective memory.' will be an overview of Fara Peluso's work showing how a new way to design is already today possible through a speculative methodology. A design made just for human being perspective is replaced with a whole system where all living organisms are considered. Fara Peluso always like to move from the theories of R. Buckminter Fuller "The Comprehensive Thinking and The Comprehensive Man' which stated a new process considering a start to think from a whole system for a particular and specific application. Her interpretation of this theory will show possible ways of living together with other organisms, from new housing systems to something even symbiotic.

The Cave – Theresa Schubert

INSTALLATION
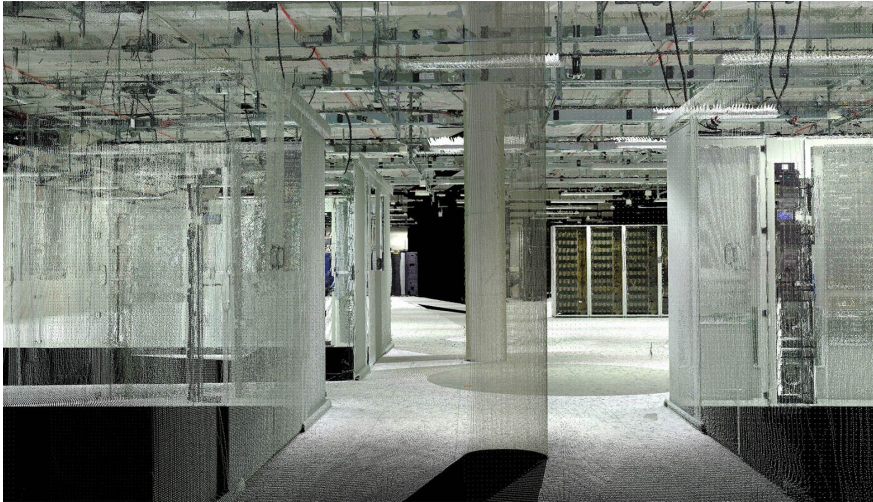
The Cave Artist Impression

The Cave is a film (installation) about a society in an undefined future reflecting about the connections between a technologized city and the outside nature.

The story unfolds based on visual metaphors of computer networks discussed via a real supercomputer server space and the forest as a superorganism. The film is told from a female first-person perspective via different text-to-speech programs.

Produced in native 8K and 4K respectively it uses newest film technologies in combination with 3D laser scans and computer-generated visuals. The film features only architectures, surfaces, textures and landscapes – no humans/animals in it.

Rise and Fall – Sarah Hermanutz

INSTALLATION

In this VR installation, the visitor will sit in the light of a beamer, against a large tank installation, in which water pumps constantly attempt to maintain a balanced water level and prevent overflow. The visitor will enter a virtual reality space via a headset, in which the Berlin cityscapes have been resubmerged into the city's wetland origins. Within this landscape, the virtual waterline will rise and fall in realtime response to the rise and fall of the aquarium installation water levels (via water level indicator sensors).

'Rise and Fall' explores the intersections of past, present and imagined futures, while immersing in ambiguities of fantasy and reality, between the imaginative and the virtual.

SCOBY, shit and humus – How I hack plant conversations – Mindaugas Gapševičius, Juan Pablo Diaz

WORKSHOP

Experimentation unfolds through the investigation of SCOBY, shit, and humus, which raises questions: what does symbiosis really mean? How can we understand the complex interaction between microorganisms, plants and animals? How is self-organisation related to being alive? The participants will explore their own symbiotic relationship with organisms inside and outside themselves and try to grasp invisible creatures, surrounded by the outer worlds: air, water, animals, plants, and microorganisms. By using SCOBY – a symbiotic culture of bacteria and yeast – and soil as metaphors for the complex organization of microorganisms in the environment, the experimentation will reflect on the role of a single organisms in relation to their habitat.

Radio Mycelium – How I hack plant conversations – Mindaugas Gapševičius

WORKSHOP

The experiment invites participants to experience interspecies communication and feedback loops between mycelium networks and their habitats, including other organisms and beings. It also proposes the examination of a new networked imaginary between electrochemical signals, digital data, and electromagnetic waves. The experiments introduced will give an idea of how to grow mycelium, how to make electronic tools and attach them to living organisms, and how to use the tools for audiovisual expression.