

NATURECULTURES Chapter 2: THE GLASS CITY

ANASTASIA EGGERS
ABELARDO GIL-FOURNIER & JUSSI PARIKKA
MARZIA MIGLIORA
URIEL ORLOW
GERARD ORTÍN CASTELLVÍ
THE RURAL SCHOOL OF ECONOMICS
DEBBIE SCHOONE

Located on the North Sea coast between Delft, The Hague, and Hook of Holland is a region where there are no seasons and the sky glows orange at night. This is the Westland: once an agglomeration of farming villages whose mild climate and clay soils made it home to grapevines and potato fields. The Westland is now the world's largest continuous area of glasshouses, all 2,300 hectares of them. The grapes and potatoes have given way to high-tech agribusiness and intensive cultivation, mainly of fruit, vegetables, cut flowers, and ornamental plants. The exhibition THE GLASS CITY explores the Westland through the work of eight artists. It provides insights into the relationship between agriculture and technological innovation and transformation, the balance between natural and artificial, economy and ecology, and the future of food production.

In his book *Being Ecological* (2018), philosopher Timothy Morton argues that climate change began with the rise of agriculture in Mesopotamia ten thousand years ago.¹ As people settled in towns and cities, so society became detached from its non-human environment and described it as 'nature'. Glasshouse cultivation and other forms of industrial agriculture could be seen as embodying this separation between nature and culture, in which land is partitioned off and used predominantly for monoculture. It becomes the victim of technological change and the notions of 'progress' inherent in capitalist production.² This means that instead of its primary responsibility to produce food, and like it or not, agriculture often becomes a means of maximising profit. This creates an unequal and exploitative relationship that undermines the ecosystem.

The exhibition considers the Westland glasshouse complex as an entity that subjugates humans, machines and plants alike to a conjuncture of discipline.³ It provides precarious seasonal employment for migrant workers, employs drones to combat insects in the glasshouses, uses genetically modified seeds, and selectively breeds plants. In other words, the glass city is a place where time, labour, and processes are synchronized and streamlined to get the maximum number of calories or output from the minimum area of land. Is the economic goal of profit maximisation still sustainable in an energy-intensive sector that is still highly dependent on fossil fuels? The industry is also suffering from groundwater shortages, nitrogen pollution from fertilisers, and the energy crisis sparked by the war in Ukraine and other geopolitical conflicts. Can new technology stretch the boundaries of this system even further to maintain the stability of *agribusiness-as-usual*, or does the new ecological reality demand a change in our attitudes to food production? What is the future of the glass city?

1 Timothy Morton, *Being Ecological*. London: Penguin Random House, 2018, pp. 49-50.

2 Jose Luis Vivero Pol, *Food as Commons: Reframing the Narrative of the Food System*, PhD. thesis, Centre for Philosophy of Law, Université Catholique de Louvain, 2013.

3 Donna Haraway and Anna Tsing, *Reflections on the Plantationocene*, *Edge Effects Magazine* (2019), p.

Artworks

1

URIEL ORLOW
Soil Affinities
2018

In *Soil Affinities*, Uriel Orlow shows how agricultural gardens, such as those in Aubervilliers in France, can be viewed as precursors of intensive farming due to their crucial function in the development of colonial agriculture in Africa. These agricultural gardens were used to test if crops taken from America were suitable for cultivation, after which the crops were shipped to Africa in order to be cultivated there to feed the growing settler population.

The departing point of *Soil Affinities* is the history of market gardening in the French commune of Aubervilliers in the nineteenth century.⁴ By tracing journeys between plants and people across different temporalities and geographies, Uriel Orlow connects colonial agriculture in Africa and the development of suburban agriculture in Europe. Consequently, *Soil Affinities* reflects on how the globalisation of cultures brought about by colonisation has generated social and economic divisions of land use and labour intergenerationally.

Following The Berlin Conference in 1899, which divided African territories between the European powers, a colonial agriculture started to develop in Africa. Hundreds of plant species were shipped from the Americas to European capitals in Wardian cases—specially designed transport crates. Produce from overseas was first tested for cultivation in agricultural gardens in Europe. A notable example was the one in Bois de Vincennes, Paris, which later migrated to Aubervilliers and became the main provider of vegetables to Les Halles, once the biggest market in Paris.

Over time, European produce such as onions and cabbages started to be cultivated in the colonial gardens in Africa to feed the growing settler population. The large scale cultivation of European staple vegetables in West Africa—contrary to the previous plantations of cocoa, coffee, or peanuts—was reinforced after the independence of some African countries, like the case of Senegal in 1960. Several French and European companies settled industrial farms in the country to produce almost exclusively for Rungis, one of the biggest wholesale markets in Europe, located outside Paris. Bearing this history in mind, *Soil Affinities* argues that market gardening in Aubervilliers can be considered a precursor of intensive farming.⁵

Altogether, Uriel Orlow's installation is an invitation to reflect on the material structures and cultural legacies produced by plant displacement in colonial, postcolonial, and postindustrial settings. What remains of Aubervillier's market gardening past nowadays? How can plants become a compass to map historical and contemporary (post)colonial relations?

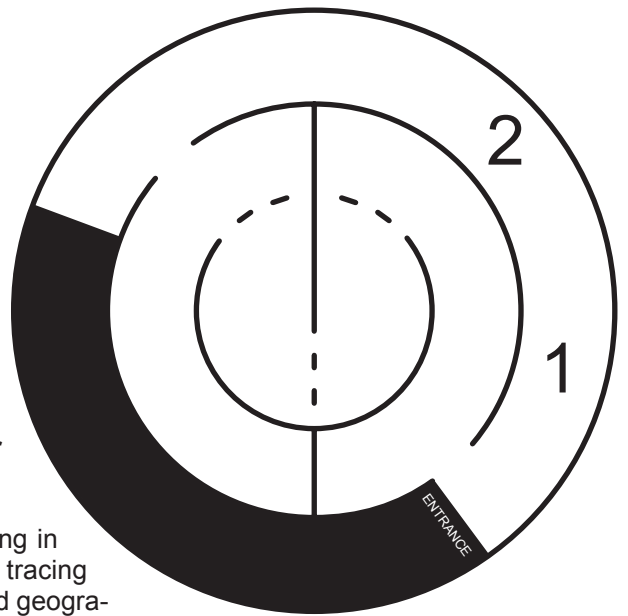
2

ANASTASIA EGGERS
Migrating Seasons
2023

Migrating Seasons seeks to redraw the farmers' almanac according to our contemporary post-seasonal world, where the growing, harvesting, and consuming of food is no longer dependent on natural factors such as weather circumstances. The pages of the almanac can be torn off and taken outside the exhibition.

The farmer's almanac is a traditional calendar documenting the rhythm of the agricultural year including knowledge on sowing dates, tide tables, and weather forecasting. Due to the modernisation of agricultural technology and the globalisation of trade, the knowledge of the farmer's almanac has become obsolete, and so have most traditional harvest celebrations and rituals simultaneously.

In this calendar, agricultural practices are paired with interdependent phenomena such as trans-European movement of workers and goods, international politics, labour rights, and the energy supply crisis. Several events representing crucial aspects of modern agriculture are highlighted on the timeline of



4 A market garden is the relatively small-scale production of fruits, vegetables and flowers as cash crops, frequently sold directly to consumers and restaurants.

5 Intensive farming focuses on investing a lot of resources and labour into small tracts of land in order to increase yield. Traditionally, one advantage of intensive agriculture is that because it requires less land, yield can be produced closer to markets compared to farms using extensive agriculture farther away from urban areas.

the year and become the subject of new celebrations and rituals that introduce the invisible realities behind our food system.

Migrating Seasons is part of Eggers' project *Seasonal Neighbours*, a collective focusing on different forms of seasonality and forms of cohabitation in Europe's countryside. In a post-seasonal world, Eggers explores current notions of seasonality dictated by financial, social, and political aspects. By imagining new seasonal celebrations, Eggers invites us to critically think about the state of contemporary agricultural practices while trying to rekindle a more balanced and sensible relationship with natural seasons.

3

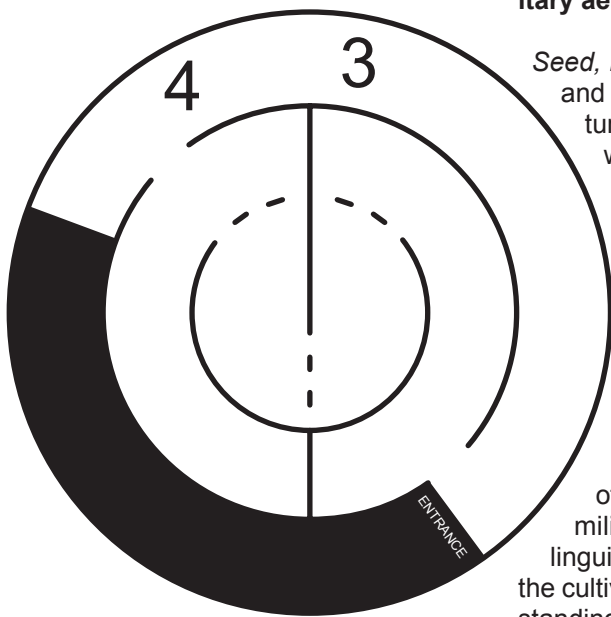
ABELARDO GIL-FOURNIER & JUSSI PARIKKA

Seed, Image, Ground

2020

Duration: 9 minutes

In the video-essay *Seed, Image, Ground* Abelardo Gil-Fournier and Jussi Parikka delve into seed-bombing and expose the links between seeds, military aerial operations and the transformation of Earth surfaces into data.



Seed, Image, Ground is a video essay structured around promotional images and videos related to seed bombing, a technique used in forestry, agriculture and environmental restoration where biodegradable containers filled with seeds and soil nutrients are dropped from aircrafts to the ground. Originally conceived by an Royal Air Force pilot, this technique has seen a resurgence in the last years, mostly due to an increased deployment of robotic aerial vehicles in environmental monitoring.

Co-authored by media theorist Jussi Parikka and artist-researcher Abelardo Gil-Fournier, *Seed, Image, Ground* exposes the links between seeds, aerial operations, photographic images, and the transformation of Earth surfaces into data. Assembling a visual spectrum from online archives and YouTube videos, to commercial seed bombing advertisements and historical footage of plant physiology, Parikka and Gil-Fournier reflect on the fabrication of images of growth and the relation between aerial power—predominantly under military logistics—and the perception of the environment. What are the linguistic, cognitive, and technological connections between the military and the cultivation of the environment? How are images incorporated into an understanding of growth, and how do we come to make them?

In order to answer these questions, the video essay operates in different scales of image-making: photographic images and diagrams, cinematic techniques like time-lapse, and contemporary techniques of large-scale datasets, which turn territories into data manageable images such as in precision farming.⁶ *Seed, Image, Ground* enquires into the operational images for territorial planning, measurement, and survey, and reveals how territory can be turned into an image where a particular understanding and deployment of growth becomes possible.

4

MARZIA MIGLIORA

Paradoxes of Plenty

2020 – 2021

***Paradoxes of Plenty* is an installation featuring a series of collages in which Marzia Migliora reflects on the history and the development of modern agriculture.**

The title of this series of twenty-four drawings and collages is borrowed from a chapter in *An Edible History of Humanity*, a book by journalist Tom Standage. Inspired by the book, Marzia Migliora rethinks modernity through the history of agriculture and its subjection to the production of food as a commodity via the introduction of monocultures, intensive production, pesticides, genetically modified organisms, and other techniques that have endowed humans with the control of natural cycles of germination.

Migliora's collages address the different histories, geographies, and scales of modern agriculture through the perspective of labourers—mostly women—encompassing farmers, seasonal migrants, workers on colonial plantations, or people from the artist's family own rural background. The juxtapositional layout

6 Precision farming is a management approach that focuses on (near real-time) observation and measurement of variability in crops, fields and animals. It can help increase crop yields and animal performance, reduce labour costs and optimise process inputs.

of the collages reveal the interplay of imaginaries of agriculture across modernity and seek to expose the industrialised and globalised production models of cultivation and consumption. Displayed on trays in three rack trolleys commonly used in canteens, the installation nods to the repetition, decontextualisation, and non-descriptiveness of food management.

Migliora's work connects with feminist scientist Donna Haraway's reflections on the *Plantationocene*, a suggested term to define the epoch of the plantation system, which set in motion the maximisation of food production at the expense of multi-species forced labour and violence on the environment and their rippling legacies and continuations in contemporary times. As Haraway argues, in designing systems for coerced labour in colonial plantations, ecological simplification entered agriculture. The plantation was precisely the conjuncture between ecological simplifications, the discipline of plants in particular, and the discipline of humans to work on those. As Anna Tsing adds to the conversation on the Plantationocene: contemporary agriculture at large could be considered as the heritage of a particular set of histories that took place after the European invasion of territories worldwide, involving enslaved labour and the simplification of crops.⁷

5

RURAL SCHOOL OF ECONOMICS

2003 – ongoing

In the temporary working space of Rural School of Economics, the collective Myvillages displays their research on the Dutch profit landscape as exemplified in the Westland.

Rural School of Economics is a nomadic, multilingual, intergenerational and trans-local school founded by Wapke Feenstra and Kathrin Böhm. Working from the rural, they excavate, reflect on, and engage with localised forms of culture, economies, and resources. The school exists across places and is shared between local rural communities, local cultural organisations and associated research initiatives. It branched out from the collective Myvillages, which has been working on the rural and connecting communities, individuals, and spaces around it since 2003.

For THE GLASS CITY, Rural School of Economics offers a temporary working space for the understanding of the rural beyond the binary with the urban. Instead, the rural is invoked as a place, a mindset, a memory, an amalgam of trans-local territories. In this exhibition, Rural School of Economics presents their research, methodologies, and network to think about the Dutch profit landscape, exemplified in the agricultural complex of the Westland, and the localised cultural, financial, and political intertwining between the urban and the rural in the Netherlands.

As a communal space for sharing knowledge, visitors are welcome to engage with the material on the table, as well as to attend the parallel public programme. Further information can be found in the installation and on our website.

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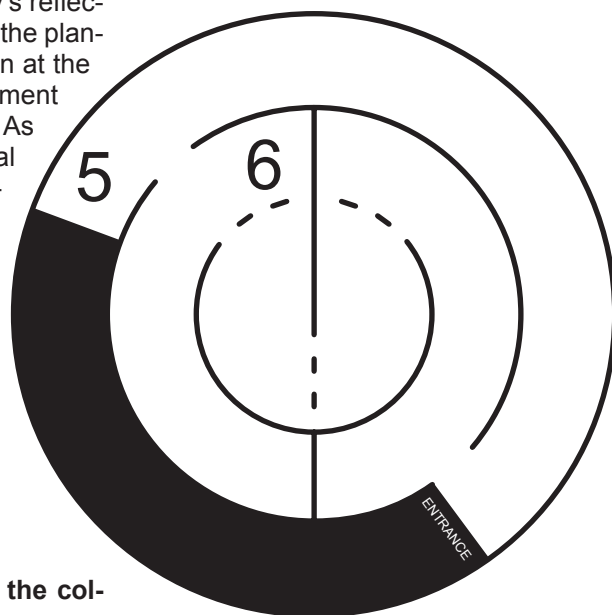
DEBBIE SCHOONE

Seaweed Archive

2018 – ongoing

In the installation *Seaweed Archive*, Debbie Schoone shows a part of her ongoing research on seaweed as one of the sustainable alternatives within the food industry. The installation combines archival material, photographic documentation and samples in order to provide visitors with an insight into the possibilities of seaweed as a sustainable alternative to intensive agriculture.

As the human population continues to grow—more than doubling in sixty years to currently 7.8 billion people—the demand for food, energy, and other resources is increasing exponentially. In order to meet the upcoming demand whilst thinking ecologically, sustainability-driven techniques and circular economies are increasingly emerging. Seaweed farming is one of them. Seaweed is an extractive crop that has little need for fertilisers or water, meaning that seaweed farms typically have a smaller environmental footprint than other agriculture or aquafarming.⁸



7 An insightful conversation on the Plantationocene between Donna Haraway and Anna Tsing can be listened to and read here: <https://edgeeffects.net/haraway-tsing-plantationocene/>

8 Aquafarming or aquaculture is the controlled cultivation of aquatic organisms such as fish, crustaceans, mollusks, algae. It involves cultivating freshwater, brackish water and saltwater populations under controlled or semi-natural conditions. It can also be defined as the breeding, growing, and harvesting of fish and other aquatic plants for repopulation of endangered species.

Debbie Schoone's interest in seaweed sprouted during her research into more sustainable solutions in the food industry. First expressed in her project *How to Farm a Fish* (2018) and continuing currently in *Seaweed Archive*, Schoone presents her research in an installation where archive material, documentation, photographs, and samples constitute different approaches to the phenomenon of study of algae and seaweed farming.

7

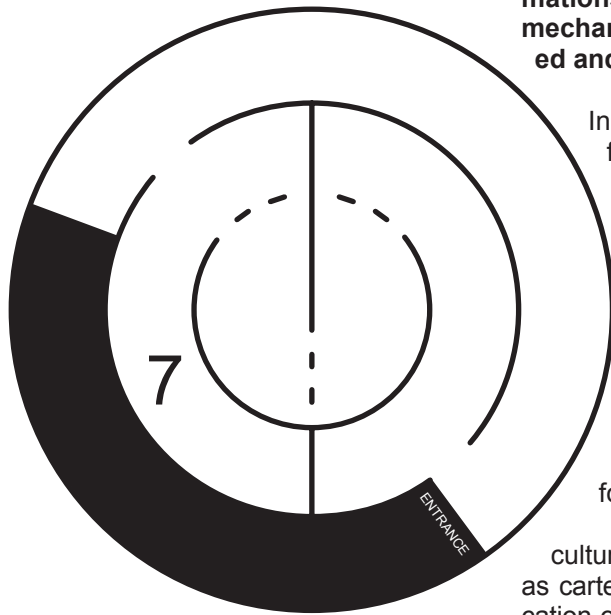
GERARD ORTÍN CASTELLVÍ

Agrilogistics

2022

Duration: 21 minutes

***Agrilogistics* is a cinematic journey through the technological transformations in contemporary industrial agriculture. Scene after scene, the mechanisation of produce management unfolds in the perfectly calculated and aligned Dutch greenhouse complex.**



In daytime, the greenhouse strikes as an automated film set optimised for the mass production of fruits, vegetables and flowers. At night, the machinery comes to a halt and the greenhouse becomes an uncanny landscape where plants, animals, and machines quietly coalesce.

In a filmic metaphor, *Agrilogistics* both reveals the technological script of greenhouses and their film set appearance. With pre-meditated, cyclic actions designed to ensure the productivity and aesthetic appeal of food and plants, the automated screenplay of the greenhouse blurs the division between natural and artificial: perfectly shaped cress, shiny tomatoes, homogenous tulips, all stocked on supermarket shelves all year round, regardless of their natural season. On the other hand, the presence of human labourers is sparse except for a few delicate tasks carried out by gloved, unidentifiable hands.

As cultural geographer Clemens Driessen notes, the automated agricultural complexes and landscapes in The Netherlands could be described as cartesian, in connection to the advocacy for regularity, order, and domestication of nature in the philosophical work of René Descartes, who lived in The Netherlands between 1628 and 1649. Rendered cartesian in its land maximisation and profit-oriented goals, the greenhouse has a historical and contemporary role in the reductionist view of produce and plants as an automated harvest that obscures their ecological contingencies from our perception.⁹

9 Clemens Driessen, *Descartes Was Here — In Search of the Origin of Cartesian Space* (2020).

YEAR PROGRAM

NATURECULTURES

In 2023, RADIUS will present seven exhibitions, including three solo presentations and four group exhibitions, with a coinciding public and educational program. The year program takes shape on the basis of naturecultures, a term that refers to the increasing entanglement between nature and culture, enforced by climate change and ecological breakdown.

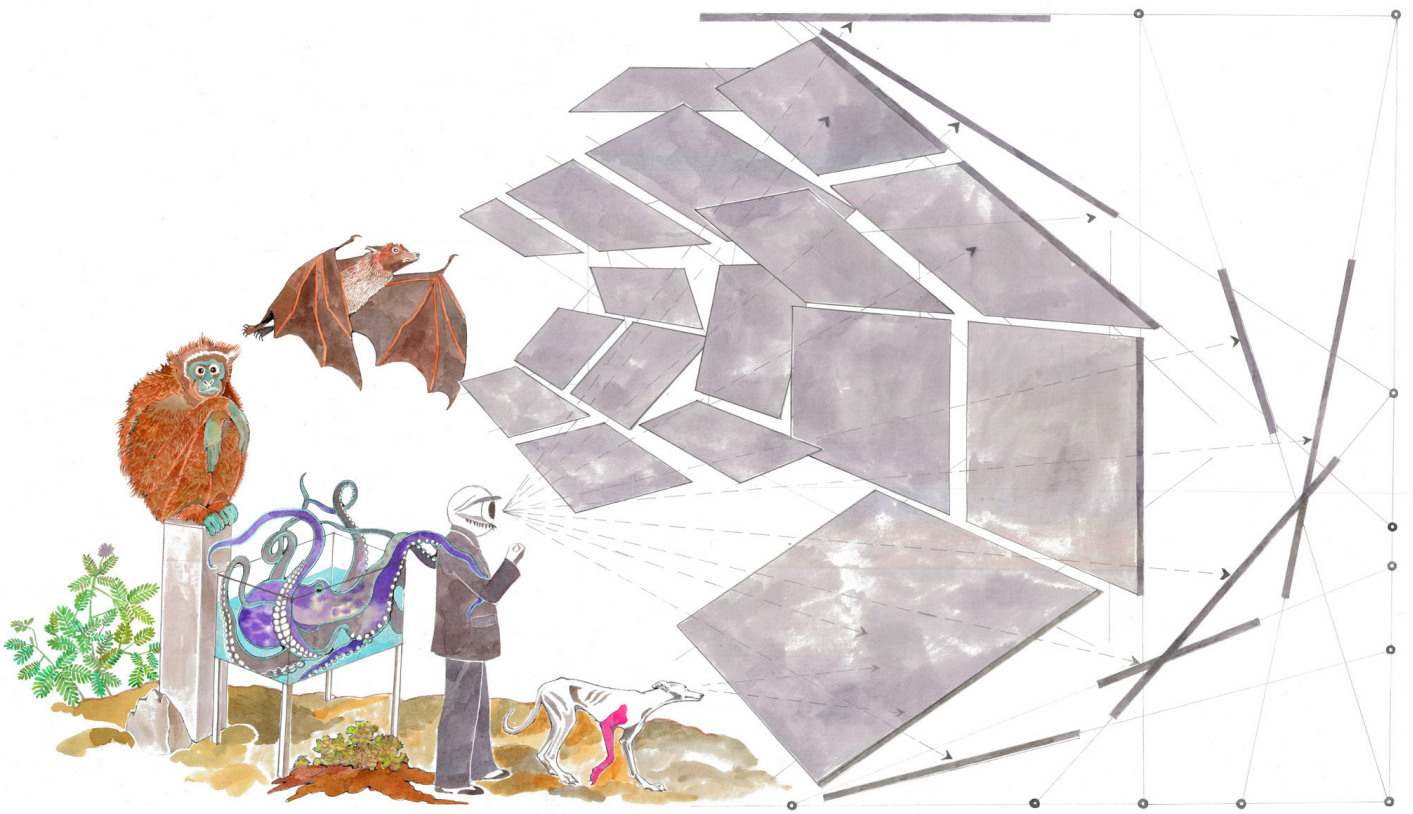
AT RADIUS IN 2023

We start the year with the group exhibition *THE MEASURE OF THE WORLD*, revolving around the ghosts of Western Enlightenment thinking and the relationship between science, truth-finding and the consequential creation of world views. With the work of fifteen artists, the exhibition stands as the starting point for the year program and presents a first counterpoint to the current crises that bear witness to the perverse reality of modernism. For primary school students, we present *ONDIERPLEZIER*: a workshop that pays tribute to weeds and pests and wonders: shouldn't we appreciate these "invasive species" instead of seeing them as a threat?

The following group exhibition *THE GLASS CITY* zooms in on the Westland—the largest contiguous agricultural greenhouse complex in the world, located between Hoek van Holland, Delft and The Hague—with the question: how can monocultural agriculture, often focussed on profit maximization, be reconsidered to more reciprocal, sustainable and fair systems of food as a common good? At the same time we present a solo exhibition by OSCAR SANTILLAN, which centers around the continuity between colonial botany and the contemporary destruction of our planet. How can indigenous knowledge and emerging technologies such as artificial intelligence and virtual reality contribute to more reciprocal modes of existence?

As part of the Antoni van Leeuwenhoek Year—the Delft cloth merchant Antoni van Leeuwenhoek became renowned with his microscopes and is regarded as the founder of microbiology—we present the group exhibition *RADICAL SYMBIOSIS: SOCIAL LIFE WITH MICROBES*, curated by guest curators Àngels Miralda Tena and Mateo Chacón Pino. The exhibition takes the form of a petri dish, in which artists experiment with and present work on the basis of bacterial and microbial worlds, as an endless conversation between people and the living environment. In SISSEL MARIE TONN's solo exhibition, the audience encounters three bog bodies, who collectively hum, murmur and converse with each other about their transcendental experience of becoming-with the bog. In the educational workshop *MIJN MICROBEN EN IK*, for secondary school students and adults, the microscope becomes the central medium, as a means to link awareness about micro life to the pandemic and the ways in which humans treat the Earth and its natural resources.

The year program concludes with the group exhibition *THE POLITICS OF THE ARMED LIFEBOAT*, which examines the differences between climate politics and the current political climate. Subsequently, we present JUNGHUN KIM's solo exhibition, for which RADIUS will be transformed into a biotope in which geological meditation and entanglement beyond the exclusively human-oriented are central.



Overview drawing of the *NATURECULTURES* year program by Lisa Rampilli.

*There is no border where evolution ends and history begins, where genes stop and environment takes up, where culture rules and nature submits, or vice versa. Instead, there are turtles upon turtles of naturecultures all the way down. Every being that matters is a congeries of its formative histories—all of them—even as any genome worth the salt to precipitate it is a convention of all the infectious events cobbled together into the provisional, permanently emerging things Westerners call individuals, but Melanesians, perhaps more presciently, call dividuals.—Donna Haraway, *The Haraway Reader*, 2004.*

The term naturecultures originates from the feminist scientist Donna Haraway. She introduced the concept to describe the intertwined histories of a multitude of life forms on Earth, to reveal new ways of thinking about agency and power, difference and sociality, forms of existence and knowledge. Naturecultures is a term that arises from the scientific questioning of binaries—including, for example, human/animal, object/subject, and nature/culture—that are deeply rooted in the intellectual traditions of the sciences. The pronounced boundaries and divisions produced within and between scientific fields have led to the separation of humanity and nature, sometimes to the point of exempting humans from fundamental physical properties and laws of nature. The term naturecultures has no clear definition. Rather, it is a vibrant and unruly spectrum of transdisciplinary approaches united by a common argument: approaching and maintaining worlds that are more than human requires a change in the methods and tools with which we study those worlds. In other words, to remove the boundary between nature and culture, a radical mixing of disciplines including art, design, architecture and science is necessary. In this sense, naturecultures is a synthesis of nature and culture that recognizes their inseparability through ecological relationships that are formed biologically, physically and socially.

The thinking in binaries and divisions that emerged from Western Enlightenment thinking has failed, although its consequences are no less real and dualisms have (had) real consequences. The cultural field that deals with the Anthropocene—the current human-dominated epoch—oftentimes considers this as a new revelation, that while anthropologists and scientists have been challenging the contradiction between nature and culture for decades. This contradiction, they argue, is the basis for a dangerous belief in human exceptionalism, the root of both progress (for a few) and catastrophe (for the rest). Yet thinking in binaries in the cultural sector—between nature/culture, object/subject, human/non-human, organic/inorganic, natural/synthetic—is still the rule rather than the exception. But challenging contradictions alone is not enough! To understand the violent consequences of thinking in terms of exclusion mechanisms, we must divide history through new prisms, perspectives and points of

view. We need to develop a counterpoint to the centripetal force of the dominant narrative of the Anthropocene—which centres on a particular type of human—by telling centrifugal narratives that recognise the vast inequalities generated by the various forces changing our planet.

Artists have always sought new ways to experience, represent and interact with 'nature'. Although the addition of quotation marks in the previous sentence shows how dramatically the perspectives on nature have changed in recent decades, and how much this has changed the way we talk about 'culture'. If we just think about the way in which 'nature' has re-entered 'human' history and 'culture' through climate change, we have to agree that there is a hybrid world. If the way we imagine the world changes, how should this be reflected in the way we create and interpret art?

In 2023, RADIUS looks at the deep dividing line we have drawn between ourselves and our living environment and asks: what makes this pattern so persistent? How can we use imagination to move from a human-centred vacuum to a world continuum of naturecultures? How can we learn to recognise the magnitude of the current climate regime without succumbing to despair? How can we transcend anthropocentrism in the Anthropocene and remove the human from the center of humanity? How can we reshape the canons that define how the world should be seen and what is considered important in it? How can we endorse what we mean when we say "we"? How do you move from dominant ways of seeing to ways of experiencing the world that makes use of the entire sensorium and rejects a one-sided perspective? How can a center for art, ecology and climate be more than a fashionable phenomenon and be embedded in everyday life? How can responsibility for the living environment—more than a rhetorical, symbolic commitment—be compatible with the impact of an art institution on that same environment?

As the recently deceased philosopher, anthropologist and sociologist Bruno Latour put it, "we have never been modern." Yet we will have to keep finding new ways to learn to live in the ruins of modernism and capitalism that surround all of us; we need to "stay with the trouble," as feminist philosopher of science Donna Haraway suggests. At RADIUS we take this assignment to heart and with the *NATURECULTURES* year program in 2023 we will look for the possibilities of a more earthly Earth.



NATURECULTURES, Chapter 2
THE GLASS CITY
27 May — 20 August 2023

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