THE MEASURE OF THE WORLD

Mille

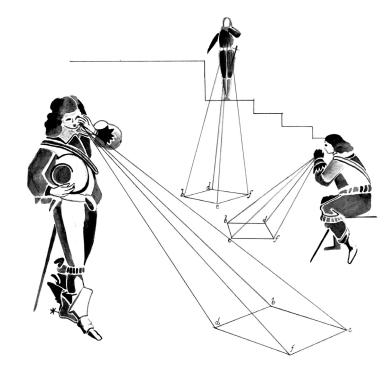
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-RADIUS Center for Contemporary Art and Ecology Kalverbos 20 2611 XW Delft www.radius-cca.org

NATURECULTURES Chapter 1: THE MEASURE OF THE WORLD

KARL BLOSSFELDT MADISON BYCROFT FILIPA CÉSAR & LOUIS HENDERSON LAURA HUERTAS MILLÁN ESTHER KOKMEIJER SASHA LITVINTSEVA & BENY WAGNER CLAUDIA MARTÍNEZ GARAY PEDRO NEVES MARQUES TUAN ANDREW NGUYEN URIEL ORLOW ANDREW PEKLER ERIK PETERS JOL THOMS

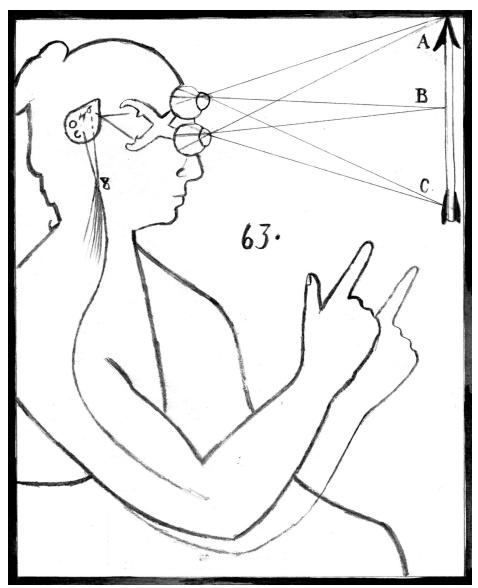
RADIUS starts the year with the group exhibition *THE MEASURE OF THE WORLD*, revolving around the ghosts of Western Enlightenment thinking and the relationship between science, truth-finding and the consequential creation of worldviews. With the work of fifteen artists, the exhibition forms a conversation starter for the NATURECULTURES year program and presents a first counterpoint to the current crises that bear witness to the perverse reality of modernism.



Drawing by Lisa Rampilli, modelled after *Les Perspecteurs* (1647) by Abraham Bosse.

THE MEASURE OF THE WORLD departs from the legacy of Western Enlightenment thinking. The Enlightenment, in its broadest sense, can be understood as the late 17th-century and 18th-century European period of progress based on empiricism—gathering knowledge from human experience—and rational thinking. This thinking has always been aimed at liberating people from fear of nature and establishing them as lord and master. Now that the lights of the Enlightenment have slowly dimmed, the wholly enlightened Earth is radiant with triumphant calamity and ecological decay.¹ What have we actually inherited from the Enlightenment? What happened when the ideas spawned from this epoch turned out to be toxic?

The basis of Enlightenment thinking can be briefly summarised as the modern separation of natural and social worlds-also called dualism. Wellknown Enlightenment thinkers such as Thomas Hobbes, Carl Linnaeus, Robert Boyle, Isaac Newton, Denis Diderot, Charles Montesquieu, Jean-Jacques Rousseau and Alexander von Humboldt are at the origin of these divisions of European modernity, including the division between object/subject, nature/ culture, human/non-human. Using criticism, purification and categorisation as methods, completely separate zones were created: those of humans on the one hand, and those of non-humans on the other.² The representation of citizens belonged to the political domain, whereas science represented the category of non-humans. Scientists mediated (between) the nature of non-humans-including plants, animals and those people who were not considered human-and the culture of people, society. The modern project of purification between nature and culture took many forms, including a sharp increase in the production of philosophical epistles, mathematical treatises, encyclopaedias, cartographic expeditions and surveys, political theories and botanical world tours, with the common denominator: the European enlightened human as the centre and measure of the world.



Drawing by Lisa Rampilli, modelled after drawing by René Descartes from Treatise of Man (1662).

For humankind to become the measure of all things, the human also had to go beyond itself, become external to itself. Scientific objectivity required an (immaterial ubiquitous) perspective based on universal mathematical abstraction and an absolute scientific method. The epitome of this attitude can be found in the work of René Descartes, a French philosopher and mathematician who lived in the Netherlands for a long time and laid the foundations for the later Enlightenment. In his famous publication *Discours de la Méthode* (1637), Descartes creates the framework of his overarching method: to unify the sciences and to base all knowledge on a single (mechanical-mathematical)

1 Text excerpt quoted from Max Horkheimer and Theodor W. Adorno, *Dialectic of Enlightenment*. Stanford, California: Stanford University Press, 2002.

2 Text fragment quoted from Bruno Latour, *We have* never been modern. Cambridge, Massachusetts: Harvard University Press, 1993.



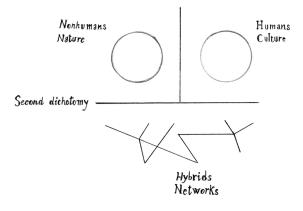
Ursula K. Le Guin, *Late in the Day — Poems 2010–2014*. Oakland, California: PM Press, 2016.

universal method, thereby abolishing so-called 'non-objective' sciences such as scholasticism, mythology, and witchcraft.³ In his radical reductionism of the non-human, Descartes stated: "There exist no occult forces in stones or plants, no amazing and marvellous sympathies and antipathies, in fact there exists nothing in the whole of nature which cannot be explained in terms of purely corporeal causes, totally devoid of mind and thought." and: "The only principles which I accept, or require, in physics are those of geometry and pure mathematics; these principles explain all natural phenomena."⁴

That same so-called 'objective' and objectifying view of the human as a central perspective on the world formed a division between human and the non-human, the modern enlightened and the pre-modern. Through human mediation, nature was conquered and tamed, measured, cataloged and categorised to form a stable background for human, civilised culture.⁵ Not only non-scientific methods were externalised, also groups of people that did not make a distinction between nature and culture were categorised as inferior, non-human or primitive according to these ideas, in contrast to the modern European Enlightenment thinker as an exalted species and category.

THE MEASURE OF THE WORLD foregrounds the ghosts of these earlier knowledge regimes by providing insight into the ways in which they continue to contaminate our ways of seeing and thinking to this day. Although the modern project of thinking in divisions, boundaries and dualisms has failed, it has real and polarising consequences; the exclusion, exploitation and exhaustion of humans, more-than-humans, natural resources and ecosystems are still rampant in humanistic, religious and capitalist systems. Which embodied, reciprocal, feminist, indigenous and decolonial worldviews are possible as an alternative to thinking in divisions, so that we no longer have to "see double" between nature and culture, object and subject? Or, to conclude in the words of writer Ursula K. Le Guin: "One way to stop seeing trees, or rivers, or hills, only as "natural resources," is to class them as fellow beings—kinfolk. I guess I'm trying to subjectify the universe, because look where objectifying it has gotten us. To subjectify is not necessarily to co-opt, colonise, exploit. Rather it may involve a great reach outward of the mind and imagination."⁶

First dichotomy



Drawing by Lisa Rampilli, modelled after diagram by Bruno Latour from We have never been modern (1993).

3 Text fragment paraphrased from Clemens Driessen, 'Descartes Was Here — In Search of the Origin of Cartesian Space' (2020).

4 Text fragment quoted from Clemens Driessen, 'Descartes Was Here — In Search of the Origin of Cartesian Space' (2020).

5 In this scientific mediation we find the paradox of the moderns, as philosopher, anthropologist and sociologist Bruno Latour formulates: "By using both the work of mediation and the work of purification, but never representing the two together, they were playing simultaneously on the transcendence and the immanence of the two entities, Nature and Society." Text fragment quoted from Bruno Latour, *We have never been modern.* Cambridge, Massachusetts: Harvard University Press, 1993.

6 Text fragment quoted from the foreword of Ursula K. Le Guin, *Late in the Day — Poems 2010–2014*. Oakland. California: PM Press. 2016.

Artworks

ANDREW PEKLER

Phantom Islands — A Sonic Atlas 2019

Phantom Islands — A Sonic Atlas is an interactive online project and album by musician Andrew Pekler turned into an installation for THE MEASURE OF THE WORLD. During centuries of European ocean exploration, many islands were sighted, mapped, and explored—yet their existence has never been corroborated. Coined as phantom islands, they exist between cartographical fact and maritime fiction and inspired legends and fantasies throughout history. In this installation, you can navigate through the interactive map and zoom in on individual phantom islands to learn about them while hearing their soundscapes based on their biological and geological descriptions.

Andrew Pekler interprets and presents an ethnographic catalog of music and synthetic field recordings, realised with the collaboration of cultural anthropologist Stefanie Kiwi Menrath and the designer Flavio Gortana. Moreover, an array of research material and speculative objects are presented as part of the installation.

2 ESTHER KOKMEIJER

Terra Nullius – *Ownership and Pioneering on Ice* 2013–ongoing

Esther Kokmeijer began collecting historical and contemporary maps of Antarctica ten years ago. Different countries commissioned the production of these maps for various purposes. Consequently, each map presents different information. Some have even been stripped from textual details to present an image of a pristine Antarctica. From historical expeditions to topographic research, magnetic anomalies to scientific research stations, the maps display the manifold interests that people have had in Antarctica. These interests are not only limited to the remoteness and natural conditions of the continent, but also extend to its untapped deposits of fossil fuel and geopolitical significance.

Antarctica is governed by about thirty countries, all of which are parties of the 1959 Antarctic Treaty System. This treaty prohibits military activity, mining, nuclear explosions, and nuclear waste disposal on the continent. In spite of the agreement and being scarcely populated, Antarctica suffers from human activity because of pollution, ozone depletion, and climate change. Although Antarctica is not officially claimed by any country, the countries that signed the treaty have establish their presence on the continent by building scientific stations to conduct research. Additionally, human activity is increasing through tourism.

Kokmeijer's cartographical collection illustrates the tension between preserving the untouched landscape of Antarctica and the potential exploitation of its fossil fuel reserves. As global temperatures rise, how long can Antarctica remain an environmental haven while also being considered as a solution to the world's energy crisis?

3 SASHA LITVINTSEVA & BENY WAGNER Constant 2022 Duration: 40 minutes

For most of recorded history, the human body has been the standard to measure everything. In *Constant*, Litvintseva and Wagner examine how metrology, the science of measurement, was separated from the body and established as its own field of study. The film examines three major shifts in the history of measurement standardisation: land surveying in early modern European history for land privatisation, the connection between the Metric Revolution and the French Revolution, and the conceptual dematerialisation of measurement in contemporary Big Science.⁷

The film's first chapter is set at the National Physics Laboratory in Lon-

arcnese hfor-

> 7 Big science is a term used by scientists and historians of science to describe a series of changes in science which occurred in industrial nations during and after World War II, as scientific progress increasingly came to rely on large-scale projects usually funded by national governments or groups of governments.

don, an institution responsible for the standardisation of forms of measurement in Great Britain. The scene recreates a meeting between the artists, scientists, and representatives of the institution, as well as the artist's confrontation with the institutions' lack of transparency. The film continues to explore superstitions surrounding measurements among the working class in early modern Europe, as land measurement shifts from being based on the body to methods that disregarded the human body, labour, and their relationship to the land. Finally, the film shows the two French astronomers who were in charge of determining the exact length of the metre by measuring the distance between the North Pole and the Equator. The astronomers embarked on a seven year long expedition to calculate the distance between Dunkirk and Barcelona, using a method called triangulation. The distance between these two cities is a section of the meridian they wanted to use as a basis for their calculations.

Constant exposes the historical search for a universal standard of measurement, and how it was intricately connected to the production and control of knowledge and power. In reviewing the modernisation of science, Litvintseva and Wagner engage with science not as a monolithic set of laws, but as a way of being, a way of understanding the world that is ever-changing instead.

4

FILIPA CÉSAR & LOUIS HENDERSON

Refracted Spaces and Sunstone 2017 Duration: 35 minutes

This installation contains two works that stem from César and Henderson's ongoing research on optical technologies of military and colonial design, both of which are based on Western models of knowledge. Their research centres the lighthouse as both an example and metaphor of military weaponry, and questions how it can be related to the European colonial project of economic expansion across the Atlantic Ocean. Adopting a critical approach to the ideologies behind instruments of guidance and surveillance, the artists investigate how notions of discovery and possession are associated with the production of knowledge and its (in)visibility.

Sunstone follows the journey of Fresnel lenses—a type of lens used in lighthouses—from their production site to an exhibition in a museum of lighthouses and navigational devices. The film explores of the different contexts surrounding optics, from the system of triangular trade after the first European settlements in America to the political use of Op art in post-revolutionary Cuba. It also maps the technological trajectory of optics, covering historical methods of optical navigation and contemporary satellite systems and their control by military bodies.

An installation is presented alongside the film, revealing research material from the artists, including archival images, oceanic charts, lighthouse blueprints, and pieces of Fresnel lenses. As a whole, César's and Henderson's work displays the aesthetic regime of the enlightenment and exposes the relation between navigational techniques and the global capitalist project.

5

MADISON BYCROFT

BIOPIC, or Charles-Geneviève-Louis-Auguste-André-Timothée 2021

Duration: 1 hour 47 minutes

This film is based on the historical figure of the Chèvaliere d'Éon, an eigheenthcentury French diplomat, spy, and soldier of androgynous physique, who presented themselves as both a man and a woman throughout their life. The Chèvaliere is evoked and embodied by three young-adult main characters, named Charlie, Lu, and Andrea. They hold a position in the French king Louis' court, the patriarch and gatekeeper of the Estate. He is deeply involved in taxonomic research, influenced by the Enlightenment's pursuit of measuring and naming all territories, plants, and animal species in the newly established European colonies around the world. While Louis is determined to earn recognition from the aristocracy by naming a new plant, Charlie, Lu, and Andrea daydream about a different life away from the absolutist and strict court they are part of, becoming more and more unrecognisable and fantastical.

BIOPIC narrates the emergence of dissident identities in restrictive spac-

es, where the idea of 'home' is constructed under patriarchal, traditionalist, nationalistic, and heteronormative parameters. The protagonists in Bycroft's film are constrained and controlled by Louis, who embodies the totalising scientific ideals of the Enlightenment that defined modernity. The power structure imposed by him suppresses any form of knowledge or identity deviates from the cisgender European man. The protagonists do not conform to the controlled spaces that are their home, so they gradually detach from them and begin to shape a new identity for themselves. In BIOPIC, a reflection on the politics of repression on knowledge and identities is paired with a speculation on the historical development of queer aesthetics and self-expression.

6 LAURA HUERTAS MILLÁN

Journey to a land otherwise known 2011 Duration: 23 minutes

Journey to a land otherwise known is inspired by the first accounts of the botanical and ethnographic explorations of America by the conquistadors, missionaries, and scientists. The film adapts and narrates these as the camera enters into the Tropical Greenhouse of Lille, a brutalist concrete building from 1970. Our stare becomes that of the explorers, embarking on an expedition in the so-called "New World", where descriptions of fascination for the newfound territories are intertwined with prejudiced and belittling analyses of the indigenous inhabitants, forming the myth of the savage that needed to be colonised and educated by the European man.

Sixteenth-century scientists deployed a range of narratives in their depictions and representations of America that contributed to the shaping of modernity. These narratives included perceptions of pre-modern states of nature, progressive strategies for resource "improvement", and the belief in a paternalistic, God-given mandate to reinterpret everything under the guise of Christianity. At the core of this endeavour to modernise the world was the image of the New World as an untamed landscape that could serve as the foundation for two pillars of European progress: resource accumulation and knowledge appropriation.⁸

In her work, Laura Huertas Millán seeks to expose and deconstruct the colonial political constructions of ethnographic knowledge. Central to her films is the capacity of language to create reality and subjectivity, identity and alterity. By exposing how the myths of the savage and untamed nature were used to justify exploitation, the artist opens up the possibility to rewrite indigenous identities.

7

URIEL ORLOW

What Plants Were Called Before They Had a Name 2017–ongoing

The European colonial enterprise encouraged botanical expeditions into to colonised territories to map and classify the natural resources, a practice that contributed significantly to their occupation and exploitation. The naming of newly discovered plants, a practice based on Carl Linnaeus's system of classification *Systema Naturae* (1735), disregarded and consciously erased previous indigenous plant names and botanical knowledge. In *What Plants Were Called Before They Had a Name*, Uriel Orlow recovers the memory and linguistic presence of indigenous names of plants after an ethnobotanical research that began in Guatemalan Altiplano and that extended to other places afterwards including South Africa.

Orlow's installation, which is presented as an action of postcolonial restitution and a rekindling of ancient knowledges, can be seen as an acoustic and visual learning station. It promotes cultural diversity to counteract the epistemic violence in botany and science, where plants were isolated from their ecological and spiritual surrounding and studied under the guise of objectivity. We are invited to consider the installation as an oral plant dictionary, and to listen to names of endemic plants in a dozen indigenous South African languages—i.e., Khoi, SePedi, SiSwati, isiZulu... Additionally, the installation encourages us to gain insight into the history and impact of modern botanical practices by browsing the books on display.

8 An elaborate argumentation of the politics of natural history can be found in Mauro José Caraccioli, *Writing the New World: The Politics of Natural History in the Early Spanish Empire,* University of Florida Press, 2021.

8 KARL BLOSSFELDT

Dispacus Laciniatus and *Delphinium*, from Wunder in der Natur 1942

Karl Blossfeldt (1865–1932) was known for his photographs of plants, which he captured by using a camera he that he modified to achieve unprecedented magnification. Blossfeldt used his works as educational material for his classes at Vereinigte Statsschulen für freie und angewandte Kunst, a former art school in Berlin. He is considered one of the main photographers of the Neue Sachlichkeit (New Objectivity), a modernist movement in German arts and literature that emerged after World War I and flourished during the 1920s.

The Neue Sachlichkeit movement thought of the photographic camera as a tool for representing reality with complete objectivity. Its photographers sought to recreate the perception of objects in the most authentic way, rejecting the aesthetic function of photography and instead exploiting its ability to represent the world in a more scientific and objective way. Blossfeldt's aimed to produce a catalogue of natural forms that would be useful for any craft or science, in line with Enlightened botanists and physicians like Carl Linnaeus or John Hope and their vast collections of drawings on the physiology of plants. His photographs follow the modern botanical logics of decontextualising plants and flowers, and presenting them as objects of study, use and examination.

9 **PEDRO NEVES MARQUES** *Linnaeus and the Terminator Seed* 2017

Duration: 15 minutes

8

Linnaeus and the Terminator Seed is a video essay that explores the connection between the sexual imaginings of eighteenth-century Swedish botanist Carl Linnaeus, who formalised the modern system of naming organisms known as binomial nomenclature. The essay also explores the biases and preconditions of contemporary biotechnology, colonial understandings of reproduction, and the gendered categorisation of living organisms.

The film collages botanical drawings of Latin America and Southeast Asia by European naturalists, plant genome representations, UN documents about transgenic seeds, and depictions of the reproductive systems of flowers and humans. Using a voice-over, the film questions the foundations of what is conceived "natural", and exposes the development of a universalising method to comprehend and classify the world through the western lenses of science and philosophy.

In their work, Pedro Neves Marques seeks to disclose and investigate the ways in which the colonisation of peoples is closely linked to the colonisation of land, and how its capitalistic by-products have shaped modernity and continue to be present in contemporary times.

10 **TUAN ANDREW NGUYEN** *The Boat People* 2021 Duration: 20 minutes

The Boat People is set in an unspecified future where humanity has become almost extinct. The main characters, known as the boat people, are a group of children who sail the seas, explore abandoned places and try to learn about the past of their ancestors through the few objects that remain of them. The film shows the boat people arriving at the coast of a place formerly known as Bataan, where they find ruins from different historical periods, including Buddhist buildings overgrown with vegetation, headless statues, an empty war museum and stones with carved dates and names. Like future archaeologists, they try to make sense of what remains in Bataan. In a mysterious ritual, every object they deem important is recreated in wood, burnt, and thrown into the ocean. Set in the Philippines and following the Vietnamese identity of the artist, the film

centres around the Bataan Refugee Camp, where Vietnamese, Cambodian, and Laotian refugees lived in the 1980s before emigrating to the United States, Europe, or other parts of Asia. Nguyen's film is a meditation on memory, belonging, and displacement. It exposes how colonialism transformed the world and how its destructive legacies continue to be felt today. Nguyen seeks to make these legacies visible through the material remnants of history while underlining the power of animism to rectify the rupture of the social, philosophical, and psychic ties between humans and nonhumans.⁹

What have objects witnessed, how can we interpret them, and how can we heal from the trauma they are connected with? The Boat People reinterpret the world by tracing the origins of the monuments and memorials we leave be-hind and freeing them from the oppressive politics that gave birth to them.

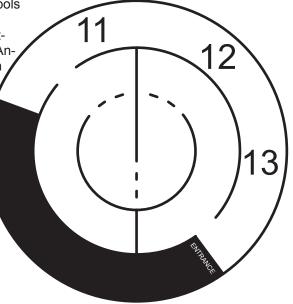
11

CLAUDIA MARTÍNEZ GARAY

Kimsa Pacha and *Iskay Pacha* 2020

In this prints series, Claudia Martínez Garay collages a plurality of symbols that are part of the Inca Andean cosmology, where nature, humans, and Pachamama—Mother Earth—are a whole that live entangled and perpetually related. The artist is native from Ayacucho, a city in the Peruvian Andes, where this holistic understanding of the world prevailed until Spanish colonialism imposed Christianity and a relationship with land based on inequality and exploitation.

The Pacha works can be read as post-historical documents ing Andean cosmoltigieal proferrorscest, efferments are through a ploge ther. C counts, and personal allusions, Martínez Garay confounds the perception of history as a linear trajectory. What constitutes a cultural artefact, and how is it portrayed visually? What is our affect to them, and how do they shape the memory of the past? Confronting the heritage of colonialism in contemporary Peru, the artist recovers the Andean material and immaterial culture from her indigenous ancestors to offer their worldviews as a counterpoint to the ecologically fracturing legacy of colonialism.



12 ERIK PETERS How to Wake Up the Ghosts 2021

How to Wake Up the Ghosts explores the consequences of the climate crisis within the thresholds of artificial nature and interconnectivity. The installation is inspired by a publication from 1756 about the finding of a piece of coral near the Artic by whale hunters. In a similar vein, the work presents a speculative future where what is found is remnants of human efforts to resist ecological crises.

Inside the 3-d printed reef sculpture we see and hear the artificial coral reflect on the blurred lines between reality, nature, and technology, from a more-than-human perspective. The coral, a plural technological entity, carries opposite perspectives on what it is and what it means to live in a neo-ecological world where artificial intelligence has become an integral part of nature. The script is co-written by an open-source artificial intelligence program trained on texts by, among others, Donna J. Haraway, Bruno Latour, Timothy Morton, Jean Baudrillard and Anna Lowenhaupt Tsing. The artificial coral imagery is created using machine learning algorithms able to create a landscape from textual prompts.

How might future ecologies adapt to the possible futures emerging from climate crises? Erik Peter's practice of collaborative world-building and speculative storytelling aims to create scenarios where an exploration of queer relations and kinship with more-than-human entities can provide with potential answers. In light of the dichotomic heritage of the Enlightenment, Peter's work tests the possibilities of an ecological regime defined by plurality of voices and agencies.

> 9 Animism is the belief that objects, places, and creatures all possess a distinct spiritual essence. Potentially, animism perceives all things—animals, plants, rocks, rivers, weather systems, human handiwork and perhaps even words—as animated and alive.

13 JOL THOMS Viriditas 2019-2020 Duration: 21 minutes

In this performance lecture, Jol Thoms questions how the history of Modernity has been shaped by colonial rule and practices of extraction, exploitation, and desacralisation, through a rich archive of pre-modern European knowledges. Borrowing from an extensive visual archive spanning more than seven hundred years, Thoms presents a thorough insight into the animistic and alchemical knowledge that was popular in Europe before the spread of René Descartes' philosophical theory on the separation of mind and body in the mid-seventeenth century.

Throughout the film, Thoms situates scientific knowledge and the constructed divide between nature and culture whilst exploring technologies for sustainable energy production and their connection to premodern science, specifically nuclear fusion. Despite decades of efforts by physicists, nuclear fusion has not been successfully achieved. Experimental fusion energy reactors use rare earth minerals and extremely strong magnetic fields to replicate the conditions of stars by burning pure hydrogen at temperatures of around 150 million degrees Celsius. The research examines the potential for using a fusion energy reactor to convert water into a self-sustaining source of energy. This idea brings to mind the metaphor of a nuclear fusion reactor as a miniature sun, and highlights the connection between this modern technology and the historical, premodern alchemical tradition.¹⁰

Thoms conducted fieldwork into the state of European fusion together with artist Julian Weaver. They visited the fusion research facility Joint European Torus (JET) in the United Kingdom and the International Thermonuclear Energy Research (ITER), a huge project under construction in France. Weaver recorded the sound of magnetic plasma and combined it with the sounds from experimental sites into a soundtrack that was added to this film.

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.

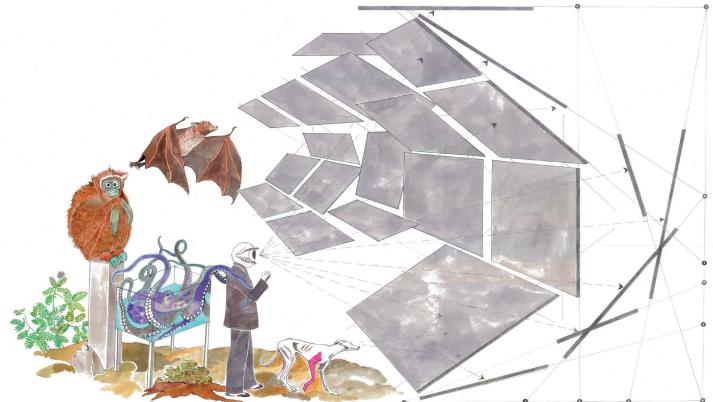
AT RADIUS IN 2023

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 *RADI-CAL 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 1 THE MEASURE OF THE WORLD 25 February — 14 May 2023

KARL BLOSSFELDT MADISON BYCROFT FILIPA CÉSAR & LOUIS HENDERSON LAURA HUERTAS MILLÁN ESTHER KOKMEIJER SASHA LITVINTSEVA & BENY WAGNER CLAUDIA MARTÍNEZ GARAY PEDRO NEVES MARQUES TUAN ANDREW NGUYEN URIEL ORLOW ANDREW PEKLER ERIK PETERS JOL THOMS

Curator: Niekolaas Johannes Lekkerkerk Assistant Curator: Sergi Pera Rusca Text: Niekolaas Johannes Lekkerkerk and Sergi Pera Rusca Translation: Niels Bekkema Graphic Design: Sabo Day and Augustinas Milkus Production and Coordination: Eva Burgering Education: Fleur Knops Communication: Daan Veerman Technical Support: Menno Verhoef, Stefan Bandalac, Moos de Beer, Catelijne Boele and Mendel Nieuwdorp

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Center for Contemporary Art and Ecology Raiverbos 20 2611 XW, Delft The Netherlands info@radius-cca.org

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