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Underland Year Program 2022–2023

RADIUS commences its first year of existence with an exhibition program consisting of four chapters. Partially modelled after the eponymous novel by Robert MacFarlane, the *Underland* exhibition cycle is an exploration of subterranean spaces as observed through art, literature, mythology, science, ecology, memory, and the physical landscape. We descend into RADIUS' subterranean exhibition spaces, through the surface of the Earth's biofilm, to make an observation about what takes place underneath man-made layers of concrete, tarmac and the constructed artificiality of our surroundings, to examine our relationship to darkness, life and death beneath ground level.

In four chapters, *Underland* invites you to join in a series of journeys through “deep-time”—a vast geological time—along water sources and caverns, composite layers of soil, mines and drilling sites for unearthing minerals and fossils, fungal and root networks, and storage and hiding places providing shelter and protection within the increasingly unstable environment of the Anthropocene, the current era in which humankind dominates. The basis for considering the Anthropocene as our current geological epoch rests on the claim that the historically accumulated, planetary environmental effects of an expanding human population, technological innovation, and economic development have become inseparable from the Earth's geological processes.

The compounded crises of capitalism, sociopolitical unrest, environmental catastrophe, and technological transformation are becoming increasingly pressing and tangible, both on a local level and on a planetary scale. In addition, the struggle for social emancipation and the role of colonialism and racism are inextricably linked to the current ecological depression, re-drawing attention to the fragility of Earth and life itself. The gravity of the situation is such that it is no longer possible to place ourselves outside the ecological breakdown equation. As the underground journey at RADIUS begins, the obscured depths of the underland are blazed with open-hearted encounters across deep time that reveal pathways to weather the Anthropocene.

The *Underland* exhibition cycle is developed to provide a sense of grounding for the art center in its early beginnings, but predominantly serves as a public conversation starter for a continuous program around ecology and climate concerns, as facilitated through current artistic practices. Not dissimilar from science, art has the capacity to raise perception and consciousness for those elements, processes and dimensions that bypass our human sensorial capacities altogether. Both engaged in developing languages to inform an under-standing and gain traction with our speculative present, we believe that art as a field must extend and apply itself without invitation, to trigger responses where none have been called for, and to confront what we take for granted. Moving through critical zones, the artists in *Underland* seek to unearth and undermine a singular human-centred perspective as to register more reality thanks to multiple templates, for which pluralism is understood not as a plurality of perspectives on one reality, but as a multiplicity of agencies that register numerous realities.

From fieldwork-taking to patchwork-making, *Underland* is envisioned as a space for synthetic thinking, science fact and fiction, forging new bonds between human and non-human forms of agency. From thinking and acting in a human-centered vacuum, to a life continuum.

Bringing Water to Life in the Encroaching Desert

URSULA BIEMANN
CAROLINA CAYCEDO
MARJOLIJN DIJKMAN & TORIL JOHANNESSEN
ALICE DOS REIS
DENISE FERREIRA DA SILVA & ARJUNA NEUMAN
XANDRA VAN DER EIJK
SAMI HAMMANA
LUKAS MARXT
JOSÉFA NTJAM
HIMALI SINGH SOIN
RIIKKA TAURIAINEN & PALOMA AYALA & ANNE-LAURE FRANCHETTE
SUSANNE M. WINTERLING / THE KALPANA
MÜGE YILMAZ

EMOTIONS ARE OCEANS is the opening exhibition of RADIUS as a center for contemporary art and ecology and presents the work of nineteen artists around the subject of global water crises.

Water, despite being a fundamental, life-bearing element that intertwines all living organisms on Earth, is subject to increasing scarcity. Water sources dry up due to rising temperatures and melting glaciers make sea levels raise up, causing floods and threatening the availability and quality of water. Likewise, contamination of waters by toxic chemical substances further reduces safe water accessibility. Yet scarcity is not only a matter of the current climate regime's harshness: uneven water distribution triggers major inequalities. Water distribution is not necessarily a matter of how much freshwater there is, but rather of how poorly it is allocated as a result of corporate misappropriation and political corruption.¹ Such unsustainable and unjust water managements not only affect human beings, but also countless of other species that either inhabit aquatic ecosystems or equally require water to subsist. The first act of *Underland* departs from the acknowledgement of human-driven water crises and the pressing need for different modes of thinking and behaving. How can we tackle the incompatibility of destructive anthropocentric tendencies on aquatic bodies and eco-systems despite our absolute reliance on water to exist? How can we build an encompassing and sensitive awareness of the life-bearing networks of watery exchange in the face of ecological breakdown?

Bodies of water—such as seas, oceans, lakes, and glaciers—harbour invisible yet crucial organisms that allow for survival on Earth, and they are increasingly subject to imbalances and undesired stagnancy.² For instance, the release of freshwater from melting ice caps in Antarctica and Greenland increase acidity, alter saline levels, and negatively influence oceanic currents, all of which is destructing to microorganisms responsible for fifty to eighty-five per cent of the world's oxygen production and CO₂ storage.³ The ever-so-rapid pace in which technology is advanced impacts water ecosystems too. A new smartphone announcement implies that damage to the sea soil has been made, as an ever-increasing demand for minerals such as cobalt, copper, or manganese to produce high-tech applications—including wind turbines and solar panels as well—requires deep sea mining. This practice originates disturbances on the

¹ "Corruption in drinking water and sanitation emerges at every point along the water delivery chain; from policy design and budgeting to building, maintaining, and operating water networks. It drains investment from the sector, increases prices and decreases water supplies. One result is that poor households in Jakarta, Lima, Nairobi, or Manila spend more on water than residents of New York City, London or Rome. [...] In China, for example, corruption has weakened the enforcement of environmental regulations, abetting the pollution of aquifers in 90 percent of cities and making over 75 per cent of urban rivers unsuitable for drinking or fishing." Transparency International, 24 June 2008. <https://www.transparency.org/en/press/20080624-corruption-in-the-water-sector-is-an-overlooked-threat-for-developop#>

² Penn State. "Increasing stability decreases ocean productivity, reduces carbon burial." ScienceDaily. ScienceDaily, 28 September 2020. <www.sciencedaily.com/releases/2020/09/200928125106.htm>.

³ "Arctic Ocean acidifying at 'unprecedented levels' as sea ice melts". Climate Home News, 16 September 2013. <https://www.climatechangenews.com/2013/09/16/arctic-ocean-acidifying-at-unprecedented-levels-as-sea-ice-melts/>

seafloor that leads to loss of endemic species, sediment plumes that smother animals, sound and light pollution, and potential leaks and spills of fuel and other toxic products.

In the era of advanced capitalism, the seafloor has become subject to financialization to supply the technosphere of the Earth. Yet pervasive geopolitics of water have been the state of affairs for long, with the unsustainable exploitation of freshwater sources that profits from vulnerable lands and communities to supply water in plastic bottles that ultimately end up polluting said water sources. Nestlé, the world's largest producer of bottled water, is the epitome of water commodification, spending tons of money in lobbying to take over freshwater sources with disingenuous claims of creating jobs in the local communities. Chairman and former CEO of Nestlé Peter Brabeck even claimed that considering water as a basic right is an "extreme" view, and since the world will run out of freshwater before oil, "privatisation is the answer". As professor Jamie Linton argues, the "modern" concept of water is derivative to the dominant Western European and Northern American ways of knowing and relating to water: for water to become a commodity, it is first deterritorialized, rendered 'placeless', and afterwards objectified so that it can be traded liberally.⁴

When we reflect on the subject water, we inevitably reflect on ourselves, and ourselves in connection to many others that dwell on Earth. From oceans, seas, rivers, and lakes, to rainclouds, filtration tanks, fish, and humans: these are all interconnected bodies of water. Watery embodiment is always constituted by a hybrid assemblage. That is, a grouping of human, animal, vegetable, bacterial, and other planetary bodies coursing through one another. It also challenges our canonical definitions and cartographies of space, time, and species, and calls attention to the fact that as bodies of water we are both different and in common.⁵ All the same, an advocacy for common grounds as watery bodies ought to be nuanced: even though "we" are implicated in grappling with the ecological deterioration, "we" are not all the same, nor are we "in it" in the same way.⁶

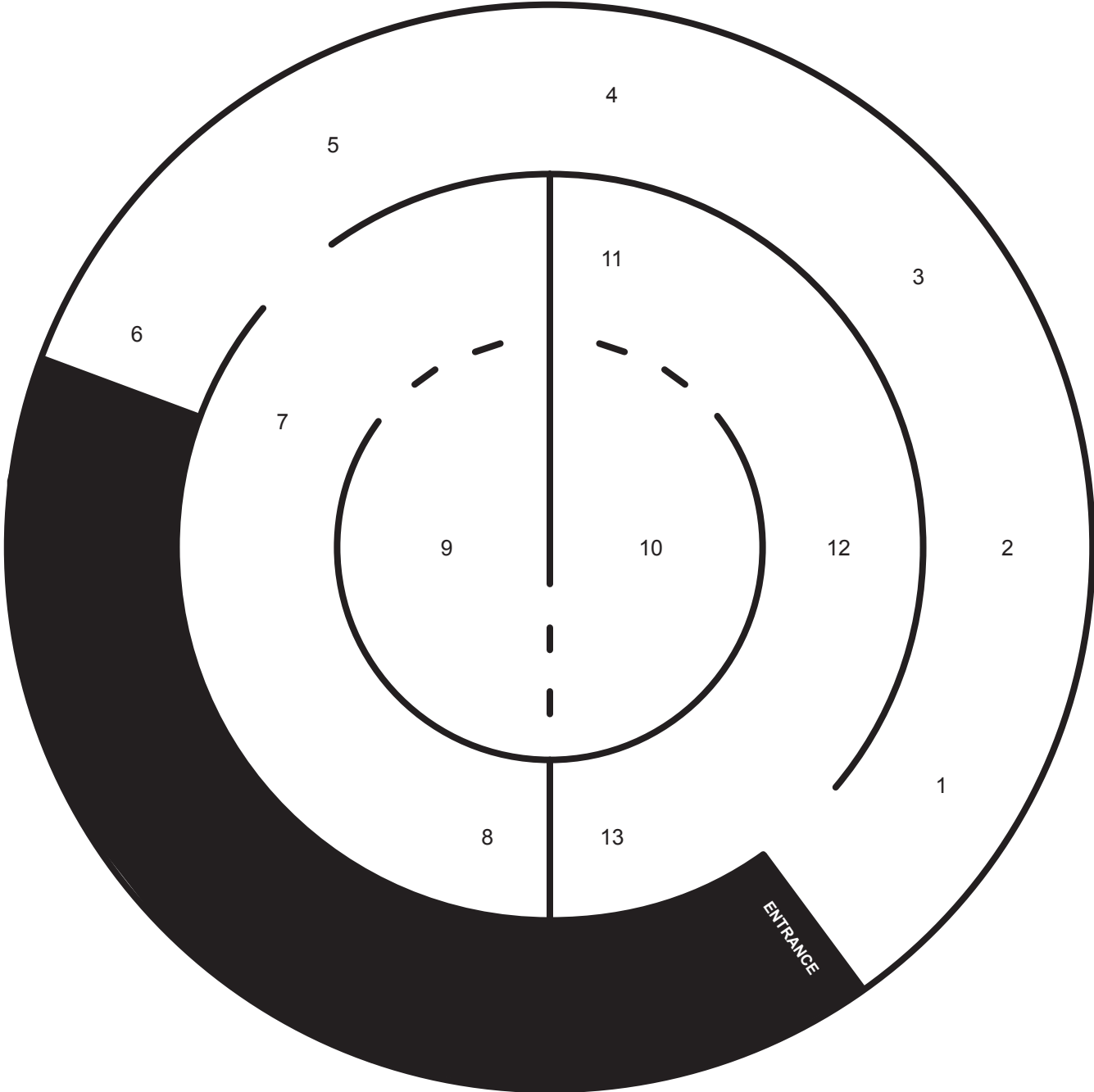
As professor Astrida Neimanis phrases it, "water is an archive of meaning and matter".⁷ What we were and what we will become are concurrently returned and projected to and from us in an interdependent ebb and flow, in a simultaneous acknowledgement that a rich alterity of water bodies flows through us in an ongoing cycle. The first act of *Underland* merges the circular spaces of RADIUS, once a body of water itself, in artistic proposals for ways of existentially flowing in a jeopardised landscape of abundance and scarcity, of financial speculation and risk, of emergence and devastation. Reckoning ourselves as bodies of water underlines a rich set of assemblages that demand compromised responses at the present time. In what ways can we establish sustainable blueprints for equitable water cycles? How can thinking about ourselves as watery bodies in connection to other species entangle us in productive ways? How can we move away from anthropocentric water sovereignty by embracing an inter-species consciousness, and what systems of distribution and relating may emerge from it?

⁴ Jamie Linton, *What Is Water?: The History of a Modern Abstraction*. (Vancouver: UBC Press, 2010).

⁵ Astrida Neimanis, *Bodies of Water. Posthuman Feminist Phenomenology* (London: Bloomsbury, 2017), 4.

⁶ Idem.

⁷ Astrida Neimanis, "Hydrofeminism: Or, On Becoming a Body of Water", in *Undutiful Daughters. New Directions in Feminist Thought and Practice*, ed. Henriette Gunkel, Chrysanthi Nigianni, and Fanny Söderbäck (New York: Palgrave MacMillan, 2012), 87.



1 JOSÈFA NTJAM

Unknown Aquazone

2020

Unknown Aquazone is an aquarium. Not in the conventional sense, though, as it is stripped out of its scientific or decorative functions. *Unknown Aquazone* is an aquarium in which Josèfa Ntjam entwines past and future by drawing inspiration from water-related myths: from the mermaid-like water spirit Mami Wata, a highly allegorical deity largely venerated in West, Central, and South Africa and its diaspora, to Drexciya, a duo of Detroit-based musicians that created the eponymous myth of an imaginary people—the Drexciyans—who live in the Atlantic Ocean, descendants of the enslaved pregnant African women jettisoned from slave ships.

Ntjam's aquarium borrows its name from Drexciya's fourth album *The Unknown Aquazone* (1994). In it, the artist has created an assemblage of images from family archives to photographs of Cameroonian revolutionaries who fought for the country's independence, such as Ruben Um Nyobè and Marthe Ekemeyong Moumié. In this way, the work becomes a large-scale photomontage wherein personal stories and historical events coalesce. The usually passive and humdrum observation of an aquarium is reversed as Ntjam invites the viewers to actively scout for details and speculate on underlying connections between images. Moreover, the stalagmites inside the structure trace a parallel between the organic formations of minerals dripping onto caves with the stacking of Black myths and histories.

Josèfa Ntjam's versatile artistic practice seeks to showcase Black and feminist struggles while building Afrofuturistic worldviews. By exploring associations between Black identity and bodies of water, the artist wonders about the potential afterlives of collective memory, resulting in an abundance of references that displace hegemonical narratives and welcome knowledge between Black bodies, identities, spiritualities, and ancestries, across space and time, across past and future.

2 SAMI HAMMANA

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2021

“How to make sense of that which cannot be sensed?”

Deep onto the seabed lie submarine communication cables which carry digital data—telephone, Internet, and personal data traffic—through optical fibre technology across oceans and seas. Huge metal ships sail around the world to spool the far-reaching cables down into the sea, to a depth where sunlight does not reach. In ~ ~ ~ ~, Sami Hammana draws attention to the almost topographically identical routes of the submarine cables and the routes sailed by the colonial fleets of the Dutch East India Company in the seventeenth century to explore the relationships between contemporary geofinancial infrastructures and the colonial past of the Netherlands.<sup>1</sup>

Following the “phenomenal threshold of perception”—an expression Hammana uses to refer to moments when perception fails—he juxtaposes the intangibility and invisibility of speculative financial transactions and virtual trade taking place through the undersea cable network with the tangible and visible commodities and enslaved people that used to be moved by colonial ships through the same routes. Despite the difference between these two systems of exploitation, Hammana argues that there are also similarities, as the ships used to lay and maintain the cable network transport precarious workers who manually unroll the coils of fibre optic cables.

Sami Hammana’s film exposes the limits of human perception to sense neo-colonial systems of exploitation. The speculative financial market makes use of the precarious work force in undersea cable-laying to stealthily venture into the conversion of environmental catastrophes into profitable financial products. Without the vast network of cables, first delineated by the cartographies of colonial power, and the use of neo-colonial labour, geofinance would not be able to render the Earth as a speculative playground for capitalisation.

## 3 CAROLINA CAYCEDO

*Serpent River Book*  
2017

Meandering through the exhibition space, *Serpent River Book* unfolds a plethora of archival images, satellite photographs, maps, poems, lyrics and more, which altogether inform about and denounce the effects of industrialisation and privatisation of river ecologies to the local communities in Mexico, Colombia, and Brazil. The book is part of Carolina Caycedo’s ongoing project *Be Damned*, which studies the outcomes of extractivism on environmental, economic, and social landscapes together with the power dynamics in the decimation of water resources by multinational enterprises.

As a result of the privatization of water extraction in Central and South America, international conglomerates are building dams that not only control the flow of water, but also deny local populations access to water, in total disregard of their rights and livelihood. Resistance and activism against it are often met with violence: 227 environmental activists were killed around the world in 2020; Indigenous activists accounted for one third of cases.

The book is divided into five chapters, each one representing one part of a river. The starting two chapters, the river’s upper course, present Amazonian ways of considering the interconnectedness between bodies of water, as well as sustainable means of mining and fishing in a celebration of the richness of their ecologies. As the river flows, pictures of threatening dams and bleak land show the disruption of the neo-colonial agenda of corporations, and it culminates with representations of community members and their activism.

*Serpent River Book* can be folded and read in many different ways, thus providing multiple narratives and perspectives that unravel in non-linear directions. The book functions as a performative and educational tool which, by showcasing the vital synchronicities between the river ecologies and their caretakers, underlines the importance of actively opposing their abuse.

## 4 URSULA BIEMANN

*Deep Weather*  
2013

In this video essay, following her long-standing practice in bridging ecologies with larger planetary issues, Ursula Biemann explores the convergence between the

<sup>1</sup> Geofinance is a composite (portmanteau) word (Geography + Finance) aiming to capture the interplay between geography and the financial organization of economic activity. It primarily concerns the analysis and spatial representation of aspects of financial activity. For more information, see Jack Clarke & Sami Hammana (eds.), *The Geofinancial Lexicon* (London: Abstract Supply, 2021); <https://www.abstract.supply/books/geofinancial-lexicon>.

flow of people and resources in a rapidly globalising world with water and oil as the main narrators. *Deep Weather* comprises 'Carbon Geologies', set in the oil sands of the boreal forests of Northern Canada, and 'Hydro Geologies', set in the near-permanently flood-threatened Bangladesh. The film shows the interconnectedness between geological abuse in resource extraction and the resulting vulnerability of impoverished, disempowered, and displaced communities.

Alberta, Canada's richest province in hydrocarbons, provides seventy percent of the oil and natural gas exploited on Canadian soil. To do so, it conducts aggressive mining and steam processing projects which violate environmental and human rights and ravage territories that belong to Indigenous peoples. On the other side of the planet, 11,000 kilometers away, the combination of melting ice fields in the Himalayas, sea levels rising, and other extreme weather events have been steadily imposing an amphibian lifestyle on the Bangladeshi population living in the deltas. To mitigate floods, communities join forces to build protective mud embankments.

Ursula Biemann unravels the Earth's ecologies as an interconnected system where its crises cannot be looked at in a vacuum. As exemplified in *Deep Weather*, the aftermath of heavy fossil fuel extraction in Canada endangers the livelihood and sovereignty of Indigenous people, while simultaneously having a rippling effect onto the population of the Bangladeshi deltas, whose life-sustaining practices and conditions erode as global temperature continues to rise.

## 5 MÜGE YILMAZ

*Circle Of Necessities (Halay)*

2013 – ONGOING

Müge Yilmaz has been collecting water bottles for almost a decade now. Either purchased in Amsterdam or gifted by friends and acquaintances, an array of brands, shapes, and sources conform a vast, growing collection of bottles containing water that has flowed throughout the world to ultimately be sold and consumed in Amsterdam. When installed, they become an assembly of vessels in a ritualistic ensemble, reminiscent of folkloric dances such as halay, the popular dance of Anatolian and Middle Eastern people in which they dance in circles. At the same time, the bottles reference the significance of water in the composition of our bodies—up to sixty per cent. *Circle of Necessities* triggers a reflection on our watery existence whilst drawing attention to the privatisation of water, a vital element for life often inscribed in capitalistic logics that profit off its scarcity and present it as a commodity.

In recent years, riots and civil unrest have erupted in both developing and developed countries over corporate exploitation of fresh water. As water scarcity worsens, water conflicts are becoming more common, and the unsustainable use of freshwater continues to have significant repercussions for ecological preservation and human rights. Classifying water as a commodity makes it subject to market prices and jeopardises the universal right to clean water accessibility. The premise that water is not a possession but a shared element for the survival of all living things on Earth should be underlined at all times.

Such assertions resonate with the philosophical understandings of water as the originating principle for life on Earth. Considered the first modern philosopher in the Greek tradition, Thales of Miletus proposed a theory of essential materialism in which water is the vital foundation of all beings. Thales, whom Yilmaz researched during the development of *Circle of Necessities*, is useful in thinking with water as a primal origin, both in its embryonic conception and in the dependency of water exchanges for the development of life.

Müge Yilmaz presents an installation on the circularity of water as an ontological proposition, which, at the same time, serves as a commentary on water as a profitable product within unfair management and distribution systems, creating harmful imbalances between its abundance and scarcity.

## 6 DENISE FERREIRA DA SILVA & ARJUNA NEUMAN

*4 Waters – Deep Implicancy*

2018

The Mediterranean, the Pacific, the Atlantic, and the Indian. Across these four bodies of water, philosopher Denise Ferreira da Silva and artist Arjuna Neuman guide us through stories of migration, displacement, colonialism, and ecological decline, in a pursuit to imagine the multi-species entanglement in the primordial soup prior to the separation of matter—what Ferreira da Silva calls 'Deep

Implicancy'—and speculate of a world free of the Western notions of value that have wreaked social and ecological havoc.<sup>2</sup>

Evoking the Earth as a single and unified mass, both human and non-human organisms are intrinsically bound through water, simultaneously a source and a disrupter of life. Each organism, despite being perceived as a physiological individual, is part of a broader whole wherein different lineages intersect. In the film, the plurality and interdependence of the whole is argued through philosophy, physics, quantum mechanics, and postcolonial theory, and visualised in an array of images of the rumbling of the Earth blended with images of environmental violence, war, slavery and uprising, and forced migration. All of which presented through non-linear narratives in order to decentralise hegemonical understandings and values of time and history.

4 *Waters – Deep Implicancy* proposes a holistic thinking in which every living thing and event relates to one another with water as their common denominator. In a suspended journey to enquire about the making of human ontologies and ethics, the film unthinks the world in order to build it again, posing whether our understanding of it should require phase instead of measure.

## 7 PALOMA AYALA & ANNE-LAURE FRANCHETTE & RIIKKA TAURIAINEN

*River Oracle*

2022

Professor Astrida Neimanis states in her book *Bodies of Water. Posthuman Feminist Phenomenology* (Bloomsbury, 2017) that as watery bodies we are “never really autonomous [...] we require other bodies of other waters (that in turn require other bodies and other waters to bathe us into being. Watery bodies are gestational milieus for another”.<sup>3</sup> In pursuit of an artistic exploration of the porous relationships between human beings and other bodies of water, Paloma Ayala, Anne-Laure Franchette, and Riikka Tauriainen present a new version of their work *River Oracle* for RADIUS. The multimedia installation, in collaboration with Kay Zhang and Melody Chua for the sound composition, seeks to engage us with the ecologies of the river Rhine, which is proposed as an oracle to whom ask questions to build a deeper, situated self-reflection as watery, entangled beings.

By embracing porosity as an agential means of relating, *River Oracle* sets alternative definitions of ‘human body’ in motion. Following a hydrofeminist approach, it undermines the dominant Western metaphysical description of the body as bounded by an anatomical and subjective individuality, whilst contemplating other ways for the human body to go beyond those boundaries and relate to other bodies—both human and nonhuman, both conceptually and materially—through water.

Textile, sound, and interactive media are dovetailed to summon a figuration of the river in a lyrical and tactile manner. Aquatic affinities are directed towards fairer ecological relationships. Perhaps attempting, ultimately, to consider answering the following question: “What does telling the story of humans in relation to more-than-humans in one way rather than another mean for how these stories will unfold?”.<sup>4</sup>

## 8 ALICE DOS REIS

*Undercurrent*

2019

Krill are tiny crustaceans found across all oceans on Earth. Aside from being a crucial species within the oceanic food chain, they conform one of the biggest biomasses in the world. Their marine ubiquity makes them know the oceans very well, as they navigate them in big swarms of thousands of individuals per cubic meter. Following her interest on krill after reading about the decline in population, Alice Dos Reis began a research that culminated in her film *Undercurrent*. A marine biologist is immersed in the laboratory working on a project to map the seabed of one of the deepest areas of the North Atlantic Ocean. Her project depends on the use of biotechnology that entails the insertion of nanocameras inside the bellies of krill to be able to observe the low depths of the ocean—and consequently making it difficult for krill to reproduce. As time goes by, the biologist starts questioning the ethical dilemmas of the project while developing an emotional attachment to the krill.

*Undercurrent* reflects on the limitless agency humans grant themselves while stripping it from non-human organisms. In the film, krill are just a means to an end, a tool for scientific research. The scientist does not use krill’s knowledge

<sup>2</sup> The primordial soup is a generic term that describes the aqueous solution of organic compounds that accumulated in primitive water bodies of the early Earth as a result of endogenous abiotic syntheses and the extraterrestrial delivery by cometary and meteoritic collisions, and from which some have assumed that the first living systems evolved. Lazcano A. (2015) ‘Primordial Soup’. In: Gargaud M. et al. (eds) *Encyclopedia of Astrobiology*. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-662-44185-5\\_1275](https://doi.org/10.1007/978-3-662-44185-5_1275)

<sup>3</sup> Astrida Neimanis, *Bodies of Water. Posthuman Feminist Phenomenology* (London: Bloomsbury, 2017), 4.

<sup>4</sup> *Ibidem*, 13.

to learn about the bottom of the ocean, but rather she modifies them and vicariously utilizes them for the benefit of scientific progress. Slowly, the scientist wonders whether the krill are aware of being watched and modified, and feelings of uneasiness and doubt begin dawning on her.

Once the awareness of intrusion and violence to non-human organisms is too unbearable to dismiss, how can certain scientific practices be sustained? Alice Dos Reis presents a call for reevaluation of the human systems that mediate contact with other species through a story of unexpected kinship.

## 9 MARJOLIJN DIJKMAN & TORIL JOHANNESSEN

*Liquid Properties*

2018

The sculptural installation by Marjolijn Dijkman and Toril Johannessen allows us to peek inside natural processes in water ecosystems. A modular metal structure supports hand-blown spheres and magnifying lenses that reveal the water world to the naked eye. The artists sourced water from the port of Rotterdam and throughout Delft, where in the seventeenth century the scientist Antonie van Leeuwenhoek took similar samples from bodies of water, observing microbes for the first time in the history of science.

Some of the organisms will develop successfully and flourish; others will not, taken over by bacteria, or due to water becoming too polluted to live. Algae might grow, and even tiny species may be born. All as a result of symbiosis, the biological interaction between two or more different organisms—or symbionts. In the installation, the isolation and enlargement of watery ecosystems is needed to visualise microbial life. Nevertheless, microbes—bacteria, archaea, single cell eukaryotes, and virus—are omnipresent in animals and humans too. In fact, human bodies contain 160 major species of bacteria, and they all form complex ecosystems within them. As bodies of water, we are constantly exchanging microbes with one another, making us multilineage organisms.

*Liquid Properties* not only renders visible processes in water hidden to the naked human eye, but it also questions how we relate to microscopic life and opens a further way to think about how it is adjectivized: what do we consider beautiful in nature, and what is excluded in our understanding of nature? And even: what languages of description and relating might ensue upon the realisation that human and nonhuman life influence and evolve one another in defining ways?

## 10 SUSANNE M. WINTERLING / THE KALPANA

*In Desert Times*

2020

Together with Goutam Ghosh and Bodhisattva Chattopadhyay, Susanne M. Winterling founded The Kalpana—Sanskrit for create, imagine—in 2016. As a collective, their practice explores the desert as a speculative site for futuristic imaginaries through three intersecting approaches: geo-cultural, science-fictional, and bio-artistic. *In Desert Times* presents an interactive, three-dimensional desert map in which to wonder about future species, artefacts, and languages in a hypothetical desertified planet.

The installation came to be after the collective's research trips to the archaeological site of Dholavira (India) and the Great Rann of Kutch, a large area of salt marshes in the border between India and Pakistan. Similarly influential are desert planets in science fiction and the literary descriptions of Mars. Combining knowledges from vestigial arid areas and futuristic imagination, *In Desert Times* conjectures on survival in dried-up landscapes with the help of non-human species and forms. In the installation, Winterling provides with insights on environmentally induced mutations on animals. The first consists of a hologram of a camel nose, an organ that has adapted to desert climate and as a result is able to absorb water vapour from the air to cool the camel's blood, eyes, and brain. The second shows a street dog in Mumbai that has turned blue due to chemical pollution in water, progressively transforming into algae.

The Kalpana's work extends an invitation to speculative thinking through the desert as a figuration by means of merging the real and the imaginary, what used to be and what is to come, in jeopardised ecologies in which science and science fiction are tools of equal footing to (re)act. The desert will only be sur-vided in a Posthumanist world where human-centric ingenuity is not enough, and where alternative relationalities are the departure point.<sup>5</sup>

<sup>5</sup> Posthumanism designates a range of contemporary philosophical positions that argue for the inclusion of non-anthropocentric viewpoints of the world and a rejection of the boundaries between the human, the nonhuman, and the technological established by traditional Western Humanist culture.

**11 LUKAS MARXT**  
*Imperial Irrigation*  
 2020

The Salton Sea, located in an area known as Imperial Valley, used to be the largest inland lake in California. Made fertile through irrigation canals from the Colorado River—causing it to no longer flow into Mexico—it became the most important region of industrial agriculture in the United States, as well as a popular resort destination ideal for birdwatching. The artificial lake, however, began shrinking as a result of the excess water from the river—rich in salts, selenium, and fertilizers—draining through the soil and thus dissolving ancient salt deposits. As a result, salinity increased, further exacerbated by the natural evaporation in the desert. On the other hand, in 1942, the U.S. Navy set up a military test base on the south-west shore of the lake, and in 1944 they tested up to 150 atomic bombs. The continuous changes in the area made it gradually inhospitable to wildlife, leading to large fish kills, a decline in bird populations, and a drastic reduction of tourism, conforming the so-called biggest environmental disaster in the history of California.

In *Imperial Irrigation*, Lukas Marxt unfurls a glitchy history of ecological decay. As the artist himself explores the area, an array of digital flora and fauna intrudes the poisoned landscape, paired with the computerised narration and otherworldly soundscape, blurring the threshold between the real and the simulated. Marxt, who is always searching for the remnants of human impact upon nature, renders the Salton Sea into a disturbing tale of the earth as a commodity and its consequent environmental catastrophe.

On the whole, *Imperial Irrigation* unearths frictions between human and geological existences through a digital reconfiguration of a manmade landscape turned into a blighted, barren land. An anthropogenic place for non-existence, a testimony of deforming ecologies to points of no return.

**12 XANDRA VAN DER EIJK**  
*Retreat*  
 2019

“Losing land to sea, losing ice to the sun, losing animals to history.”<sup>6</sup>

The loss of species, ecosystems, and landscapes as a result of climate change is not only an objective loss. As they are progressively disappearing, we also experience acute emotional responses of distress, worry, and helplessness, all of which conform a shared ecological grief. This growing and widespread feeling unveils the profound attachment to the environment and how significantly our cultural identities are knitted to it. *Retreat* is the result of Xandra van der Eijk’s aim to preserve the receding glacial landscape in the Swiss Alps. Serving as a visual reminder to the effects of ecological deterioration, as well as creating a ritual for both appreciation and mourning, the artist petrifies the landscape and its vanishing materiality.

Over the twentieth century, the temperature in the Alps has increased up to three degrees Celsius, double the global average. Equipped with two laptops, a 3D-scanner, and a smartphone, Van der Eijk travelled with her team to Switzerland to scan the topography of a glacier. A difficult and hazardous endeavor, the artist managed to take three scans of the bottom surface of the glacier to afterwards 3D-print three replicas of the ice chunks in bioplastic.

Glaciers have had a significant role in shaping the landscapes we are surrounded by. Their disappearance will have an equally major impact: floods, wipe-out of species and their habitats, unstable energy supply, and drinkable water shortage. In *Retreat*, there lies a call to action and an urgency to re-think the relationship with the environment, one triggered by a collective grief and based on ecological solidarity.

**13 HIMALI SINGH SOIN**  
*We Are Opposite Like That*  
 2019

Great Britain, mid-nineteenth century. A fear for an imminent glacial epoch begins spreading after a giant boulder, originally from the Norwegian archipelago of Svalbard, was found adrift in the British coast. Speculations of a new ice age and the consequent glaciation and erasure of the heart of the biggest colonial empire infused paranoia in the country. Coinciding with the first expeditions to the North Pole and the frequent disappearances and tragic outcomes

<sup>6</sup> From Xandra van der Eijk’s text on *Retreat*: <https://xandravandereijk.nl/projects/retreat>.

of the explorers, ominous publications and illustrations of an impending icy doom circulated on land. This tale of Victorian anxiety is the departure point of Himali Singh Soin's *We Are Opposite Like That* (2017-2022), an ongoing series of interdisciplinary works around mythologies for the poles, explored from the non-human perspective of ice as a witness of the geological transformations of the planet throughout millennia.

The film, shot during the artist's research residency in Svalbard, sets the endangered Arctic landscape as a milieu for non-human storytelling and a means to speculate on the collapse of the colonial enterprise and the decolonial possibilities thereof. Wandering across the remote scenery, the artist embodies a glimmery figure whose narration is accompanied by a foreboding soundscape comprising an original score performed by a string quartet, further layered with melodic fragments from the Victorian composer Edward Elgar's piece *The Snow* (1895).

*We Are Opposite Like That* considers a post-human future in a world reclaimed by ice where the colonial dichotomies of North and South collapse under the freeze of Western civilization. A likewise topological alarm on the receding glacial ecologies, the film conjures myths both as matter of fact and fiction to voice alternative worlding potentials.

Underland, Chapter 1  
*EMOTIONS ARE OCEANS*  
May 8 – June 26, 2022

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CAROLINA CAYCEDO  
MARJOLIJN DIJKMAN & TORIL JOHANNESSEN  
XANDRA VAN DER EIJK  
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HIMALI SINGH SOIN  
RIIKKA TAURIAINEN & PALOMA AYALA & ANNE-LAURE FRANCHETTE  
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