

Our Time on Earth

Exhibition contributors' statements

Sanctuary of the Unseen Forest

A statement by Marshmallow Laser Feast

Sanctuary of the Unseen Forest creates a moment of awe, felt when we embrace the presence of a majestic being, a giant Ceiba pentandra tree from the Colombian Amazon (located at 4°02'06.8 "S 70°04'44.1"W). The artwork promotes radical thinking on a new ecology in the age of the Anthropocene (the period of time when humans have had the greatest impact on Earth).

The artwork offers a shift to our daily perception: "as the victims of plant blindness, we are simply unable to notice [the] plant kingdom's liveliness, they are so different from us that we have to invent new ways of seeing and apprehending them."*

Sanctuary of the Unseen Forest seeks to foster a sense of belonging to a more-than-human world. We are intimately connected with the trees; they can be seen as an extension of our lungs in some ways. The oxygen they exhale flows into our tree-like lungs, moving from our heart centre outward, through complex branching arteries to feed every cell in our body.

As we peer through the layers of the tree, we uncover the vibrancy of the life that is flowing through and beyond its body. The movement of nutrients in its phloem (living tissue) pulse to your heartbeat and reverberate through the room. This pulsing draws you in on a journey from the tree's crown to its roots, climaxing in rivers of carbon in the soil. Here we meet the mycelial (fungal) bridge between land and sky. In this network of tree-supporting, mycorrhizal fungi we see that no self is bounded – we are all porous, enmeshed and entangled.

In this open way we may seek to live in the world, through a deep and wordless understanding of the roles that we play. The space becomes a sanctuary, a place to reflect and contemplate our role within the wider systems of nature.

**Radical Botany: Plants and Speculative Fiction* (2019) by N Meeker and A Szabari

The Ceiba pentandra and the Amazon Rainforest

The Ceiba pentandra tree's volumetric data, field recordings and ecological surveys were conducted by the Marshmallow Laser Feast team in 2020–2021 (at 4°02'06.8 "S 70°04'44.1 "W). The data collection is part of our ongoing digital preservation process for endangered ecosystems and the species that inhabit them.

The Ceiba pentandra is an emergent tree of the tropical rainforests and can grow to a height of 150 feet or more. These emergent trees rise above the canopy of the rainforest and provide a home for plants who are dependent on sunlight. Their branches provide a habitat for countless epiphytes (air plants), which provide food and shelter for many types of insects and animals.

Rainforests, like the rest of the natural environment, are part of the planet's life support system; an invisible world of interconnected systems and cycles that we all depend on, providing fresh air, clean water, fertile soil, nutritious food, rich biodiversity, a stable climate and a natural recycling system. If these systems and cycles are threatened, so are we.

Our collective future depends on us understanding our interconnectedness to the natural world, and for that we need to explore the world beyond our human senses. Bringing the invisible into view and exploring the symbiosis of everything can transform our understanding of the world – and how we interact with it.

Refuge for Resurgence **A statement by Superflux**

Welcome, we'd like to invite you to our dinner table set after the end of the world. Multiple species gather as equals to celebrate ecological interdependence in a new world – one where we can all prosper with resilience, adaptation and wild hope. This is *Refuge for Resurgence*.

We imagine our story to be a new kind of myth. The great oak table, 14 stools, plates, sets of ceremonial cutlery and the window view provide an opportunity to explore a journey from the destruction of the old to the resurrection of a new world. In the storytelling process, we create new rituals. This invites a shift in thinking. Moving our world from human-centred supremacy to mutual ecological respect and embracing a more-than-human future.

Our table guests represent a cross-section of life on a resurgent Earth. Some were once domesticated. Some may have been considered 'weeds', 'pests' or 'vermin' under human domination but now reclaim their rightful place in the ecological order. Ultimately, we wanted to give every species at the table the level of love, care and attention we give to ourselves.

Walking around the table, you'll meet three humans – a man, woman and child – and a fox, rat, wasp, pigeon, cow, wild boar, snake, beaver, wolf, raven and mushroom. Looking out of the window, you'll see a layered city – hot, wet, organic – submerged underwater.

Now, we invite you to explore each place setting – the finely detailed material, the audio, visual, and mythopoetic (myth-making) clues that give texture to this world's new folklore. We hope this invocation is evidence that other worlds are possible.

A statement by Sônia Guajajara and Célia Xakriabá, members of the Choose Earth collective

We are the Earth. We arise from the Earth and we return to it.

The Earth is within us.

The Earth is our sister, our daughter, our aunt, our mother, our grandmother. The earth is our womb, our food, our cure.

The power of our chants connects us to the charms of our ancestors. We are the ones who – through our hearts – hear the cry of the Earth. In the echo of this cry, the daughters and sons of the Earth cry too. We are the ones who no longer wish to remain deaf. Nor in silence.

We have seen daughters and sons die at the hands of the colonisers. We cry with the fire that burned Galdino; with the cowardice that stoned the baby breastfeeding its mother. With the genocide – of the black body, of Indigenous peoples.

We are the seed, the root, the forest, the rivers, the woods, the animals, the cosmos. Our chanting is ancestral. We never sing alone.

Smĩkra Wahikwa, 'The future is ancestral', as we say in the Xakriabá language.

To save the old is to save the new. You cannot cure evil if you insist on the innocuous remedy. There is no other way to save the forests, the voice of the Indigenous songs, Indigenous life itself, if not by the force of the fight.

Who are we? We are the cure, the active principle, the air that saves you. We are daughters and sons of ancestors who taught us 'that the limit of a land is in our consciousness'.

When we learn from the land, it is a book that never ends.

Hail our original peoples. The lungs of the world are Indigenous.

A statement by Selvagem

Ele atirou.
Ele atirou e ninguém viu.
Só Sete Flechas é quem sabe
aonde a flecha caiu.¹
Ponto do Caboclo Sete Flechas²

The caboclo³ is an enchanted manifestation of the Brazilian jungles. In Brazil, the Caboclo Sete Flechas [Seven Arrows] arises at the terreiros⁴ of Umbanda and Candomblé.

The seventh Flecha Selvagem [Wild Arrow] is the last of the audiovisual series created by Selvagem - Ciclo de Estudos sobre a Vida. Entitled The feral and the sphere, this arrow "landed" in London, at the Barbican Centre, incorporated to the exhibition Our time on Earth. This arrow crosses the Atlantic Ocean, taking the opposite route of the one taken during the Age of Exploration, aiming to touch civilised hearts and reverse the colonialist logic, that is still reproduced until today by the consumerist flow that devours the planet and makes merchandise out of everything, quoting David Kopenawa.

The feral and the sphere is, thus, a Selvagem [Wild] manifesto – a request, a demand, a claim, a plea – so that it becomes obvious, at last, that we integrate a wonderful living system and

¹ In English:

"He shot.

He shot and nobody saw.

It's only Seven Arrows who knows where the arrow fell." [free translation]

² The ponto is a music that invokes or praises the presence of a deity (entity) at the terreiro

³ A caboclo is a person of mixed Indigenous Brazilian and European ancestry. The etymology of the word is uncertain, but one supposition is that it comes from the Tupi word kari'boka, meaning "descendent from the white".

⁴ Terreiro designates the houses of worship where Candomblé or Umbanda rituals take place

that destroying it, by blindness and greed, it's the end of the world triggered by a group of humans.

The cognitive transformation of the capitalist desire of how to be in this world is fundamental, we must allow the forest to (re)infiltrate our senses.

The Symbiocene

A statement by Julia Watson

In the year 2021, Earth's dominant culture focused on future-oriented, colonial technologies to solve the climate crisis. They ignored Indigenous people's wisdom and their local technologies, thinking them primitive. However, a global decolonising uprising had begun. In the years that followed, the Indigenous peoples of the Earth – and their radical technologies that worked in harmony with nature – changed how civilisations designed infrastructures in symbiosis with the Earth's systems.

The Symbiocene (2021) is a future history, charting the evolution of this dramatic change in humankind's relationship with the planet – from extractive (over-exploiting natural resources) to symbiotic.

Working with Smith Mordak and Buro Happold, I invited friends from three indigenous communities to share their knowledge of building technologies that work with nature. We collaborated with members of the Khasis community in the north-eastern Indian state of Meghalaya, the Subak community of farmers in Bali, and the Ma'dan community of southern Iraq to look at how urban environments in 2040 could benefit from incorporating indigenous and local knowledge into contemporary designs.

Through reigniting respect for traditional knowledge of the beautiful and complex biosphere, *The Symbiocene* (2021) explores different ways of existing on, and reconnecting with, Earth while also examining the role technology has to play in deepening our understanding and connection to the natural world. Through conversations with the Khasis, Subak and Ma'dan communities, *The Symbiocene* invites us to rediscover the human ingenuity of the ancient past, to find a future in harmony with nature.

Planet City

A statement by Liam Young

As a consequence of hundreds of years of colonisation, globalisation and never-ending economic extraction, we have remade the world from the scale of the cell to that of the tectonic plate. But what if we radically reversed this planetary sprawl? What if the world retreated from our vast network of cities and entangled supply chains into one hyper-dense metropolis housing the entire population of Earth?

Planet City is a film and book set in an imaginary city for ten billion people, the entire population of Earth, where we surrender the rest of the world to a global wilderness and the return of stolen lands. The film follows a continuous festival procession dancing through the city on a 365-day loop. Each day it intersects with a different carnival, culture and celebration, changing the beat as it goes, endlessly cycling through new colours, costumes and cacophonies.

Although wildly provocative, *Planet City* eschews the fantasy of designing a new world order. This is not a neo-colonial masterplan imposed from a single seat of power. It is a work of critical architecture – a speculative fiction grounded in statistical analysis, research and traditional knowledge. It is a collaborative work of multiple voices and cultures, supported by an international team of acclaimed environmental scientists, theorists and advisors.

In *Planet City* we see that climate change is no longer a technological problem but rather an ideological one, rooted in culture and politics. This is a fiction shaped like a city. *Planet City* is an extraordinary image of tomorrow and an urgent examination of the environmental questions facing us today.

Queer Ecology

A statement by Institute of Digital Fashion (IoDF)

Queer Ecology is an analytical approach to the systemic condition of reality. It is based on acknowledging the permanent warping/twisting of the contact between living beings and objects/all kind of bodies.

The queer or warped condition of beings emerges from the very unstable fabric/quality of the complex networks where they participate. It also arises from their fluid, anxious and erotic internal forces, coming from their desire to explore the joy of creative relationships.

The queer also suggests, with a twinkle of the eye, that there is a sticky and organic condition in everything – an ecological glue, permanently operating through sex and evolution, shared among sentient beings but expanding towards technological devices in the form of enhanced prosthetics.

A queer eye sees, almost unwillingly, the permanent tremble/shiver that inhabits the current order of things – slightly unsettling, tempting and seductive, risky, but powerfully transformative of our love towards everything in the universe.

At the Institute of Digital Fashion, our aim is to use technology as a democratic tool for change. This installation gives you the opportunity to experience wholeness, otherness and collectiveness – the whole spectrum that queerness occupies. The shared experience unites participants and explores the fundamentals of nature.

Queer Ecology delves into the idea of individualism. It asks you to fall into and experience yourself as matter, beyond your physical body, beyond the binary framework of human society, and beyond our societal labels into the collective universe.

A Biological Future for Fashion

A statement by BIOFABRICATE

How do we balance our love of fashion with our love for our planet? The fashion industry has a huge impact on the environment, from deforestation and polluting waterways, to being responsible for emitting 4% of global greenhouse gases. Where can we turn to for more sustainable alternatives to plastics and animal leather?

We believe the natural world can help us find the answers. Take a walk in nature. Everything you see is being grown from renewable resources like the sun, air, water and nutrients from the surrounding environment. Rather than turning to fossil fuels or animals to provide materials for our clothes, shoes and handbags, we can harness life itself.

Future fashion will come from surprising sources. Living organisms such as algae, bacteria and fungi will be the new origins of style! They enable us to grow materials in the same way nature does.

A Biological Future for Fashion takes you on a journey inspired by the wonder of our living planet to reimagine how we can create fashion using biology. The root system of mushrooms can grow into a new kind of leather. Taking inspiration from spider silk, bacteria can produce the softest, strongest fabrics. And, with the help of bacteria, we can even transform the carbon emissions from a steel mill into fabric. What if, instead of destroying the natural world, the fashion industry could regenerate it?

Sharing Prosperity

A statement by Professor Henrietta Moore, Institute for Global Prosperity

For roughly 300 years – a rather brief moment in the history of humans in the world – from the invention of Boyle’s air pump to Hiroshima, certain societies thought of themselves as masters of their own fate. Now matters are much less certain.

It is no surprise then to find philosophers, anthropologists and scientists turning against human exceptionalism and looking to alternative ways of being that speak of engagement and negotiation with other living and sentient beings, of profound connection between the organic and the inorganic, of self-organising systems and the ceaseless vitality of life itself. Many communities around the world have long thought of landscapes, plants, mountains, nonhuman ancestors and a variety of physical phenomena, beings and entities as having consciousness and intentionality.

There are many ways in nature to co-operate rather than compete. Harnessing collective wisdom is a feature of many forms of interaction including decision-making, sharing resources and information. Humans it turns out are not so good at sharing with nature, preferring to extract, exploit and repurpose. How might we rethink forms of exchange with all the others with whom we share the planet? Can we build a relational economy based on radical solidarity with the world we inhabit and what would be its principles, constraints and pleasures?

Where Does Your Building Come From?

A statement by BuildX Studio

In the same way that we know what food in the supermarket is good for us, we now know whether it is good for the planet. Labels show us how much fat something has, how it was produced and, nowadays, how healthy it is for the environment. This empowers us to make our own choices and contribute positively towards our time on Earth.

We believe we can also have a say in the materials used to construct our buildings. Because they are just as important for our planet's health – and our own. For example, concrete accounts for 8% of global carbon emissions and is the most consumed substance on Earth after water.

Yet some materials can help reduce our environmental footprint and even enhance our quality of life. Using low-carbon natural materials like wood or earth in buildings can improve indoor air quality, regulate humidity and reduce people's stress levels.

We imagine a future where we grow our buildings like we grow our food. *Where Does Your Building Come From?* shares the journeys of three materials: from the forest to the building frame, from the earth to the building block, or even from the mushroom to the building panel! You can see, touch, smell and imagine a future where the materials we use for our buildings are healthy for us and the planet. It is time to start demanding a future where buildings are natural, low-carbon and sustainable for life on Earth, for centuries to come.

Soil

A statement by George Monbiot

When you dig up a handful of soil, at first it doesn't look like much. But when you view it through a strong magnifying lens, it springs into life. An amazing range of tiny creatures scuttle and wriggle out of the light. Within a few minutes, you might see more of the major branches of life than on a week's safari in Tanzania.

Lacing through the soil are tiny root hairs, surrounded by crystal threads –strands of fungi that help plants draw nutrients from the earth. Looking at soil through a much stronger lens, you may notice that these root hairs are surrounded by crowds of bacteria. Plants feed these bacteria with sugars and 'speak' to them in a complex chemical language. In return, the bacteria supply the plants with minerals, destroy diseases and support their immune systems.

Soil is like a beaver's dam or a wasp's nest; it is a biological structure, built by microbes and tiny animals. The features that make it useful to us – its fertility, stability and ability to hold water – are created by these life forms. We are only beginning to understand how this crucial system, which supplies 99% of our food, works.

Soil is among the most fascinating and complex of all ecosystems, yet we treat it like dirt. We take it for granted, and erode, crush and contaminate it. This project aims to inspire a new respect for the narrow layer between rock and air, on which our lives depend.

2040—Sensible Zone

A statement by Territorial Agency

2040—the last decades have been times of deep convulsions and upheavals. Earth moved against the world, and we are now trying to find new ways to be in it.

2040—There is a new alignment to the Earth, with the emergence of a new space of action: the Sensible Zone. The Sensible zone is where the Earth System is most sensitive to small

perturbations. It is where the biosphere interacts with the ocean, atmosphere, and land to maintain Earth in homeostasis and allow inhabitation.

The Sensible Zone is the space between -200m and +200m where marine and land life dynamics are most intensely interconnected, and where the technosphere is most vividly interfering with the Earth's dynamics. It is the area of most rapid transformation, with urbanization, infrastructure, transport and extraction processes being the most intense.

2040—the Sensible Zone is where humans are now interacting with the biosphere in more intense ways. We are augmenting its processes and dynamics, mainly to capture carbon. They reshape multiple knowledges of spaces for complex negotiation between different forms of intelligence. Models, remote sensing, AI, individual and collective monitoring are at the side of this process.

2040—the Sensible Zone is the most senses, measured and surveyed part of the planet, where technologies augment human capacity to become sensitive to the multiple processes of the Earth. The Sensible Zone is where we discern the new forms of agency of the planet.

2040 - Sensible Zone is a new commission based on Territorial Agency: Oceans in Transformation, a research project commissioned by TBA21 – Academy

© Copyright Territorial Agency

Wallmakers

India's traditional handloom weavers use fabric to create artworks that express their cultural identity. Chendamangalam in southern India is famous for this craft, with nearly 600 weavers. In 2018, flooding almost washed away the area's entire hand-loom industry, as well as lives and homes. Material worth hundreds of thousands of rupees (thousands of pounds), equipment, looms, yarn and furniture were destroyed beyond repair.

Wallmakers transforms discarded handloom fabric from these floods into seats and screens. Using layers of coconut fibre mesh wrapped around scrap reinforcement bars and covered with lime, these cloth sculptures are a floating reminder of the fast-approaching consequences of climate change.

Stories of Change **A statement by The Earth Issue**

Since 2015, The Earth Issue has shared stories from artists, activists and change-makers around the world. We focus on environmentalism that recognises that humans and nature are deeply connected. We must consider both when we speak about our planet's well-being.

Unfortunately, some people and societies are more severely affected by climate change than others. Therefore, we aim to include many different perspectives in conversations about environmental activism – especially those of vulnerable and marginalised communities.

In *Stories of Change*, we brought together 10 'storytellers' – people or groups who are fighting for a brighter future. Some are photographers or film-makers, others are activists and youth leaders. They are all dedicated to creating more inclusive and diverse conversations in global environmental movements. We asked each storyteller to share a short message about their work and the changes they wish to see in the world.

These 10 videos weave together virtually filmed interviews with archival footage and imagery filmed by our team. This creates a poetic montage of overlapping imagery, representing the diversity and the multi-layered nature of the storytellers' messages.

We hope these stories will inspire you to reflect on how you can use your voice to bring about positive change.

Sonic Waterfall

A statement by Silent Studios

Sonic Waterfall is a sound and light installation that creates a calming environment using sonic frequencies, relieving anxiety and creating a deep state of restoration, focus and reflection.

At the heart of the installation is a 5-metre-high sonic waterfall that moves red noise frequencies and processed field recordings from high to low through 18 loudspeakers. Red noise has higher energy at lower frequencies, making it deeper than pink or white noise. Examples of red noise include thunder and powerful waterfalls. The deepness of red noise can help older adults with dementia, hyperactive children and students' ability to study.

The waterfall embodies our most critical life element – water. Water maintains life by repairing our cells, keeping every living being on Earth alive – every human, animal and plant.

This large-scale installation is inspired by the artist's work with Damon Albarn in Iceland – *The Nearer The Fountain, More Pure The Stream Flows*. It's also inspired by a visit to the majestic Skógafoss waterfall, where visitors are surrounded by a cloud of spray, sound and refracted light. According to legend, a Viking named Thrasi hid his gold under the falls. Many have tried to find the chest of gold, and a young man almost succeeded. He tied a rope to the chest's handle ring and pulled. He only retrieved the ring, which was later used for the church door at Skógar.

Sonic Waterfall continues our ongoing exploration into the human condition through multi-sensory, collective experiences.

Life Forces

A statement by Tin&Ed

We are Tin&Ed, artists and creative technologists based in New York. *Life Forces*, an interactive digital installation, is inspired by dioramas found in natural history museums – places of history and imagination where flora and fauna (plants and animals) meet.

This projection features a scrolling, never-ending landscape, made up of mossy rocks, trees, flowers and twigs. Its shifting form is made from 3D scans of plants found in forests, meadows

and deserts, as well as 3D sculpted fungi enlarged to human scale. The pulsing lights represent trees communicating without words – just like they do all around us each day – using their roots and mycelium (fungal) networks, also known as ‘Earth’s natural Internet’.

This landscape moves with you, the viewer. It reacts to your body in real time. Powered by an iPad, it spots movements through body-tracking technology, and alters itself to match. As you wave your arms, dance, jump or twirl before the screen, you’ll see your movement mirrored by moving pollen, spores, slime mould and mushrooms. You might even become part of a dancing rock tower.

Our message here is simple and urgent: every living thing is interconnected. We are part of a bigger Earth. Fragile bonds tie our actions to the natural world, like networks of invisible veins.

Eyes as Big as Plates

A statement by Karoline Hjorth and Riitta Ikonen

Since 2011 we have travelled randomly across five continents, creating over 100 portraits in collaboration with weavers, village chiefs, librarians, surfers, reindeer herders, opera singers, drivers, aboriginal artists, 90-year-old parachutists, wrestling coaches, housewives and farmers. *Eyes as Big as Plates* has developed as a collaboration between the two of us, each local collaborator and their surroundings, to understand how modern humans belong in nature.

Ten years ago we started investigating folk tales in a small coastal city in Norway, looking at how they explain natural phenomena (events) through human characters. We reasoned that working with older local collaborators would get us closer to the ‘talking rocks’ of these stories. A decade later we are still searching, although our quest has evolved into exploring the possible ways that art can propel change, especially in the current climate emergency.

Each image in this series is based on a conversation with a collaborator. It presents a solitary figure in a landscape, dressed in a wearable sculpture made from natural elements from their surroundings.

We are dedicating our work to the three hardworking Fs of the more-than-human world; flora, fauna and funga (plants, animals and fungi), along with the 120 human collaborators we have had the honour of meeting so far.

Wither

A statement by Thijs Biersteker

A slice of rainforest disappearing at the Amazon deforestation rate.

This slice of digital rainforest disappears in front of your eyes at the rate of the deforestation that’s happening right now. Every leaf that becomes transparent in this artwork marks the loss of 128 square metres* of rainforest disappearing at this moment. A baffling 641 square metres of ancient rainforest is disappearing each second.

This awareness artwork sets out to help you imagine the sheer scale of what is being lost at this moment in a place where no one is there to watch. As *Wither* updates every time new data is available, it becomes a living monument to the loss of Amazon biodiversity happening at this very moment.

The deforestation data is provided by the ongoing partnership between the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the artist. It reflects the Brazilian Amazon, where 71% more deforestation, on top of already immense deforestation rates, was detected in 2020–2021. This was caused by a lack of supervision due to the Covid crisis.

Wither is produced by Woven Studio in a circular (reusing, repairing, refurbishing and recycling as much as possible) and low emission way.

*Based on data from July 2020 to July 2021.

The Ideal City 2040

A statement by Space10

Imagine if we could end the climate crisis in one generation while increasing the quality of life for billions of people. We believe we can – simply by rethinking our cities.

Our biggest challenge today is how to meet the needs of all people within the means of our planet. Cities are at the heart of the problem. Here is where 78% of the world's energy is consumed, and more than 60% of the world's greenhouse gas emissions are produced.

But cities are also at the heart of the solution. More than 55% of the world's population lives in cities. Around the world, another 1.5 million people move into cities every week, in search of a better life. If we put our knowledge into action, we have an opportunity to make our cities into places that work better for more people – and for our planet.

Cities that are greener, healthier and more sustainable. Cities that provide more opportunities for a wider range of people. Cities that foster community, creativity and sharing. Cities that are more resilient and productive, while they tackle the climate crisis head on.

All this is possible today.

With *The Ideal City 2040*, we aim to empower you with courage and hope for new futures. What do you care about? How would you like the ideal city to be?

Noise Aquarium

A statement by Victoria Vesna

80% of the air we breathe is produced by sea-based plankton – a key part of both the marine food chain and the Earth's ecosystem.

Over the last five years I have become enthralled and enchanted by the beauty and complexity of tiny oceanic creatures called plankton. I am amazed that every other breath we take is

produced by them. We all know that whales and dolphins are affected by underwater noise, but what about plankton? How is noise pollution affecting these micro-creatures?

To underscore the importance and the beauty of plankton, *Noise Aquarium* shows seven species magnified to the size of whales. You can interact with the enlarged plankton, surrounded by microplastics and the underwater noise from humans' sonar, shipping vessels and fossil fuel digging.

The noise disappears when there is no movement. Then, we hear whale calls reminding us about the complex interconnections of the living systems in Earth's seas, rivers, and lakes.

Plankton-producing oxygen is endangered. The urgency of this message has resulted in different versions of *Noise Aquarium* – from video projections to fully immersive virtual reality (VR), augmented reality (AR) prints and online collective meditations.