

## David Haines

Born 1966 London, UK. Lives and works in Colomatta/Blue Mountains, NSW.  
Pronouns: he/him

## Joyce Hinterding

Born 1958 Naarm/Melbourne, Vic. Lives and works in Colomatta/Blue Mountains, NSW.  
Pronouns: she/her

### *Encounter with the Halo Field* 2009–2015

single-channel video, colour, and sound  
5:00 minutes

Courtesy of the artists and Sarah Cottier Gallery, Sydney.

Every second, we are immersed in a turbulent sea of invisible electromagnetic waves. This brief but evocative video by artistic duo Haines and Hinterding makes visible the fact that energy is everywhere. There is a hidden vibratory world that permeates our bodies and the planet: we are, quite simply, electric beings.

Set at dusk, *Encounter with the Halo Field* resembles a high-voltage electromagnetic field experiment. The artists perform a strange choreography with the suburban landscape and its electrical grid, brandishing the florescent lights that are ubiquitous within office settings. Holding the lights aloft, the artists attract and channel the electrical field emanating from high-voltage transmission lines in North Lawson, NSW, illuminating the lights and making them glow. The soundtrack was also captured in the Blue Mountains during two field recordings using very low frequency (VLF) antennae. Reminiscent of high-pitched twinkling and crackling sounds, the soundtrack makes audible what the illumination of the lights makes visible: the electromagnetic fields that surround us.

The artists' figures strike dramatic silhouettes against the landscape, appearing to possess some supernatural power to conjure and shape energetic forces. We have entered an unprecedented geological epoch known as the Anthropocene, shaped not by the forces of nature but by human intervention. This predicament is almost entirely connected to the way we extract, produce, and utilise energy.

## George Tjungurrayi

Born in 1947 Kiwirrkurra, Gibson Desert, WA. Pintupi people.  
Lives and works in Kintore, NT, and Kiwirrkura and Warakuna, WA.  
Pronouns: he/him

### *Tingari* 2004

synthetic polymer paint on linen

Collection of The University of Queensland, purchased 2007.

George Tjungurrayi is a painter renowned for his shimmering brushstrokes and linear compositions that reverberate with optical intensity. For the artist, they evoke the sacred energy fields of his ancestral Pintupi Country where he spent his earlier years before walking out of the so-called Gibson Desert. In 1976 he commenced painting for the Papunya Tula Artists as an apprentice to the original practitioners of the Western Desert art movement, before coming to prominence in the late 1990s.

This mesmerising painting entitled *Tingari* is characteristic of Tjungurrayi's practice. It depicts the ancient Tingari cycle, a creation story, world view, and system of lore composed of a vast network of Dreaming songlines. The undulating desert topographies of the region are articulated by geometric patterns in restrained monochromatic tones, conveying physical, cultural, and ancestral understandings of Country.

The Tingari cycle details the movements of the ancestral beings who traversed the vast desert region, performing rituals and creating Country. It encompasses traditional stories deeply rooted in sacred lore, and song cycles learned by Pintupi Elders relating to ceremony and social structures that provide the foundation of traditional Pintupi culture and are kept purposefully obscured to the uninitiated.

## Diane Borsato

Born 1973 Tkaronto/Toronto, Canada. Lives and works in Tkaronto/Toronto, Canada.  
Pronouns: she/her

### *Gems and Minerals* 2018

single-channel video with colour, sound, and captions

25:01 minutes

Produced, written, and directed by Diane Borsato

Performers: Lukas Malkowski, Ralista Rodriguez, Valerie Calam and Sage Lovell

Camera and post-production: Jason Tan

Courtesy of the artist, Toronto, Canada.

*Gems and Minerals* was filmed among the glass vitrines and museological displays of the Royal Ontario Museum in Toronto. Beyond the glittering crystals, geological specimens, and ambient hush of visitors, museum guides recount entangled narratives in American Sign Language. One performer emotively uses her body to communicate the settler-colonial lineages of mineral extraction, its relationship to mine violence, toxic contamination, and land theft. Other stories are quirky and imaginative, infused with humour and hyperbole. Throughout, a sole museum guide enacts a private, ritualistic dance, contorting her body in mimicry with the specimens—such as a towering amethyst geode—as if to commune with their energetic power.

Made in collaboration with Deaf Spectrum Canada and told through gesture, these stories convey alternate forms of knowledge and experimental ways of knowing. They function as a subtext that destabilises the dominant narratives of the museum as a cultural authority. Articulating the tension between economic growth and ecological care, the performers reframe the mine as a site of exploitative power relations between indigenous custodians and global corporations that extract geological resources and simultaneously sponsor museum exhibitions. While *Gems and Minerals* was produced in North America, its presentation in a Queensland context resonates with the political rhetoric of the Australian imaginary—the “lucky country”—a land of prosperity contingent on its status as the world’s greatest quarry.

*The artist would like to acknowledge the support of the Royal Ontario Museum Teck Suite of Galleries: Earth’s Treasures, Josslyn Johnstone (ROM Communications), Catherine Dunnell (ROM Minerology Technician in the Department of Natural History), Deaf Spectrum (Consultation and captioning), Amanda Cachia (Commissioning Curator for the Owens Art Gallery), Jacqueline Bell (Curator of the Walter Philips Gallery at the Banff Centre for the Arts), Toronto Dance Theatre, and the Canada Council for the Arts. Thanks to the performers and crew who brought tremendous knowledge, insight, and expression to the final work.*

## Elise Rasmussen

Born 1977 Amiskwaciy Waskahikan/Edmonton, Canada. Lives and works in Tovaangar/Los Angeles, USA.

Pronouns: she/her

### *In the Valley of the Moon 2022*

16mm film transferred to 4K, colour, 4 channel sound, 4:3

20:27 minutes

Courtesy of the artist, Tovaangar/Los Angeles, USA.

Elise Rasmussen's new film reflects on the paradox of green energy futures in relation to late capitalism and the extraction of minerals. The film is primarily set in the lithium-rich salt flats of the Atacama Desert in Chile, and near the largest global manufacturer of Electric Vehicles: the Tesla Gigafactory located in Sparks, Nevada. Rasmussen employs analogue film techniques, combined with archival material, and screenshots of online content such as Tesla founder and tech billionaire Elon Musk's Twitter feed.

*In the Valley of the Moon* is centred around the mining histories of Atacama and its ongoing colonial legacies of extraction. Narrating the video in an autobiographical style, the artist acknowledges her own complicity as a white-settler filmmaker. Rasmussen weaves together the Atacama, the global appetite for minerals, and the mythology of infinite growth. In the early twentieth century, Atacama was mined for sodium nitrate for fertiliser related to food production and chemical warfare. Nowadays, lithium evaporation is integral to the batteries of smartphones, mobile computers, solar panels, and electric vehicles.

The 'lithium triangle', composed of Chile, Argentina, and Bolivia, provides half the world's lithium resources. The evaporation processes used in its extraction drain scarce groundwater, impacting fragile ecosystems, ancient ways of life, and potable water for indigenous communities. In this context, Big Tech companies such as Tesla resemble a neo-colonial force within the region; this new kind of frontierism is driven by an unquenchable global desire for technology and, paradoxically, renewable energy for the Global North.

*In the Valley of the Moon* complicates the narratives around renewable energy futures. While the electrification of our global transport and energy system is vital to reducing carbon emissions and reaching net zero, Rasmussen cautions against substituting one exploitative and environmentally ruinous extractive industry with another.

## Dane Mitchell

Born 1976 Tāmaki Makaurau/Auckland, Aotearoa/New Zealand. Lives and works in Naarm/Melbourne, Vic.

Pronouns: he/him

### *Post hoc (List of Lists) 2022*

printer, paper, steel, computer, vinyl

Courtesy of the artist, Naarm/Melbourne, Vic.

Dane Mitchell's *Post hoc (List of Lists)* reads as an inventory of loss, enumerating countless phenomena that once existed but are now no more. In this work, a printer expels a continuous paper scroll of 260 meticulously researched lists across the exhibition's five-month duration, gradually amassing on the gallery floor. A corresponding index is printed on the adjacent wall.

Resembling an Anthropocene version of the library of Alexandria, the installation recalls millions of vanished, absent, withdrawn and obsolete things: extinct mammals, black holes, crashed stock markets, dead words, obsolete smartphones, failed utopias, submerged atolls, abandoned oil rigs, past geological eras, extracted minerals, discontinued airlines and many more. *Post Hoc* elicits questions around the connections between these disparate events and vanished 'past things', registering their passing without necessarily calling up judgement. It highlights the constant circulation of matter and energy—which cannot be created or destroyed—and their transformation into flows of objects, organisms, entities and phenomena: a principle known as the Law of Conservation of Mass.

The artwork's title 'Post hoc' is a Latin phrase that translates to 'after this'. It describes the assumption that an occurrence has a logical relationship with the event it follows. *Post hoc's* unrelenting roll call indirectly reveals the march of progress and the patterns of consumption that have accumulated into our present ecological predicament. *Post hoc* suggests 'after this what's next?', prompting us to consider circular economies that constrain the usage of energy and materials within the boundaries of our planetary life-support system and the case for degrowth.

## Will Benedict

Born 1978 Tovaangar/Los Angeles, USA. Lives and works in Paris, France.  
Pronouns: he/him

### *All Bleeding Stops Eventually* 2019

digital video, colour, sound (6 parts)  
2:40 minutes

Courtesy of the artist and TBA21 Academy, Venice, Italy.

*All Bleeding Stops Eventually* is Will Benedict's artistic response to the Intergovernmental Panel on Climate Change (IPCC's) *Special Report on the Ocean and Cryosphere in a Changing Climate* (2019). In this humorously sardonic work, Benedict argues for deeper connections between the human and non-human in cross species solidarity. The title of the work is a surgical aphorism that means doing nothing also has consequences.

Here, four anthropomorphised animals—a polar bear, puffer fish, cat, and Macaque monkey—have been given the power of speech to tell us about their opinions on the state of humanity. They are joined by the sun and the moon, and together resemble unlikely soothsayers. Speaking out from the gallery walls, they respond candidly to our planetary predicament, urging us to decentralise human experience and instead recognise that we are part of an interdependent ecology.

## Megan Cope

Born 1982 Meanjin/Brisbane, Qld Quandamooka people. Lives and works between Minjerribah/Terrangeri/ North Stradbroke Island and Meanjin/Brisbane, Qld  
Pronouns: she/her

### *Untitled (Death Song) 2020*

instruments made of repurposed soil augers, oil drums, with violin, cello, bass guitar, piano strings and site-specific, locally sourced debris

Musical director: Isha Ram Das  
Collaborative maker: Hoshio Shinohara

Courtesy of the artist and Milani Gallery, Brisbane.

*Untitled (Death Song)* is a sound installation by Quandamooka artist Megan Cope that acts as a lament, a harbinger of death, and a warning for the future. The work takes its first note from the haunting cries of the yellow-eyed Bush Stone-curlew, a bird known for its distinctive call, an eerie “weer-lo” sound often mistaken for a crying baby or wailing woman. An endangered species within certain Australian states due to land clearing, habitat loss and predation, the bird’s threatened status registers ongoing ecocide and the impact of settler-colonial land management.

*Untitled (Death Song)* is composed of found objects traditionally used in mining and extractive processes that have been reimagined as instruments. Rusted industrial drills, scaffolding, and oil drums are assembled alongside geological specimens retrieved from the Earth’s crust during prospecting for mineral and energy resources. A series of strings borrowed from orchestral instruments such as violins and cellos are tethered and strung taut across the objects, transmitting their hidden sonic potential through the energy of sound and frequency.

In this work, Cope explores how sound can enter the body in ways that other art forms cannot. She asks “If the land could sing, what would it sound like?” *Untitled* is a work that calls for deep listening, drawing on embodied knowledge through the affective power of sympathetic vibration.



*This project has been assisted by the Australian Government through the Australia Council for the Arts, its arts funding and advisory body.*

## **Girringun Art Centre**

Established in 2008. Located in Cardwell, Qld Girringun represents artists from nine Traditional Owner groups: the Nywaigi, Gugu Badhan, Warrgamay, Warungnu, Bandjin, Girramay, Gulngay, Jirrbal and Djiru people.

### **Eileen Tep**

Born 1958. Jirrbal people. Lives and works in the Davidson Road area, Qld.

#### *Bunyaydinyu Bagu 2012*

ceramic, cable

### **Daniel Beeron Galaman**

Born 1947. Girramay/Jirrbal people. Lives and works in the Davidson Creek area, Qld.

#### *Bagu 2011*

ceramic, cane

### **Debra Murray**

Born 1977 Murray Upper, QLD. Girramay/Jirrbal people. Lives and works in Murray Upper, Qld.

#### *Bagu 2011*

ceramic, string, wool

### **Doris Kinjun**

Born 1947 Tully River area, QLD. Gulngay people. Lives and works in the Tully River area, Qld.

#### *Bagu 2010*

ceramic, cane

### **Davina Harries**

Born 1990 Murray Upper, Qld. Girramay people. Lives and works in the Jumbun Community near Murray Falls, north-west of Cardwell, Qld.

#### *Bagu with Jiman 2010*

ceramic, cane and milky pine wood

### **Judith Henry**

Jirrbal people. Lives and works in Tully, Qld.

#### *Traditional Bagu with Jiman 2011*

ceramic, milky pine wood, string

### **Clarence Kinjun**

Gulngay people. Lives and works in the Tully River area, Qld.

#### *Bagu with Jiman 2010*

ceramic, milky pine wood, string

All works Collection of The University of Queensland, purchased 2011.

This series of ceramic forms known as *Bagu* and *Jiman* refer to an ancient fire technology. For the nine Traditional Owner groups of Far North Queensland, they embody the spirit of fire, pertaining to important cultural knowledges around caring for Country. *Jiman* (firesticks) were traditionally used to generate sparks, while *Bagu* transported hot coals through the wet, tropical rainforest to maintain fire for survival.

These works represent a contemporary re-thinking of ancient craft practices that evidence the resilience and continuation of culture. Presented as wall-mounted and freestanding sculptures instead of tools, they have been hand built in clay and kiln fired, then applied with commercial acrylics in accordance with customary protocols. *Bagu* were traditionally painted with a mixture of charcoal combined with wallaby blood and carved from the boogadilla (milky pine tree), while *Jiman* was crafted from mudja (wild guava tree).

Continuing ancient traditions through contemporary creative approaches, the artists from the Girringun Art Centre demonstrate the significance of caring for fire. Beyond providing warmth and sustenance, the advent of fire brought community connection, ceremony, the ability to craft weapons, ward off predators and care for Country through cultural burning.

## Jack Green

Born 1953 Wakaiya Country, Soudan Station, NT. Garrwa people. Lives in Borroloola, Southwest Gulf of Carpentaria, NT.  
Pronouns: he/him

### *Sucking the Life from Our Hearts 2019*

acrylic on canvas

Purchased, 2020. Collection of The Australian National University.

Courtesy of the artist and The Australian National University Art Collection, Ngambri/Canberra.

Jack Green is a Garrwa Elder from Borroloola in the Gulf of Carpentaria in the Northern Territory. Green's artistic practice is an extension of his work as a land rights campaigner and these paintings are a call for justice. Rendered in acrylic on canvas in a figurative style, they advocate for sovereign Aboriginal custodianship of ancestral Country, while functioning as a powerful mechanism of legal testimony and protest. His paintings have been submitted in court as evidence for an enquiry into the destruction of cultural heritage sites on Garrwa Country.

As a cultural authority, Green's visual art practice reveals a continuum of settler-colonial occupation and unequal power relations. For decades, he has drawn attention to the ongoing fracking and drilling for gas at the McArthur River zinc-lead mine, situated on Gudanji Country. For Green and the four clans of Gudanji, Garrwa, Marra and Yanyuwa peoples, the extractive legacies of mining company Glencore have environmentally devastated and spiritually desecrated Country, impacting sacred sites and songlines, disrupting customary lore and polluting lands, waters, and food sources with toxic waste.

“In the top left sit government people; they far away, making the decision to take our Country and call it Australia. Then come the miners and settlers looking to take over our land. Us Aboriginal people were there ready to spear them to protect our Country but they just keep coming, and they still coming today, more and more of them with their drill rigs and mining trucks, diggin' our scared places, suckin' the life from Garrwa, Gudanji, Marra and Yanyuwa Country making it unsafe for us to hunt and fish and live in our own Country.”

—Jack Green, 2019

## Jack Green

Born 1953, Wakaiya Country, Soudan Station, NT. Garrwa people. Lives in Borroloola, Southwest Gulf of Carpentaria, NT.  
Pronouns: he/him

### *Desecrating the Rainbow Serpent 2014*

acrylic on canvas

Collection of The Australian National University.

Courtesy of the artist and The Australian National University Art Collection, Ngambri/Canberra.

“At the top of the painting, guarded by the Junggayi (Boss for Country) and Minggirringi (Owner of Country), are the eyes of the Rainbow Serpent. The Junggayi and Minggirringi are worried that the Snake is being desecrated. The Rainbow Serpent is one of our spiritually powerful ancestral beings. It rests under McArthur River in the southwest Gulf of Carpentaria. Under our Law, we hold responsibility for protecting its resting place from disturbance, and responsibility for nurturing its spirit with ceremony and song—just as our ancestors have done for eons. The left of the painting represents a time when we had authority over Country. We lived on Country, hunted, fished, and gathered our food. We used fire to care for Country, and most importantly, we protected our sacred places within it. By protecting and nurturing our sacred sites, we protect and nurture our spirituality and our wellbeing as Gudanji, Garrwa, Marra and Yanyuwa peoples. The right of the painting represents the present time [2014] when we still have no authority over all of our ancestral Country. The artwork illustrates how the resting place of the Rainbow Serpent looks now. It’s been smashed by McArthur River Mine. Country, torn open to make way for one of the largest lead, zinc and silver mines the world has ever seen. To do this, they cut the back of our ancestor—the Rainbow Serpent—by severing McArthur River and diverting it through a 5.5-kilometre diversion cut into our Country.

A lot of people have died because of the desecration of our sacred places. Interfering with these powerful places, it pulls people down. The stress of seeing our land suffer means we suffer. Men tried to fight but got pulled down. I might be the next one, or the Junggayi will go down. The mining executive might go too. All this pressure, it’s no good.”

—Jack Green, 2014

## **Mavis Ngallametta (Waal-Waal Ngallametta)**

Born 1944. Kugu-Uwanh people, Putch clan, Aurukun, Cape York Peninsula, QLD.  
Lived and worked in Pundum north of Kendall River, near Aurukun, QLD. Died 2019.  
Pronouns: she/her

### *Nhoom (After the Bush Fire the Green Shoots Sprout)*

2007

synthetic polymer paint on linen

Collection of The University of Queensland, purchased 2009.

The late Mavis Ngallametta was a traditional Elder of the Putch clan and cultural leader of the Wik and Kugu peoples of Aurukun. Her painterly language often combined macrocosmic and microcosmic views, depicting aerial perspectives that zoom in on the rich biodiversity of Far North Queensland in figurative detail. Ngallametta's works were often executed with natural pigments sourced from Country such as white clay, ochre and burnt hibiscus flowers turned into charcoal to make black.

In *Nhoom (After the Bush Fire the Green Shoots Sprout)*, Ngallametta employed synthetic polymer on canvas to conjure themes of destruction and renewal in relation to ecological cycles. Ngallametta was a song woman, and the painting has a vibrational quality generated by the constellation of dots that pulse across the picture plane in contrasting tones of earthy brown, fiery orange and white. Green hues evoke the emergence of new shoots that arrive after the bush fires. Here, the artist reminds us of the resilience of fire-resistant plants that depend on fire as an essential part of their life cycle to release and germinate new seeds.

Destructive wildfires are occurring in increasing frequency across the globe due to climate change, incinerating precious carbon sinks and contributing additional emissions. By contrast, Ngallametta's painting exemplifies the regenerative role that Aboriginal land management practices, known as back-burning, can play in mitigating wildfires during the dry season, and stimulating the regrowth of Country.

## **Eglė Budvytė**

Born 1982, Lithuania. Lives and works in Vilnius, Lithuania, and Amsterdam, The Netherlands.  
Pronouns: she/her

### *Songs from the Compost: Mutating Bodies, Imploding Stars* 2020

single-channel, colour and sound, 4k video  
28:10 minutes

Courtesy of the artist, Amsterdam, The Netherlands.

*Songs from the Compost* is an evocative depiction of interdependence, vulnerability, and care. Filmed on the Curonian spit in Lithuania at a UNESCO World Heritage Site, the work is attentive to the fragility of ecological balance and the interconnectedness of the human and non-human.

In this film, a group of non-binary performers traverse lichen-covered forests and coastal sand dunes. They move together as a choreographed whole, resembling shapeshifters that slide and scuttle crab-like across the landscape, often entangled with each other and pulled earthwards. Subtle bodily mutations reveal fungi growths or altered evolutionary traits. Some sprout cyborg-like extensions, fleshy appendages, or prosthetics for sensing nature. Their bodies educe portals to other ways of becoming, caught in a state of metamorphosis.

Accompanied by a mesmerising score, Budvytė's poetic lyrics draw on themes of mutation, hybridity and the cyborg as explored by Eco-feminist Donna Haraway. The work also references radical microbiologist Lynn Margulis's theories on 'endosymbiosis', which demonstrate that not only is the human body an ecosystem composed of deeply collaborative bacteria, but also that every animal and plant organism encompass millions of distinct species working together in symbiosis. Margulis championed symbiosis as an evolutionary driver, refuting neo-Darwinian ideas around individualism and notions of 'the survival of the fittest'. Haraway's 'symbiotic thinking' is proposed as remedy for the Anthropocene, a means to contest the anthropocentric hierarchies that insist on the superiority of humanity over nature.

## Yasmin Smith

Born 1984, Sydney, NSW. Lives and works in Sydney, NSW.

Pronouns: she/her

### *Forest 2022*

11 coal fly ash glazes on stoneware slip

Courtesy of the artist and The Commercial, Sydney.

Yasmin Smith's *Forest* reminds us that coal is made from ancient trees, forged in the carbon cycles of deep geological time. Across her career, the artist has developed a ceramic practice that reveals the biochemical traces of settler-colonial land management processes. Through the production of unique ceramic glazes derived from incinerated natural materials such as trees, she reveals the molecular residue of agricultural and industrial effluents that permeate our biosphere.

This series of sculptural forms are slip cast from lumps of coal and glazed using coal fly ash—a polluting industrial by-product of fossil-fuelled energy. The ash was collected in collaboration with scientists, activists, and industrial workers from 11 power stations across the Eastern Australian seaboard, including inland areas of so-called New South Wales, Victoria, and Queensland. The gradation of tones that span black, brown, beige and cream relate to regional variations, different species of trees, and strata of geological time.

Like anthropogenic climate change caused by carbon emissions in the atmosphere, coal fly ash is another toxic by-product of the fossil fuel industry that is redeposited into the earth, this time contaminating the groundwater. The spectrum of coal ash glazes in *Forest* makes visible humanity's impact on the very geochemical strata. In this way, Smith's sculptural installation acts as a material witness, a scientific marker of the Anthropocene that warns us of a dangerously warming world and an ecological tipping point from which we cannot return.

## Joyce Hinterding

Born 1958 Melbourne, Vic. Lives and works in the Colomatta/Blue Mountains, NSW.  
Pronouns: she/her

### *Floric Oscillator* 2018–2022

graphite on glass, wood, mixer with wall-mounted box, headphones

Courtesy of the artist and Sarah Cottier Gallery, Sydney.

*Floric Oscillator* is a multimedia artwork that combines antenna design, fractal mathematics and energy scavenging. It takes the form of an antenna, attracting ambient electromagnetic fields that surround us, scavenging vibrations and transposing them into sound. The artwork is site specific, enabling audiences to listen to an array of invisible energy fields within our local electrical environment at The University of Queensland and across the city of Meanjin/Brisbane. Occasionally you will hear clicks and chirps of ‘natural radio’ as it pervades through the electromagnetic envelope of the building. Humans are also electrical conductors, and audiences can ‘play’ the artwork like a musical instrument, adding the energy of their own bodies into the circuit through touch.

Here, Joyce Hinterding connects the medium of drawing to the technological world of circuit diagrams and patterns found in nature. Geometric lines are rendered through the materiality of graphite (a mineral made of carbon that is used in the core of pencils), known for its energy-conducting properties. The pairing of the conductive images with the active antenna and capacitor (which stores energy like a battery) forms a resonant circuit.

Hinterding’s antenna design follows nature in biomimicry, referencing the fractal growth patterns of lichen she observed while bushwalking in the Blue Mountains with her artistic collaborator David Haines. Lichens are symbiotic organisms consisting of algae and fungi that obtain energy through photosynthesis, drawing on the sun’s electromagnetic energy and decomposition within the earth.

Hinterding draws our attention to the patterns within the energy systems of the natural world and more-than-human modes of expression. She asks: ‘If the fractal patterns of lichen can attract and transmit energy, do antennas exist in nature without human intervention? Is the biosphere underpinned by energetic communication?’

*Floric Oscillator’s* self-sustaining, energy-scavenging system demonstrates the kind of radical thinking required to innovate and retool our global energy infrastructure, transforming it into one that harnesses renewable energy systems such as solar and wind power as opposed to finite fossil fuels.

# The Institute of Queer Ecology

Artist collective founded in 2017.  
Based in Myaamia/Miami, Florida.

## *Metamorphosis 2020*

Three-part film with prelude, colour and sound  
48:27 minutes

Courtesy of the Institute of Queer Ecology Myaamia/Miami, Florida  
and DIS Manahatta/New York, New York, which commissioned the film for online release  
on DIS.art.

*Metamorphosis* unfolds as a prelude and three-part series entitled *Grub Economics*, *Liquidation in the Pupal Stage*, and *Emergence*. The work analogises the lifecycle of a butterfly, progressing from the metabolism of a caterpillar into a phase of radical transformation. The film takes the form of an activist manifesto by the Institute of Queer Ecology (IQECO), exploring eco-critical questions and positing a road map for a queer, utopian future. IQECO call for new imaginaries beyond Petro-capitalism, an untenable economic model dependent on the extraction and emission of fossil fuels. In cross-species solidarity, IQECO argue that nothing short of revolutionary metamorphosis is necessary for planetary survival.

As IQECO note, we are entangled with the natural world in deepest relation. Each climate disaster and extinction are part of a complex ecology of planetary decay that evidences an unbalanced planet. *Metamorphosis* is a poetic speculation on a queer utopia. It is a call to imagine a future that is symbiotic, intersectional, and multi-species, where desire is framed as a tool for world-building.

## David Haines

Born 1966 London, UK. Lives and works in the Colomatta/Blue Mountains, NSW.  
Pronouns: he/him

### *The Wollemi Kirlians 2014*

21 Kirlian photographic images in waxed oak frames, pigment ink on rag paper

Courtesy of the artist and Sarah Cottier Gallery, Sydney.

*The Wollemi Kirlians* are a bewitching series of electrostatic photographs featuring botanical specimens. Each plant emits a crackling electrical charge that resembles an aura, giving the impression of an energetic field that encompasses all things. The specimens were collected from the Wollemi National Park, a biodiverse stretch of wilderness located in the Blue Mountains of NSW, traditional Country of the Wiradjuri, Dharug, Wanaruah and Darkinjung peoples.

Haines's practice operates at the nexus of art and science, spanning a variety of approaches from conjuring invisible forces to exploring aroma molecules and the esoteric. For this series, he was propelled to recreate examples of Kirlians or 'aura photography', which his mother had shown him in the 1970s. Kirlian photography originated as a technical process in 1939, invented by Russian electrical engineer Semyon Kirlian and his wife Valentina. They experimented with making contact prints by directing a high-voltage charge onto an object placed on photographic paper.

For this series, Haines reverse engineered the process to produce a makeshift camera. Using highly experimental methods that are both daring and perilous, the artist released a strong electrical current into the atmosphere, ionising the surrounding air to produce the resulting images. While captivating as an idea, the reading of Kirlian photography as evidence of auras complicates the known effects of a pseudo-scientific process. The 'aura' is in fact a corona discharge, a well-published physics phenomenon seen in auroras and nebulas in deep space.

## Cameron Robbins

Born 1963 Naarm/Melbourne, Vic. Lives and works on Dja Dja Wurrung Country, Castlemaine, Vic.  
Pronouns: he/him

### *Helio Ephemera 2022*

solar panel, motors, marble, graphite, stainless steel, brass, marine ply, poly urethane cord, bearings, aluminium, gearboxes, speed control unit, steel, cedar, paint

Courtesy of the artist, Dja Dja Wurrung Country.

Cameron Robbins is known for his site-specific drawing instruments that conjure and reveal the Earth's natural forces such as solar power and wind energy. His sculptures work kinetically, involving mechanical systems that attune to turbulent weather systems, sensing and visualising their invisible energies through a vortex of lines.

*Helio Ephemera* is a solar-powered drawing instrument that transcribes the energy of the sun into the material form of a drawing in real time. Alongside its mechanical components, it combines materials formed from ancient sunlight and organic life in the story of Earth's natural carbon cycle, such as graphite (the marker) and limestone (the marble surface).

*Helio Ephemera's* graphite marker is connected to a solar panel outside UQ Art Museum and is powered by the sun. The artwork is therefore reliant on environmental conditions and does not necessarily 'perform' for audiences during gallery hours on cloudy days, challenging the metrics of how a successful artwork might behave. The nearby solar drawing entitled *Double Wormhole* was produced across nine days in the artist's studio in Castlemaine, central Victoria.

Decarbonising our energy infrastructure and rapidly switching to renewables demands that we recalibrate our day-to-day expectations around how and when we use energy, and what those energy sources look like. It will mean being attentive to the natural rhythms of the Earth's systems and its ebbs and flows, including daylight hours, wind velocity and tides. *Helio Ephemera* attests to the importance of being in responsive choreography with the planet, to exist within the boundaries of its abundant resources and carbon budget, and to remain in balance.

## **Cameron Robbins**

Born 1963 Naarm/Melbourne, Vic. Lives and works on Dja Dja Wurrung Country, Castlemaine, Vic.  
Pronouns: he/him

### *Double Wormhole 2022*

silver ink on inked watercolour paper 360gsm

Courtesy of the artist, Dja Dja Wurrung Country.

## **Michaela Gleave**

Born 1980 Mpartnwe/Alice Springs, NT. Lives and works in Sydney, NSW.  
Pronouns: she/her

## **Amanda Cole**

Born 1979 Sydney. Lives and works in Sydney, NSW.  
Pronouns: she/her

## **Warren Armstrong**

Born 1967 Newcastle. Lives and works in Sydney, NSW.  
Pronouns: he/him

## *Terrella 2022*

self-generating music app, live data, projection screen, seating elements, ionisation unit

Lead artist: Michaela Gleave; Composer: Amanda Cole;  
Programmer: Warren Armstrong; Seating elements: Katy B Plummer; Additional  
programming: Code on Canvas; Graphic Design: Olivia King.

Courtesy of the artists, Sydney, Naarm/Melbourne.

What does the Earth's energy sound like? *Terrella* is an immersive sound installation that 'plays' the Earth's electromagnetic field in real time. Using live data from geomagnetic monitoring stations across the planet, the project sonifies the frequencies of the Earth, listening to its fluctuations and turning them into music. The work is a transdisciplinary collaboration with composers, designers, and data technicians, involving scientific partners from Geoscience Australia, the South African Space Agency, the British Geological Society and INTERMAGNET, a global network of geomagnetic observatories.

*Terrella* takes the form of a shifting mesh of sound and imagery that connects with the tremendous energetic forces of nature. A reverberant multi-channel soundscape makes audible electromagnetic flows otherwise undetectable to humans, allowing us to hear solar storms and bear witness to the phenomena that create auroras. Data visualisations progress through waves, electron flows and fizzing particles in a tonal palette derived from the core of the Earth to the outer edges of space. The air is subtly charged with negative ions that cleanse and purify the atmosphere.

The Earth's electromagnetic field is a circuit of energy that surrounds the planet, protecting it from solar radiation. One of the four fundamental forces, electromagnetism is a physics that is separate from human concerns, and an underlying substrate of reality. Many organisms including bacteria, salmon, migratory birds, bees, and butterflies attune to it for orientation, navigation and survival.

*Terrella* reminds us that Earth is an active agent, alive within a networked planetary system. Gleave's sensorial and affective installation shifts our focus beyond anthropocentric concerns. In the age of climate crisis, the work calls for embodied listening, connecting us in sympathetic resonance with the energetic vibrations of the planet.



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