

## Curatorial Essay: Experimenta Life Forms

*“The human brain is a station on the radio dial; parked in one spot, it is deaf to all the other stations [. . .] the animals, rocks, trees, simultaneously broadcasting across the whole spectrum of sentience.”* Blackfoot philosopher, Leroy Little Bear (1)

Co-curator, Lubi Thomas and I began researching and discussing possible themes for the exhibition *Experimenta Life Forms* in 2018. Our process involves looking at artworks and listening to what artists are thinking about and discussing as well as keeping an ear out for the conversations occurring in broader culture. Our focus is on the horizon where we seek to unearth the stirrings of fresh approaches and ideas. In 2018 what ignited our curiosity was the conversations in Western science, also being picked up by artists, about making new life while at the same time discovering new life. At this stage in our curatorial process the topic is deliberately broad and we begin to collate a long list of artists. We are constantly asking do our initial ideas resonate within contemporary artistic practice? By taking this artist led approach to curation it allows the exhibition to become more layered and nuanced. We recognised that internationally, and particularly in Europe there were exhibitions exploring similar themes. Equally we recognised that exploring this thematic in Australia’s cultural context could bring a different view by including First Nations’ perspectives. To achieve this we invited First Nation’s curator Jessica Clark (palawa) into our curatorium for the exhibition. *Experimenta Life Forms* is the result. The exhibition features 20 artworks by 26 Australian and international artists who are making a significant contribution to the dialogue around the changing landscape of life as we know it, or indeed, as we don’t know it.

When conceiving the theme for *Experimenta Life Forms* we were unprepared for how events in Australia would resonate with our exhibition focus. Our six commissioned artists for the exhibition were announced in 2019 just as Australia’s bushfire emergency was unfolding across the country, bringing into sharp focus the unique eco-systems populating this continent and the impact of the Anthropocene on the vitality of these landscapes. By the time we had selected all 20 artworks in early 2020 more than 20% of Australia’s forests were destroyed in bushfires and then a virus, a kind of “borrowed life” because of its dependence on host cells (2), upended conventions and systems across the globe. These disruptions brought poignancy to our curatorial investigations. They reminded us of the critical importance of telling stories about the interconnectedness of all life, a theme evident in many of the artworks.

The contemporary artists featured in this exhibition are exploring notions of life, at a time when technological change and new research findings are making definitions of ‘life’ increasingly difficult to pin down. How are notions of our place in the web of life changing now that scientific research is identifying sentience in animals, plant-life, and may soon be found in our machines? While the focus of *Experimenta Life Forms* is on biological life we have also selected works that point to the possible future sentience in machines as well as the possibilities afforded by biotechnology research. In shaping this exhibition we became acutely aware, as artists Oron Catts and Ionat Zurr argue, of the poverty of the English language. Catts and Zurr, whose work *Biomess* features in the exhibition, write that we only have one word LIFE to deal with the living world’s immense complexity let alone for what may emerge in the future.(3) The paucity of English is further revealed when we take the time to listen to First Nations perspectives of land and seascapes alive with spirit, story, and energy.

Setting the scene for our exploration of life is the work by Daniel Boyd, *History is Made at Night*. The work marks a departure from his well-known painting practice, by bringing his signature

aesthetic of over painting into a dynamic time based video work that evokes the ever-expanding dynamics of the universe. Coloured circles in perpetual motion constantly shift into different configurations across the gallery wall echoing the light-filled exuberance of the Milky Way that stretches across the night sky of the Australian continent. The work envelops you in light and sound reminding the viewer that they are just a small part of an ever-changing complex system. This wide angle lens asks the rhetorical question are there other life forms beyond our planet, while also acknowledging that life's evolution on earth is impacted by forces beyond our blue sphere.

Several works in the exhibition are focused on life's building blocks on earth. Laura Woodward's installation *Planet* features a poetic interplay of light, water and air - the essential elements to the formation of life, as we understand it. A planet shaped transparent sphere mounted on a tripod is half filled with water that is gently disturbed by air bubbles, which together refract shadows across the gallery floor and walls. The work conjures associations of a scientific experiment, a space module and perhaps even a creature. These essential building blocks are further explored in *first forms*; Dominic Redfern's multiscreen audio-visual installation. This work signals the importance of Australia's ancient landmass in our understanding of the development of life. This multi screen video work visually conjures a pre-Cambrian world, remnants of which are still evident at ancient sites in Western Australia. Redfern visited these sites to capture images of cyanobacteria that over time build-up sedimentary form known as stromatolites. Because of their oxygen producing capabilities, cyanobacteria are credited with significantly changing conditions on earth that enabled complex life to emerge.

The work *You, Me, Things* playfully compresses the timescale of millions of years of evolution spawned by cyanobacteria, by inviting audiences to create a thriving imaginary eco-system. Participants make sounds into a microphone giving birth to different animations that appear on a screen. The more participants interact, the more this virtual ecosystem flourishes. This effervescent environment is constructed by play and performance, yet its logic can become unsettling as participants emulate humanities power over the environment that led to earth's most recent geological period of time being described as the Anthropocene.

The installation *Biomess* by Oron Catts and Ionat Zurr celebrates the diversity of real eco-systems. Beautifully crafted display cases line the gallery wall emanating a seductive light. Peering into them you discover an eclectic array of specimens exquisitely displayed as if in a high-end boutique. The presentation alludes to our complicity in the commodification of life. The artists have selected specimens that confound conventional notions of 'natural and normal' in terms of individuality, gender, sex, and reproduction. By doing so they draw attention to the social construction and reductive nature of such terms as naturalness and normality. Alongside the display cases there is a bioreactor giving visual expression to the experiments in biotechnology labs where research about life may also result in new life forms emerging. The installation draws attention to the fact that just as we pursue the invention of new life forms in our labs, we also don't fully understand the life forms that are already in existence.

The perils of commodifying life are central ideas explored in m0wson&MOwson's installation *feeler*. From a distance the viewer can see a collection of long pendulous forms emanating a shifting array of coloured light. On closer inspection the forms appear fleshy and the viewer is confronted by a collection of over sized dismembered octopus tentacles hanging like deli meat from the gallery ceiling. Current research into breeding octopuses is being driven by the potential to intensively farm

them for meat. The artists are asking us to consider the impact of intensive agricultural systems including their association with the emergence and amplification of disease.

Environmental ethics are also tackled in Bec Selleck's work *Snow Rabbits*. Since colonisation Australia's geographic isolation can be seen as a continent-wide laboratory for testing the resilience of its eco-systems to rapid changes. Arguably the biggest experiment was the introduction of rabbits in 1859 by Thomas Austin, a wealthy settler in Victoria who imported 13 rabbits to roam free on his estate. In 2020 it is estimated that approximately 200 million feral rabbits inhabit Australia. Rabbits have proven to be highly adaptable, in less than 200 years they are now found above their natural altitude limit of 1500 metres. It is this adaptation that is referenced in the title of Selleck's work – *Snow Rabbits*. The work features a group of rabbit-like forms that on closer inspection reveal subtle movement. Driven by internal animatronics each form simulates the appearance of 'breathing'. These rabbit like forms are arranged huddled together at the center of a section of carpet in the comfort and safety of a wooden chair merged with a Snow Gum replica cast in resin. These uncanny rabbits allude to the evolutionary processes of adaptation. Combined with the eucalypt elements, they highlight the tension between invasive and endemic species and colonisation. The merging of a familiar domestic scene with its external landscape point to the human culpability of these environmental changes.

Exploring the ethics of contemporary bio technology research and development is the speculative fiction work *The Modular Body* by Floris Kaayk. Originally conceived as an online project comprising 56 interconnected film clips drawing on documentary tropes, the artist has drawn on this material to create a multi channel gallery version of the work. The protagonist in *Modular Body* is Cornelis Vlasman, a versatile biologist for whom the path well travelled is the most uninteresting one by definition. He sets up an independent lab that leads to the creation of a primitive and vulnerable organism called OSCAR. Spring boarding from historic narratives such as Mary Shelley's *Frankenstein*, this work references contemporary science research in synthetic biology, wet tech and mechanical systems seeking to build new life formations via biological 3D printing. The central screen in the gallery focuses on a panel of experts debating the ethics of Vlasman's research, while to each side are smaller screens displaying footage of OSCAR in the lab.

Bringing a very different perspective to humanities unrelenting pursuit of technological advancement is Narungga artist Brad Darkson's multi media work *Smart Object*. His installation compares and contrasts two processes: a wooden plongi (club) hand-carved by the artist and a looped 3D animation of the artist's avatar performing the carving process. Darkson sets up a dialogue between the physical and digital components of *Smart Object* exploring different notions of time, cultural knowledge transfer, and the innate spirit or life force of and within all things. As Darkson asks "*Why do we strive to create a sentient form of Artificial Intelligence, or to find sentient life elsewhere in the universe?...The quest for sentience has become a distraction from the urgent need for us all to form kinship with Country and the objects of our creation, to reconnect with the spirit of Country and culture that already exists*".

Similarly Oglála Lakǰóta artist Suzanne Kite raises important questions about our relationships with technologies. She argues "*Indigenous ontologies already exist to understand forms of 'being' which are outside of humanity.*" Through Oglála Lakǰóta ontologies, even materials such as metals, rocks, and minerals can be capable of volition. She suggests that by considering the 'hearing' and 'listening' capabilities of non-human entities, a method of engagement reliant upon mutual respect and responsibility becomes possible. Kite's collaboration with Devin Ronneberg on the interactive

installation *Itówapi Čík'ala (Little Picture)* invites audiences to interact with a non-human entity. Viewers enter a darkened room where a mass of black braided cables speckled with lights and intertwined, covers much of the gallery ceiling, conjuring an image of some fantastical alien creature. Some cords hang down and are within reach of the viewers touch. Each touch triggers a response in sound and light. The work asks audiences to consider what may be the appropriate protocols for developing these types of interrelationships. As Kite writes "*How can humanity create a future with technology without an ethical-ontological orientation with which to understand what is worthy of relation and what is not?*"

Justine Emard's large scale projection work *Soul Shift* shifts the conversation from human relationships with other life forms and technology to the possible inter-relationships between machines. Her uncanny video features two humanoid robots that appear to be communicating with each other in some foreign robotic language. The two robots called Alter and Alter 2 are the original and second generation designs developed by the Japanese roboticists Hiroshi Ishiguro and Takashi Ikegami. For this video the artist created, staged and documented the possible meeting between these two generations of the *Alter* robot. The work asks the question is there memory in the machine from the data transferred between Alter and Alter 2? Could this be a form of reincarnation without flesh? Watching the video elicits a sense of unease. Are the robots actually communicating and if so what are they saying? Such feelings of unease may be culturally determined. It has been argued that Japanese people do not have the same barriers as many other cultures to developments in robotics because of the strong influence of Shinto religion on their culture. A Shinto understanding of the world identifies a spirit in all things whether animate or inanimate. This approach underpins Japan's significant advancements in the area of social robotics.

Michael Candy's work *Little Sunfish* also draws inspiration from Japan. His video tells the speculative story about a robot that escapes its human masters to roam the Pacific Ocean. The video begins at the Fukushima Daiichi Nuclear Power plant where the robot is searching for radioactive debris after the nuclear accident that was triggered by flooding to the complex as a result of the 2011 Tohoku tsunami in Japan. The work is an imaginative leap from real life events – since the meltdown Tepco, a Tokyo power company, have used robots to investigate the damage inside the reactors at the Nuclear Power Station. Candy has built a scaled down model of one of the actual robots used at the power station. The video asks us to consider the unintended consequences of our engineering feats. The robot is seen exploring the world, keen for new experiences beyond its human-built purpose, but inadvertently spreading radioactive material along its way and in so doing placing the very world it seeks to discover at risk. Alongside the screen our celluloid hero is placed in a perspex display case reminiscent of the types of display cases found in natural history museums raising questions about how we might treat our inventions that may gain agency and even sentience.

While Candy speculates about our attitudes to artificial life Donna Davis installation considers the ways we could treat flora. Her work *TRANSplant (becoming kin)* has three components that imagine the adaptations required for plants to survive the ecological upheavals wrought by climate change. The work tells the tale of ten flora refugee species whose tropical mountain home is currently under threat from rising temperatures and draws its inspiration from the 'Tropical Mountain Plant Science Project', a flora rescue mission led by the Australian Tropical Herbarium. Atop a plinth sits a device echoing early 20th century archival tools. It contains a series of fictitious records that are applications for citizenship submitted by plant refugees. Adjacent to the device hangs a large digital print – an altered version of a photo taken in a North Queensland forest in 1930. In the largely monochrome image a man stands close to a towering ancient *Flindersia* genus tree. A sliver of green

draws the viewers eyes to a young displaced sapling held in the man's hands suggesting a new approach to interspecies relationships, one not based on resource exploitation. Resting on the floor at plant level is a screen featuring an animation loop of a plant scurrying through the Queensland Archives, searching for its kin.

Facilitating the experience of inter-species relationships in a different way from Davis's work is *Sound of Fungi* by Theresa Schubert. She leads small groups of people on foraging expeditions in the forests around Berlin where she lives. Samples of fungi collected on one such expedition gave birth to this work. She set herself the task of building a sound environment only the collected fungi could experience. Most showed a positive response to the influence of sound by growing faster and denser than samples grown in silence. This interactive video installation simulates Schubert's laboratory experiment where sound stimulated fungi mycelium growth. Mounted on top of a plinth is a tracking sensor monitoring the hand movements of participants. By utilising this interface participants are able to emulate biological processes of change in the fungi's growth in real time. These changes can be viewed on the screen mounted on the gallery wall where a digital 3D environment shifts between macro and cellular level perspectives, revealing fragile topologies comprised of multiple nodes and connections and offering a glimpse into the complexity of the underground network of microbes that connect the "Wood Wide Web".

Thomas Marcusson's work DJ Moss also explores inter-species relationships. Grouped on top of a collection of plinths are two shiny white turntables, a laptop and a clear glass case housing moss. Ambient sounds of a thriving eco-system subtly envelop the installation. The artist has used the mosses basic internal communication system comprised of micro-signals to trigger the DJ set up that surrounds its glass home. This strange and haphazard performance prompts us to reflect on the agency of plant life, their societal networks and systems of communication, as well as our relationship with non-human and non-biological systems. The genesis of the work came from the artist's awareness that despite algorithms being perfectly capable of producing a beat perfect DJ set, we still prefer humans to be at the decks. By extending this proposition to another life form he sets up a playful interspecies relationship that also points to humanities ongoing unease with the digital. Perhaps too the fungi in Schuberts work would prefer to hear from this moss turntablist.

Delving into interspecies relationships at a micro level is Agat Sharma's work *Brachiation on the Phylogenetic Tree*. Sharma has adapted an automated Call Centre phone system to create an interactive work of speculative fiction about the entanglements between humans and the world of microorganisms. A phylogenetic tree or evolutionary tree is a branching diagram that reveals the evolutionary relationships among various biological species, and brachiation describes the swinging motion used by primates to move from tree limb to tree limb. This work begins in the gallery with a call-to-action – to phone the toll-free number stenciled across the gallery wall. When audiences call Sharma's toll-free number, they are greeted by a welcome message that leads them into an imaginary space. As the caller selects options, each choice you make forks the narrative arc exploring the worlds of twelve species of microorganisms ranging from fungi to Tardigrades. Dialling into *Brachiation on the Phylogenetic Tree* is an invitation to create your own customised story drawing on a combination of scientific fact and poetic fiction. At the conclusion of this initial gallery-based encounter, you are invited to discover more stories over the following weeks. These opportunities come to you as part of an automated callback service.

Connecting and contrasting five different environments across the globe is the work *Pulse: The Life Force of Trees* from PluginHuman. This installation pulses with light and sound driven by

environmental data collected from five trees and their supporting ecosystems in the Amazon, Panama, India, Taiwan and Australia. The Australian tree can be found in walking distance from the artist's home in Melbourne where they are participating in a re-forestation program for an old golf course. Long cylindrical sculptural forms made from recycled acrylic are intricately patterned with images taken of each of the trees at a microscopic level. These elaborate patterns, the constantly shifting light emanating from the sculptures and evocative audio score conjure the vibrant interconnected eco-systems that each tree inhabits. The work is entwined in biology research and discoveries that has made remarkable steps in revealing the sophistication and interconnectedness of flora, fungi and microbes.

Two works featured in the exhibition bring us back to the human body. Miranda Smitheram brings a First Nations perspective of the world where all matter is understood as lively, relational and interconnected. We see an animated digital cloth that continually twirls and morphs. The projected digital cloth appears to be dancing providing a clue to the source code of this digital animation. Its nuanced and affective movements are driven by data points collected from the motion capture of dancer Bianca Hyslop. Layered images of landforms, trees, sightlines and horizons have been visually reworked through 3D animation to pattern the digital cloth. Through this digital transformation process the cloth has become inhabited by whakapapa (genealogy or line of descent). The dancer's body, whose movement data choreographs the digital cloth, is unseen nevertheless the artwork still holds the energy of the dance. Notions of the human body are redefined as an intertwinement with the nonhuman bodies of land and water. The new surface that emerges in this artwork is simultaneously person, place, and matter.

Helen Pynor's *Habitation* explores another form of human entanglement in this case taking up Monika Bakke's notion of 'lithic intimacies': life's diverse, intimate relationships of exchange and inter-species companionship with minerals. The installation explores the animate-inanimate boundary collapse we are currently witnessing due to the widespread use of prosthetics. Navigating medical prohibitions, Pynor gained permission to retain the bone material removed from her body during surgery, raising important questions about ownership and personal agency over 'life forms' excised from the body, and what happens to them after removal. To honour the material, symbolic and spiritual potential embedded in her excised bone, Pynor has used the bone to make a series of bone china objects, modelled from CT scan data of her pelvis and femur bones. Bone china clay contains up to 50% animal bone and during its production, soft tissues are burnt off to leave only the mineral content of the bones – calcium, iron and mineral trace elements. This transformation releases the minerals that afford bone china its strength and capacity for delicacy, and makes manifest the inherent minerality of our skeletons. Coral-shaped forms are attached to the bone china objects. The intimate relationships of material exchange taking place in coral between soft-bodied organisms and their calciferous structures, offers an analogy to the osteo-integration of human bone cells into the mineral structure of prostheses.

Adjacent to the bone china works are two lightbox images that reference the absent bone and the transformational processes following surgery. The imagery is drawn from Pynor's archive of CT scans and X-rays, which trace her bone's dynamic adaptation to change over the course of her life.

Finally we come to Anton Hassel's *3D Printed Difference Tone Bell*. What you may well ask is a bell doing in this exhibition? A bell can be read in many ways. In many cultures it is a marker of time and so speaks to cycles of life and death. Indeed the development of this bell is the result of the artist being commissioned to invent, cast and tune a series of bells for the 10,000 year clock project in the

USA. English speakers may be familiar with the phrase “for whom the bell tolls” penned in a poem written by the 17th century writer John Donne. The tolling refers to funeral bells, and Donne’s poem suggests that whatever affects one person affects us all. In this exhibition’s wider examination of life, the striking of the bell asks us to consider, in the midst of the 6th great extinction, for whom does the bell toll and reminds us that all life forms are interdependent.

The bell along with Daniel Boyd’s work frames the exhibition with Boyd’s work taking a macro view and the bell leading us to the micro. Here the bell represents more recent scientific understandings of the makeup of the universe. Quantum physics expressed more recently through String Theory, posits the idea that everything in the universe, every particle of light and matter, is composed of miniscule vibrating strings. At its core all matter shares this state of vibration, made perceptible by resonance and here given expression by this unique bell. This artwork invites audiences to strike it and as it’s sound subtly ripples through the exhibition space we are asked to contemplate the very foundations of life, beyond our human scale.

One of the curatorial joys of producing this exhibition is its national tour. It is the only Australian triennial of contemporary art to tour nationally. As each new gallery we visit is different in its layout the curators reshape the exhibition responding to the particularities of each site. In doing so new conceptual threads emerge as artworks inevitably are placed in different relationships to one another. The tour also gives us the chance to observe how different audiences across the country respond to works and this too will influence curatorial decisions regarding placement in the gallery as we move forward on the tour.

Our hope with this exhibition is that it fosters in audiences new connections or reconnections to the life that surrounds us all. The idea that all life forms and their environments are interdependent is central to this exhibition. The voices of First Nations artists in the exhibition take these ideas well beyond inter-species relationships to a profound relational understanding between humans, technologies and Country.

By Jonathan Parsons

Experimenta Life Forms, curated by Jonathan Parsons and Lubi Thomas with associate curator Jessica Clark

(1) Don Hill, “Listening to Stones: Learning in Leroy Little Bear’s Laboratory: Dialogue in the World Outside,” *Alberta Views: The Magazine for Engaged Citizens*, September 1, 2008, <https://albertaviews.ca/listening-to-stones/>.

(2) Luis P. Villareal, “Are Viruses Alive?” *Scientific American*, August 8, 2008  
<https://www.scientificamerican.com/article/are-viruses-alive-2004/>.

(3) Oron Catts & Ionat Zurr, “The Contract of Art that deals with Life (Sciences)”, *Art as We Don’t Know It*, Aalto University, 2020  
<https://www.aalto.fi/en/news/art-as-we-dont-know-it-invites-readers-into-the-fascinating-world-of-bioart>

(4) Jason Edward Lewis, Noelani Arista, Archer Pechawis & Suzanne Kite, “Making Kin with Machines”, MIT Press, 2018  
<https://jods.mitpress.mit.edu/pub/lewis-arista-pechawis-kite/release/1>

(5) (4) Jason Edward Lewis, Noelani Arista, Archer Pechawis & Suzanne Kite, “Making Kin with Machines”, MIT Press, 2018  
<https://jods.mitpress.mit.edu/pub/lewis-arista-pechawis-kite/release/1>