In Kepler's Gardens
Press release

Tuesday 25th August 2020

A first for the City of Newcastle. The University of Newcastle's School of Creative Industries academic staff and FASTlab teams up with the Faculty of Science, Art Thinking Australia and international partner Ars Electronica to create a new series of works as part of a major global exhibition 'In Kepler's Gardens'.

'In Kepler's Gardens' takes place at 120 locations worldwide on 9th-13th September 2020

Artists from the School of Creative Industries have grown new works - installations, workshops and performances for Kepler's global gardens.

The Future Arts, Science and Technology Laboratory (FASTLab) creates a virtual 360° garden as a way to involve a global audience in this unique event.

This year Ars Electronica is going on a journey through "Kepler's Gardens", which are not just located in Linz, Austria – home to Ars Electronica - but also 120 other locations worldwide.

120 locations between Tokyo and Los Angeles, where universities, museums, galleries, clubs, communities and businesses will hold hundreds of exhibitions, conferences, performances, concerts and workshops that are aimed at the local audiences.

Newcastle, Australia is one corner of Kepler's Garden's where artists from the University of Newcastle's School of Creative Industries are creating an engaging and immersive online experience addressing the human issues causing today's climate emergency and biodiversity crisis through art, performance, installations and workshops.

School of Creative Industries lecturer in Visual Communication Design, Dr Bernadette Drabsch, and Faculty of Science Colleagues Dr Alex Callen – along with colleagues at Ars Electronica - curated the collaborative exhibition to help raise public awareness of impact of climate change on the natural environment.

FASTLab – The Future Art, Science and Technology Lab - created a new experimental digital platform to host Kepler's Newcastle garden with lead technologists Luke O'Donnell and Alex Barnes-Keoghan heading up the development team. Together they have created a virtual gallery which becomes the nexus of activity for the exhibition. It consists of four themed rooms for viewers to immerse themselves in 'Wonderment' before asking 'What went wrong?', 'What can we do?' as they visit the final room offering a glimpse of our 'Future ecology'.

Adding to the 360 Virtual gallery is a network of 4 WebXR hubs rooms called 'the FASTlab Performance Experiment', interactive rooms for performance on the Ars Electronica Kepler's Garden's network, accessible here:

https://www.keplersgardens.info/project/5c1fa39a-b2d2-44f9-bc03-0b3f897a4cca

The FASTlab Performance Experiment generates a series of performances connected to and inspired by the Biomes Newcastle Garden (facilitated by Kristefan Minski). As a speculative investigation into human creativity at the axis of virtual art and experimental media, this network of performance rooms is a participatory meeting place for perspectives that sow the seeds of a paradigm shift. We point toward the overarching theme of 'Novocastrian 2050' and ask: What next after the Anthroposcene? What will a future ecology in Newcastle look and feel like? We imagine a new hybrid of actual and virtual. This room is supported by FASTlab (Future, Arts, Science, Technology Lab) at the University of Newcastle School of Creative Industries. *Mozilla Hub Rooms are produced and curated by Dr. Rewa Wright. WebXR artist Dr. Alison Bennett from RMIT has made the key room, a photogrammetry garden, and Jahkarli Romanis (Pitta Pitta) has created a decolonised virtual space.*

The artists and performers planting the Ars Electronica Kepler's Garden Newcastle are:

Rewa Wright and Simon Howden: *The Contact Projects*

Contact Projects captures plant processes as bio-electrical activity, and visualises those signaletic movements as data. Tracing the bio-electrical impulses emanating from plants as sound and vision, we explore and express the limits of this unseen space. The performances afford a thinking through of the normally invisible connections plants make with us and use technology to transpose their inaudible frequencies to a range apprehended by the human ear.

Nicole Carroll: Under the Surface: Throsby Creek

This soundscape is a collection of hydrophone recordings gathered from Throsby Creek Catchment in Newcastle, NSW, Australia. The recordings capture the omnipresent sound of snapping shrimp, as well as fish grunts and calls, aquatic insects, air bubbles, yabbies eating, floating leaf litter, diving birds, curious mice scurrying across the hydrophone cables, and the constant din of transportation sounds from water, land, and air.

Nicole Carroll: Orrery Arcana

Orrery Arcana is a system for real-time performance designed for a process analogous to automatic writing. The system includes custom software and a self-made hardware controller that is integrated with a planetary gear train, which gives the performer control over timing and sequenced events through manual gear rotations. Each gear is equipped with a sensor plate with embedded light, magnetic, and capacitive-touch sensors. The sensors are manipulated via concentric rings of colored acrylic and inset magnets that correspond to Tarot cards.

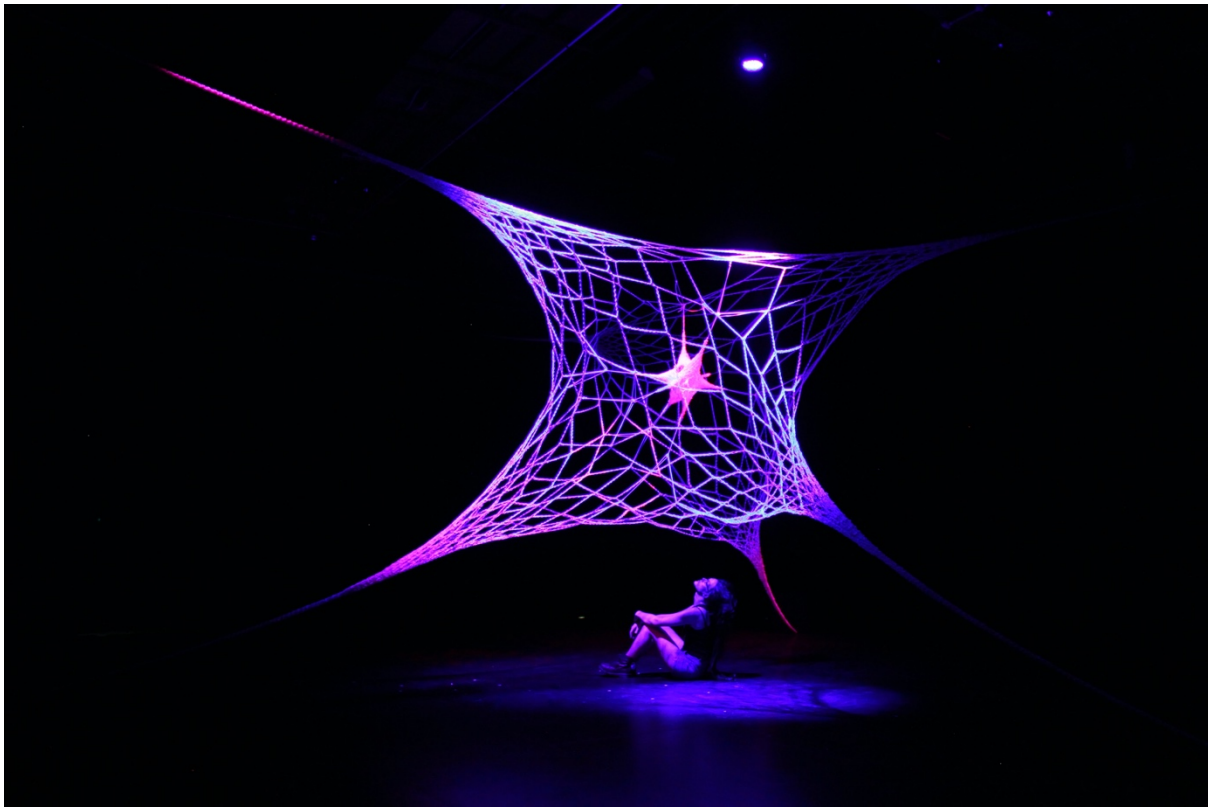
The hardware controller is used to navigate systems that encompass chance operations, conceptual mapping, and data mapping to control audio generation and processing. These systems are based on NASA lunar data, the esoteric system in W. B. Yeats' *A Vision* (1937), and the numerology and symbolism of the Tarot. Yeats' system in *A Vision* is situated in the centre, as it contains elements of both Tarot and lunar mapping. Sound sources include generated audio and samples of analogue synthesizers and environmental field recordings. nicolecarrollmusic.com/orrery-arcana/

Dr Ralph Kenke: *HUMAN vs MACHINE*

The prototype 'Human vs Machine' explores our intertwined relationship with communication technology and its potential to create data portraits. By voluntarily immersing ourselves with emerging technologies that enter our life, we often miss reflecting on the trade-offs these newly introduced technologies may cause. The distribution of biometric data that can facilitate machine learning procedures to create synthetic portraits, for example, is indicating that human ecology and computational

technology are already merging into a territory that requires future exploration of it social and ecological impact. The simulated and abstract Portrait offers an investigation of our attitude towards a representation of a future self that is transformed through computational technology

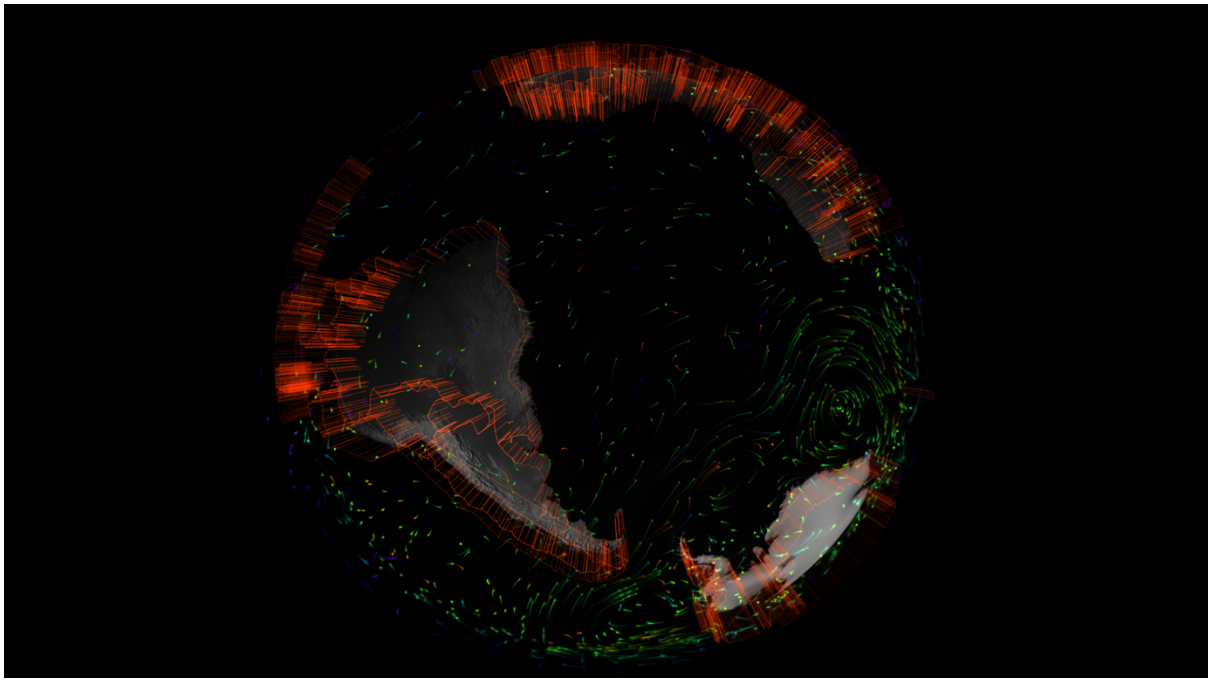
Louisa Magrics: *Visualising Rhythm*



Louisa Magrics is a musician, creative producer and award-winning interdisciplinary artist based in Newcastle, Australia. She is currently completing a PhD in Fine Art at the University of Newcastle. Her research explores rhythmic sequences and crochet forms through an experimental systems approach.

Hyperweb is a dual-solid crochet design. It is an evolution of the 3D web series, which saw an exploration of netted, cubic forms. The work appears as a large-scale, pop-up installations in public spaces. Though the form may be similar, the response to site is always unique.

Andrew Stynan: *You Are Here*



You Are Here is an interactive digital mapping platform that uses artistic and scientific models to visualise associations between our personal experience and global processes and systems. In this prototype version one aspect of that connection is explored: our breath. The work will ultimately serve as a curatorial platform for diverse sources of artistic, scientific and cultural content across many dimensions of human experience.

The Ars Electronica Newcastle Garden was managed by Dr. Kristefan Minski and the Biomes Newcastle Garden was curated by Dr. Bernadette Drabsch for the School of Creative Industries, colleagues from Ars Electronica in Linz, supported by Dr. Michelle Kelly, School of Psychology and designed by Dr. Simone O'Callaghan, School of Creative Industries. The 360 virtual gallery was created by FASTlab's Luke O'Donnell and Alex Barnes-Keoghan.

Mozilla Hub produced by Dr. Rewa Wright. WebXR artist Dr. Alison Bennett from RMIT has made the key room, a photogrammetry garden.

Artists Biogs in brief:

Dr Nicole Carroll

Nicole Carroll is a lecturer in Digital Composition at the School of Creative Industries. She did her PhD in Computer Music and Multimedia programming at Brown, where she studied with Professor Todd Winkler (Mr Interactive Music) and Butch Rovan. She is a composer, performer, sound designer, and instrument designer and builder. Her work spans improvisation, installation, and fixed media performance. She builds custom performance systems that she performs under the alias "n0izmkr." Her works have been performed internationally in the USA, Mexico, Wales, Germany, Greece,

Australia, and China. She received a PhD in Computer Music and Multimedia from Brown University in Providence, RI, and is currently Lecturer of Digital Composition at The University of Newcastle in Newcastle, Australia. www.nicolecarrollmusic.com

Kristefan Minski

Kristefan Minski is an artist and producer who specializes in transdisciplinary collaboration. His primary passion is the way in which Art Thinking combined with technological application can critique, impact and positively influence our future societies. His portfolio covers a broad range of mediums including film, theatre, dance, music, interactive installations and hybrid forms that often involve complex and new technologies. All of which culminated in his 10-year experience with the Ars Electronica Futurelab, Austria, working at the nexus of art, technology and society.. He completed his PhD at the University of Newcastle with conjoint supervision from Ars Electronica Futurelab. He is currently based in Newcastle and developing collaborative projects with FASTLab, University of Newcastle researchers and the local arts community. Since 2018 he is also founder and director of Art Thinking Australia.

Louisa Magrics

Louisa Magrics is an artist and PhD candidate at the University of Newcastle's School of Creative Industries. Winner of the 2015 Newcastle Emerging Artist Prize, Louisa has gone on to exhibit work in major institutions such as The Museum of Contemporary Art and the Perth Institute of Contemporary Art. Her site-responsive work, *Hyperweb* was shown in the Royal Botanic Gardens as a part of Vivid Sydney's 10th anniversary in 2018.

Pulling on threads of technological augmentation, electronic production techniques and digital materiality, Magrics' interdisciplinary perspective leads to a dynamic reimaging of traditional creative practice.

www.LouisaMagrics.com

Andrew Styan

Andrew Styan is a media artist and PhD candidate at the University of Newcastle's School of Creative Industries. With a background as a metallurgist in the steel industry and lifelong interests in science, his practice uses coding, visualisation and interactivity to create objects, videos and installations that reference natural processes and scientific principles. He is a Harold Schenberg Fellow, a University Medallist and a recipient of a European Commission STARTS prize.

Over the course of human history our success as a species has relied upon our intimate connection with the natural systems that surround us. Our awareness of the global scale of that connection has not expanded as the world has globalised economically and culturally. Andrew is researching ways of sensitising us to that global scale.

andrewstyan.com

Ralph Kenke

Ralph Kenke is a User Experience Design lecturer in the School of Creative Industries – and a FASTlab team member. His work focusses on information design and visual communication. His conceptual work is challenging traditional and visual communication design applications by merging technology and art in his practice. Ralph's work has been recognised with international awards such as the Digital Portraiture Award by the National Portrait Gallery, a Museums Australian Multimedia & Publication Award (MAPDA), two AGDA Awards (Australian Graphic Design Association) and the New York Type Directors Club Award. He has established an international profile working with libraries, galleries and museums to create creative exposés, shown internationally at venues that include the Galerie Loire, Nantes; Cabrabria Central Library, Santander; Central de Diseno de Matedero, Madrid; Zgraf 12

Rewa Wright

Dr Rewa Wright is lecturer in Creative Technology at the University of Newcastle's Schol of Creative Industries. Her PhD investigated cutting edge Augmented Reality and Mixed Reality technologies from an interaction design perspective so she's well qualified as our lecturer in Creative Technologies. Rewa has a great background in the Creative Industries more broadly having worked as a producer for TV New Zealand for a decade developing her techniques for creative and commercial production, such as editing, 3D modelling, digital compositing, motion graphics, programming, and interaction design.

https://rewawright.com/about/

Notes to Editor:

The School of Creative Industries:

MISSION
The School of Creative Industries believes in the incredible power of human imagination. Across art, media and design, our students learn to imagine; creating ideas, developing materials, inventing activities and delivering experiences that make our lives better.

VISION
The future of the School of Creative Industries will be shaped by the constant re-imagining of its core values: curriculum innovation, creative collaboration, critical exploration and cutting-edge technology. The School shares an institutional vision aligned to meeting the constantly evolving challenge of change.

- **Creative freedom, critical insight and innovative thinking** enables students and staff to challenge the status quo through what they do and how they do it.
- **Creative practice mixed with collaboration and compassion** enables students and staff to 'Look Ahead', imagine new futures and create the means to deliver them.

The University of Newcastle's strategic decision to establish the School of Creative Industries in 2017 provides the University with an opportunity to play a key leadership role in the region championing education, research and innovation. The University of Newcastle has powered ahead with its initial aims of supporting the Newcastle city centre revitalisation through its commitment to delivering infrastructure and development of a centre for creativity and cultural production that will drive the creative economy. In July 2017, staff from the School of Creative Industries moved into Newcastle's CBD to occupy UoN's state of the art teaching facility, the $97m NewSpace (home to over 3000 students studying business and law). Since then, UoN has committed $25 million to a new building combining an Innovation Hub with additional facilities for the School of Creative Industries in the first phase of development of a Creative Precinct on land it has purchased in Newcastle's CBD.

The precinct will provide state of the art facilities for over 2000 Creative Industries students studying design, film-making, animation, music, journalism, dance, drama, games-design, experience creation and art.

It is also home the Future Arts, Science and Technology Lab (FASTLab) – a UoN Living Lab based in the School of Creative Industries.

In 2018, the School established **FASTLab** – the Future Arts, Science and Technology Laboratory. FASTLab is an inclusive transdisciplinary research centre focused on specific, topical and relevant issues in the global creative economies. Our objectives are to deliver transformational research with global impact for the betterment of society, communities, industry, and to build sustainable futures and ecologies. This 'Living Lab' enables staff to find their best work as national and international researchers, scholars and creatives and provide opportunities for staff to fully realise their individual and group research into a range of outcomes.

Across its themes of Human Behaviour, Future Work, Transmedia Arts, Narrative possibilities and Connected Communities the FASTLab team thinks - among other

things - about Innovation and enterprise; Technology (AI & Robotics); globalization; migration; aging; (in-work) poverty and inequality; macro-economic instability.

The lab also hosts 'Transmission'. Designed as a trans-disciplinary doctoral training network, 'Transmission' seeks to engage PhD and Master's students wanting to undertake research training as part of FASTlab, where real-world challenges faced by private, public and third sector partners will provide the research training context.

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