

A STUDY GUIDE BY KATY MARRINER & SCOTT WISEMAN



http://www.metromagazine.com.au

ISBN: 978-1-76061-058-6

http://theeducationshop.com.au

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INTRODUCING EXPERIMENTA

Experimenta is Australia's leading organisation that commissions, promotes and expands the scope of media artwork presentation. These practices are at the nexus of art with digital media, science and technology, and design. We are an incubator for creativity and thought, where artists actively engage with contemporary culture. Experimenta challenges convention, celebrates the maverick, educates and leads industry discussion, and encourages collaboration.

Established in 1986 by experimental film and video makers, Experimenta has been instrumental in the development of media art from an underground cultural phenomenon in the 1980s to exhibiting in major galleries, festivals and events. Melbourne based, with a national and global reach, for over 30 years Experimenta has sought out and nurtured experimental art practices by supporting Australian media artists. We engage, educate and grow audiences for media art, develop expertise in the presentation of media art and are strong advocates for the sector.

Since 2003 our signature program has been the *Experimenta International Biennial of Media Art*, resulting in a honed and well-managed touring model. We have presented six editions of the exhibition that has toured extensively across metropolitan and regional Australian, with 42 artists commissioned to produce new works. This exhibition is the only international biennial to tour nationally, presenting technology-driven art to diverse audiences across the country. In 2017 the Biennial will move to a Triennial cycle allowing Experimenta to invest more deeply in artist and creative development processes, tour to more galleries around Australia, and present projects outside of traditional gallery contexts while the exhibition is on tour.

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EXPERIMENTA ARTISTIC DIRECTOR – JONATHAN PARSONS

Jonathan Parsons has over twenty years of experience working in arts and culture in Australia and internationally. Concurrent with his role at Experimenta he is the Creative Director of Robotronica a biennial festival showcasing developments in robotics and interactive design held at QUT in Brisbane. He was the Director of ISEA2013 (International Symposium on Electronic Art) an international festival of art, technology and ideas in partnership with Vivid Sydney.

Parsons has extensive arts administration and management experience working for a range of festivals, cultural institutions and performing arts companies. He has artistically led and collaborated on a broad range of cultural programs and events across all art forms including for: the State Library of Queensland, Queensland Art Gallery, Queensland Performing Arts Centre, Riverfestival, Byron Bay Writers Festival, Powerhouse Museum, Sydney Gay and Lesbian Mardi Gras Festival, Pacific Wave Festival, Adelaide Festival of the Arts, Awesome Festival and the London International Festival of Theatre.

EXPERIMENTA MAKE SENSE CO-CURATOR – LUBI THOMAS

Lubi Thomas is an experienced curator working in the field of digital/new media arts and associate practice areas. In the past decade, she has developed and delivered an extensive range of exhibitions, projects, festivals, events, residencies and mentoring programs, as well as, public and education focused programming. Site-responsiveness is a key element in her practice, producing works and cultural experiences for a variety of audiences. Lubi's master's Curating in Uncharted Territories proposes a methodology for cultural programing development and sustainability for sites engaged in the display of, and engagement with, experimental creative practice.

Lubi has developed cultural programming frameworks for The Cube Brisbane, Creative Industries Precinct QUT, and Qld State Library. Lubi has brokered on-going relationships with LEGO Education, Ars Electronica, FACT Liverpool, and the Australia Council for the Arts. She works and consults locally, nationally and internationally. Current projects include: Experimenta Media Arts, Femel Fissions: Women, Art & Science, and ReForm - Brisbane Street Art Festival, UTV and the Digital Placemaking Institute.

WHAT IS MEDIA ART?

Media art is a broad genre of art that encompasses all art using technology including digital art, interactive art, internet art, robotics, moving image, video art, computer art, sound art and animation. Media art can be wearable, interactive, immersive and balancing on the edge of science and art. Media art often involves emerging artistic practices and innovation and more often than not, engages the audience in active participation.

Media artists often take existing and accessible technologies such as those used at home or at school and explore and imagine new creative possibilities and applications. Media artists often come from diverse fields of expertise such as Fine Art, Design, computer and software engineering, sound art, electronic music and science.

There seem to be endless possibilities for artists and audiences to engage with one another, to participate and interact, to respond and to transform as they grapple with ideas, create meanings and build experiences through media art.

ABOUT THIS STUDY GUIDE

This resource is designed to complement a visit to the *Experimenta Make Sense: International Triennial of Media Art* exhibition and has been developed for primary and secondary teachers and students to enable exploration and learning before, during and after their exhibition visit. This study guide expands on the exhibition themes, the artists, their artworks and the technology and techniques involved in their creation. It supports the information about artists and their works, essays and other resources in the *Experimenta Make Sense* exhibition catalogue.

The *Experimenta Make Sense* exhibition and study guide offers many opportunities to promote Australian Curriculum Learning Areas, General Capabilities and Cross-curriculum priorities.

Links can be made to the following Australian Curriculum Learning Areas

- The Arts
- English
- Science
- Humanities and Social Sciences
- Technologies

Access the Australian Curriculum online for relevant content descriptions and achievement standards: http://www.australian-curriculum.edu.au/.

The *Experimenta Make Sense* study guide provides information and suggestions for learning activities in Years 11 and 12 in Art, Media, Studio Arts and Visual Communication Design. Teachers are advised to access the senior curriculum syllabus documents for their state or territory.

Through viewing the exhibition students are encouraged to:

Visually analyse and respond to media art works in the exhibition.

- Explore the range of media and materials available to contemporary artists and how the way artists use media and materials may contribute to our understanding of their work.
- Consider the issues of display, presentation and context involved in the presentation of media art.
- Use works in the exhibition as a starting point for their own creative investigations and production of artworks.
- Research the work of other artists (both contemporary and past) whose work engages with similar mediums, themes and ideas.

The information, activities and discussion points in this guide, reference key selected artworks from the *Experimenta Make Sense* exhibition. Teachers are encouraged to choose a range of artworks from the study guide for their students to engage with and to select from the suggested discussion points and activities those that best meet their students' interests, developmental and learning needs, and the focus of their curriculum. Teachers are also encouraged to adapt and build upon resources, activities and discussion points.

Images, activities and discussion points for selected artworks from the exhibition are provided to assist with:

- preparation prior to an exhibition visit (Prepare)
- exploring the works during an exhibition visit (Explore)
- engaging students in post-visit reflections and enquiry (Reflect and Respond)
- encouraging creative expression (Make)

Observation sheets for primary and secondary students have been created to guide students' engagement and exploration of the artworks featured in *Experimenta Make Sense*. Teachers may choose to make multiple copies of the relevant observation sheet prior to visiting the exhibition.

RECOMMENDED AGE GROUPS

This guide provides recommendations to assist teachers to identify artworks that are appropriate for their students.

- Middle and Upper Primary: Year 3 Year 6
- Junior and Middle Secondary: Year 7 Year 10
- Senior Secondary: Year 11 Year 12

Before visiting *Experimenta Make Sense* it is suggested that you contact gallery staff to determine the following:

- Suitability of exhibition content and subject matter for the year level you plan to bring.
- Whether staff are available to give an introductory talk.
- Opening hours, transport and parking options, cloakroom facilities and whether admission fees apply.

If possible, teachers are advised to preview *Experimenta Make Sense* prior to bringing students to see the exhibition.

AN INTRODUCTION TO EXPERIMENTA MAKE SENSE

The exhibition expresses the disconcerting and delightful world of the digital age. Both playful and thought provoking, this exhibition asks audiences to immerse their senses into a 'thinking', 'feeling' and 'doing' contemplation of what it is to be human in an age of technological acceleration. JONATHAN PARSONS

Experimenta Make Sense investigates how artists 'make sense' of our world, and invites us to explore our understanding of the present.

In a time of accelerating technological changes to our society and culture, *Experimenta Make Sense* investigates the extreme present. The term 'extreme present' was recently coined to capture the impact of accelerating technological change on society and culture: a time where it feels impossible to maintain pace with the present, let alone the future. Beyond this useful phrase, the vocabulary for describing this lived reality is still developing.

A challenge for 21st century humanity is that "we have Paleolithic emotions, medieval institutions and god-like technologies", according to Harvard biologist E.O. Wilson. We humans still 'make sense' of our world through our physical selves and our cultures. The artworks exhibited in *Experimenta Make Sense* engage directly with this conundrum.

The key questions explored by the artists featured in Experimenta Make Sense include:

- How do we make sense of the world around us?
 Featuring artworks that engage with the complexities of day-to-day living through to those works that explore the unfathomable (whether of scale such as the nano or the immense, or of quantity and complexity such as big data and systems theories).
- How can we use our senses to make sense?
 Artworks that explore whether different bodies make
 different sense and how the use of different senses can
 generate different understandings. How our senses, or
 indeed lack thereof, contribute to how we make meaning
 of and for ourselves.
- How do we make sense through making?
 Artworks that are realised through hands-on participation
 by audiences. Artworks that reveal how our embodied
 experiences alter our understanding of the world.

The exhibition seeks to encourage wide engagement with this conversation by presenting work by Australian and international artists who use, critique and experiment with technology, media and art. *Experimenta Make Sense* is Experimenta's seventh national touring show and first International Triennial of Media Art. It premieres in Melbourne on 2 October to 11 November 2017 at the RMIT Gallery, and will tour nationally until 2020.

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EXPLORING MEDIA ART

SOME ARTWORKS DON'T CHANGE.
THE ARTWORK IS EXACTLY THE SAME
BEFORE YOU ARRIVE TO EXAMINE IT
AND IT REMAINS THE SAME AFTER
YOU WALK AWAY FROM IT. MEDIA ART,
HOWEVER MAY BE PRESENTED IN
THE FORM OF AN INSTALLATION, MAY
BE INTERACTIVE AND TENDS TO BE
TIME BASED, CHANGING FROM ONE
MOMENT TO THE NEXT.

- 1 Make a list of artworks that are 'exactly the same before you arrive to examine it and it remains the same after you walk away from it'.
- 2 What is an installation? Have you ever viewed an installation?
- **3** What is meant by time-based art? Have you ever viewed a piece of time-based art?
- 4 What makes an artwork interactive? How does it make you feel to be able to touch, hear or interact with an artwork in an exhibition rather than simply look at it?
- 5 Have you been to a media art exhibition before, especially one with interactive art? If so, how was your experience similar to or different from visits to galleries with traditional displays of paintings and sculpture?
- 6 If you have previously engaged with a media art exhibition, describe how some of the artworks have used or explored the elements of space, time, light, motion, colour and sound.
- **7** If you have never been to a media art exhibition and interacted with artworks that respond to your presence and touch, what do you expect to see when you visit *Experimenta Make Sense*?
- 8 Artists exhibit their artworks in many countries throughout the world. In the case of media art the exhibition of work may be quite complicated, involving the artists, curators, electricians and often other technicians. How do you think this affects where *Experimenta Make Sense* can be exhibited?
- 9 Do you think media artworks translate from the cultural context in which they were made to other cultural contexts? Give examples to support your opinions.

BEFORE YOU VISIT EXPERIMENTA MAKE SENSE

Experimenta Make Sense aims to be contemporary, inviting, interactive, leaving a lasting impression on people and encouraging contemplation and reflection.

What do you expect to see at the exhibition?

Experimenta Make Sense explores many key concepts and ideas. These include:

- the link between art, technology and science;
- the representation and transformation of knowledge;
- whether or not artwork lead us to new modes of consciousness:
- the role of the artist to change our understanding of the world.

The seventh Experimenta exhibition is titled *Experimenta Make*Sense

- Brainstorm as a class the meaning of the phrase 'make sense'.
- What does the phrase 'make sense' mean to you?
- When do people use the phrase 'make sense'?
- How do you 'make sense' of the world around you?
- How do you use your senses to 'make sense' of the world around you?
- Spend time as a class discussing why the title *Experimenta Make Sense* may have been chosen for the exhibition?
- "Technological progress has accelerated to the point that
 the future is happening to us far faster than we could ever
 have anticipated. This new world is what we call 'extreme
 present', a time in which it feels impossible to maintain
 pace with the present, never mind to chart the future." 1

The term 'extreme present' was devised by curator Hans Ulrich Obrist to describe the impact of accelerating technological change on society and culture, and the feeling that it is impossible to keep up with the pace of change.

You live in the 'extreme present'. What are the challenges of living and growing up in the 'extreme present'? What are the advantages of living and growing up in the 'extreme present'? Is it thrilling or is it alarming? Is it always possible to make sense of the 'extreme present'? Do you need to? Does it matter if you can't?

- Contemporary art can often not make sense to a lot of people. It can be obtuse and difficult and impenetrable.
 So, how easily do you think audiences will be able to make sense of this show, and do artists or curators have an obligation to help art make sense?
- Visit Experimenta Make Sense online at http://experimenta. org/makesense. Spend time exploring the website and become familiar with the website's content. Learn about Experimenta and Experimenta Make Sense. Locate information about the Experimenta Make Sense artists and artworks.
- Hans https://www.artsy.net/article/hans-ulrich-obrist-the-future-of-art-according-to-hans-ulrichobristObrist

AT THE EXHIBITION

Experimenta Make Sense provides an opportunity for visitors to explore diverse artworks as they engage with the works of talented Australian and international artists. As you engage with each one, consider how it explores the exhibition's theme.

During your visit to *Experimenta Make Sense*, take the time to observe how audiences interact with artworks. Make notes about your observations, and comment on relationships between the artworks and audiences, the selection of spaces for artworks, and their impact or effect on audience engagement and on meanings.

Suggest that students think about the placement of each artwork. Explore how the placement of a work enhances or contributes to the audience's experience of that work.

Some points to consider:

- Is the work near the entrance, in a separate room or placed in a particular way?
- What is near the work? How does the placement of one work in relation to other works affect your experience with each piece? Do they enhance each other or detract from one another?
- Do works that are placed near to each other have some relationship? If so, what is it?
- Do all the works have something in common? Do selected works have things in common? If so, explain what you mean. What are the differences between the works?
- How and why do you think decisions were made about the placement of each work?

Primary School Observation Sheet

I SEE...., I THINK...., I FEEL...., I WONDER....

Use the observation sheet on page 7 to take notes about the *Experimenta Make Sense* artworks. Take a photo or make a sketch to help you remember the artwork when you return to school.

Secondary School Observation Sheet

ANALYTICAL FRAMEWORK

Use the observation sheet on page 8 to take notes about the *Experimenta Make Sense* artworks. Take a photo to help you remember the artwork when you return to school.

Then complete page 9.

Artist Name: Title and Date of Artwork: Describe what you see and/or hear when you are focused on the artwork Describe what you think the artist is trying to say Describe how you think the artist created the artwork Describe how the artwork makes you feel I think.... I feel.... I wonder.... I see.... Describe how you interacted with the artwork:

Artist Name:	
Title and Date of Artwork:	
Formal Framework	Personal Framework
Cultural Framework	Contemporary Framework

FORMAL FRAMEWORK

The Formal Framework is used to analyse how an artwork's formal elements and principles contribute to its meanings and messages.

- How have the formal elements of line, colour, tone, texture, shape, sound and form including focal point and space been applied by the artist and to what effect?
- How do these qualities contribute to the meanings and messages of the work?
- What materials and techniques have been used?
- How has the use of these shaped or affected the

- interpretation?
- What are the distinctive stylistic qualities of the artwork and how do they contribute to meaning?
- How does the work relate to other works in a similar style or from the same historical period or cultural background?
- What physical aspects or presentation of the artwork contain symbolic meaning and use of metaphor?
 (This may include the use of formal art elements, the compositional arrangement of figures or objects, the medium or the technique used by the artist, the style in which it is created.)

PERSONAL FRAMEWORK

The Personal Framework is used to interpret how an artist's experiences, feelings, thinking and/or personal philosophy can be reflected in an artwork. It can also be used to gain awareness of the effect of the viewer's cultural background and experience on the interpretation of the artwork.

- What relationship does the artwork have to the artist's life and experiences? What visual evidence supports this reading?
- Has the artist used a specific process or practice in creating the artwork that may reflect their personal

- philosophy and ideas?
- How is the artwork linked to people, places or experiences of personal significance to the artist such as the artist's personal feelings, thinking, aspirations, beliefs, desires (conscious or subconscious) or preoccupations, or to memories, dreams or personal world of fantasy?
- How does the experience and background of the viewer affect the interpretation of the artwork?
- What are the symbols or metaphors explored or utilised in the artwork?

CULTURAL FRAMEWORK

The Cultural Framework is used to identify the influences on an artwork of the time, place, purpose, cultural and political settings in which it was made. These influences may include historical, political, social, socio-economic, religious contexts as well as aspects of ethnicity and gender.

- How do the social, political, cultural or religious contexts of the artwork contribute to its meaning?
- How have historical or contemporary events shaped the
- intention of the artist or our understanding of the artwork's meaning?
- How do gender values reflect the social context of the time the artwork was produced? How do these values compare to the values of today?
- How does the physical placement of artworks affect their interpretation?
- How does the cultural background of the viewer influence the interpretation of an artwork?

CONTEMPORARY FRAMEWORK

The Contemporary Framework is used to examine an artwork, irrespective of when it was created, in the context of contemporary art ideas and issues. For the purpose of this study contemporary art ideas and issues are those originating in the late twentieth century onwards.

- How have contemporary art ideas and issues challenged traditional understandings of artworks and their significance?
- How does the choice or presentation of subject matter or medium, materials and techniques reflect or challenge artistic or social traditions?
- What is the impact of dynamic media applications and other emerging art forms on the viewer such as video, digital, projection, installation, interactive, street art, sound and performance art? How do these art forms differ from traditional ideas of viewing and experiencing object-based art in museums and galleries?
- How might artworks of the past take on new or different meanings, in the context of contemporary ideas and issues?

AFTER YOU VISIT EXPERIMENTA MAKE SENSE

Share and discuss the responses recorded by students while they were at the exhibition.

SUGGESTED PROMPTS

- What did you like most/least about the exhibition?
- What surprised you about the exhibition and why were you surprised?
- What shocked you and why were you shocked?
- What other reactions did you have? What created these reactions?
- Which of the works would you most like to have in your own home? Why?
- Having engaged with the exhibition, revisit your response to the question: Why is the exhibition titled Experimenta Make Sense? Do you need to change your response to this question?
- Experimenta Make Sense asks: 'What does it mean to make sense?'. What is your answer now that you have seen the exhibition?
- Take a photograph or sketch your favorite artwork.
 Write a description beneath the image describing what the artwork is about, how it works, how it makes you feel, what it makes you think and what it is that you like about it.
- Do you think any of the artworks you engaged with encouraged you to change the way you think about or perceive the world? If so, explain how the various artists' use of media technology, materials and choice of content helped to influence you.
- Artists can select from a variety of media and materials to represent and express their ideas.
- Describe some of the ways that technology has changed the way we think, feel and act. Discuss why artists might be inspired to explore the creative possibilities of everyday technologies.

- What things might influence an artist's choice of materials, media or artistic techniques?
- Record specific technologies used by artists in the Experimenta Make Sense exhibition.
- Use a highlighter to identify technologies you use regularly at home or at school. Discuss similarities and differences between your use of the technologies and the artists' uses.
- How many of your listed technologies were available when your parents, guardians or grandparents went to school?
- As a class, brainstorm different kinds of media art you could create with the technology available to you at school or at home.
- List criteria the curators may have used in making decisions about works to include in the exhibition. How do you think decisions may have been made about the location of works in relation to one another? Do you think the curators expected each visitor would start at the beginning and move around the exhibition in a particular order? Why or why not?
- Select two or three of the artworks you engaged with at the Experimenta Make Sense exhibition and identify the ideas, meanings and messages the artists are exploring.
- Imagine you have been commissioned to make an artwork for Experimenta Make Sense. Submit a design proposal that describes and explains your concept.
- Create your own artwork, utilising one of the techniques employed by an artist in the exhibition.

EXTENSION ACTIVITIES

1 Select one of the *Experimenta Make Sense* artworks as your focus. Your task is to write a detailed analysis or a review of the artwork. Draw on the notes that you have already made.

Your analysis may be presented as an alternative wall text for the artwork. Wall text is the text that is written by the curator of an exhibition and usually appears next to the artwork on the wall of the gallery.

or

Your analysis may be presented as a review of the artwork that would appear in the arts section of a newspaper or periodical for a general audience or in an art periodical.

2 Select one of the *Experimenta Make Sense* artists as your focus. Your task is to present a capsule exhibition or a catalogue of the artist's work. A capsule exhibition is a selection of artworks that are in some way definitive. A

catalogue is a printed list of exhibits. Use the internet to research the artist that you have selected. Your response should provide a biography of the artist, an overview of the artist's work and five examples of the artist's work. For each artwork selected provide a commentary that explores the artwork's composition, meaning and message.

3 Experimenta Make Sense is an exhibition of contemporary media art. Most of the artworks featured in the exhibition are new works. The oldest artwork featured in the exhibition is Katarina Zdjelar's Shoum which was created in 2009.

Your task is to investigate media art from another decade. Begin by choosing a decade. Use print and electronic texts to identify significant examples of the decade's media artists and media art. Compile a PowerPoint to present your findings. The design of the PowerPoint should reflect the content of the PowerPoint.





AN EXPERIMENTA AND AUSTRALIAN NETWORK FOR TECHNOLOGY (ANAT) COMMISSION

Moving from the Binary 2017

Aluminium, sandstone rocks, blue stone tiles, stainless steel wire, electro-mechanical motors, video monitor. Dimensions: 245 x 40 x 70 cm. Duration: 3 hours (looped) ALL IMAGES COURTESY OF THE ARTIST © THE ARTIST

ROBERT ANDREW (AUSTRALIA) MOVING FROM THE BINARY

Moving from the Binary evolves as English text translations of the Yawuru language are reformed through mechanical processes to create a new physical landscape. Six Yawuru words/phrases are cycled through the machine, and each change of word and its translation is shown on a video screen next to the installation.

Through an electronically driven process the normally opposing x-y axis that would be used to plot text or image is subverted to parallel positioning. This creates a choreographed negotiation between two rocks travelling over a horizontal bluestone surface. A seemingly random, uninformed dance of negotiated positioning and re-positioning across the etched bluestone base, produces both an aural and physical track. The rock on stone resonates with the mechanical machine-made sounds, while residues in the form of ground rock and pindan (red soil) are created.

The movement of the rocks produces ochre-like powder that filters through etched holes in the bluestone, floating to the ground and forming, over time, its own landscape. Within this newly formed landscape the text origin of one of the words may be seen. By releasing the translated language into another form, *Moving from the Binary* questions the binary text of the coloniser, the imposed ownership and disruption of the aural/oral colonised language and with it, the disruption of a culture.

Robert Andrew is an Indigenous artist and descendant of the Yawuru people of the Rubibi (Broome) area West Kimberley, Western Australia. Andrew's installation-based practice explores his Australian Indigenous history.

Born in Perth in 1965, Andrew relocated to Brisbane in 2000. He completed a Bachelor of Contemporary Australian Indigenous Art in 2012 at the Queensland College of Art (QCA), accepting his Fine Art Honours in 2013. He is currently completing his doctorate in Visual Arts at QCA, Griffith University. Andrew

has exhibited widely throughout Australia including TarraWarra Museum of Art (2016); National Gallery of Victoria (2015); Cairns Regional Gallery (2014); and a solo exhibition at Museum of Brisbane (2017). His work has been acquired by the National Gallery of Victoria for the 2015 exhibition *Indigenous Art: Moving Backwards into the Future*. He was the recipient of the Graduate Art Show and Survey Room Award (2013) and the St Andrew's War Memorial Hospital Art Prize (2013), and a finalist in the Geelong Contemporary Art Prize (2016) and the R&M McGivern Painting Prize (2016).

DID YOU KNOW? IT IS BELIEVED THAT AT THE TIME OF EUROPEAN SETTLEMENT THAT THERE WERE 250 INDIGENOUS LANGUAGES SPOKEN, FEWER THAN 150 REMAIN TODAY.

PREPARE

- Why is important to preserve local indigenous languages?
- What is the local indigenous language in the area where you live? Do you know how many people speak it?
- Andrew's Moving from the Binary uses English translations of the Yawuru language. Research where the Yawuru people come from.
- Why do indigenous people have such a strong connection to the land?
- Have you heard of the word 'binary' before? Investigate the term 'binary'. What does it mean? Where is it used? How might it be used in an artwork?

EXPLORE

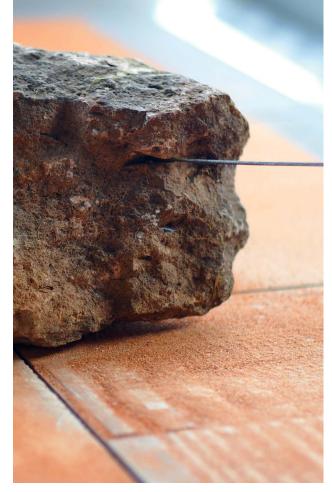
- Describe your immediate response to Moving from the Binary. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Andrew to create *Moving from the Binary*.
- Describe the way Moving from the Binary has been installed in the exhibition space. How does the placement of each artwork affect audience response?
- Moving from the Binary uses traditional material with modern technology. How does Andrew achieve this and why do you think he does this?
- Describe the sound that this artwork creates and explain how you think it is made. Why do you think Andrew has included it?
- Can you see a pattern in what the rocks do when each word is displayed on the screen or is it random?
- Describe what happens when the rocks move over the bluestone and what is the result. What does it look like? What is it supposed to represent?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about Moving from the Binary, what is the intended meaning and message of the artwork?
- Explain why Andrew titled the artwork Moving from the Binary.
- Explain how Moving from the Binary relates to the

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: INDIGENOUS LANGUAGE, TRANSLATION, BINARY, X-Y AXIS, PARALLEL, AURAL, COLONISED, COLONISER, LANDSCAPE



Moving from the Binary 2017 IMAGE COURTESY OF THE ARTIST © THE ARTIST

thematic focus of Experimenta Make Sense.

- Andrew's artworks have been said to uncover, reveal and re-present aspects of Australian Indigenous history and his own family history which have previously been denied or hidden. How does *Moving from the Binary* reflect this description?
- Why do you think Andrew chose the words he did?
 Is there a reason for these words? Do they add more meaning to the artwork? Do they make a comment about the impact colonisation had on the Yawuru people or Indigenous people in general?
- What other Indigenous artworks are in the exhibition?
 What do the artworks have in common? How do the artworks differ?
- Katarina Zdjelar's artwork Shoum is also about the translation of language. Compare and contrast the two artworks.

MAKE

- Paint, draw or use digital software to create a split landscape that shows the land before colonisation and after colonisation.
- Create a table of words from other languages and then their English translations. Think how you might visually present these lists.

USEFUL LINKS

Robert Andrew official website http://www.robotandrew.com/ Museum of Brisbane presents Robert Andrew: Our mutable histories https://youtu.be/dx99y6sBP7w





Eremocene (Age of Loneliness) 2017
Glass, fibre optics, electronics, computer, water, lighting, mechanics, five channel sound. Dimensions and duration variable.
PHOTOS COURTESY OF THE ARTIST © THE ARTIST

KEITH ARMSTRONG WITH LUKE LICKFOLD AND MATTHEW DAVIS (AUSTRALIA) EREMOCENE – AN AGE OF LONELINESS

A mysterious creature glows from within. Witnessed from several vantage points, it moves uncannily, a fluid motion within a dense blackness. Sound, vision and movement are as one. A life-like, biomorphic form fades in and out of perception.

The concept of 'the extinction of human experience' expresses our fear for all that will be rendered senseless when an ancient, intelligent, biodiverse world descends into permanent darkness. But as one series of conceptions slip into extinction, so others flow on. *Eremocene* suggests that we might instead embrace artificially intelligent 'things', which have little need for dated legacies such as excess light or the long-extinguished sounds of biological life. Philosopher and biologist EO Wilson calls such possible futures the Eremocene – an Age of Loneliness.

Eremocene has developed out of ten years of sustained collaborations with life scientists, ecologists and sustainability professionals. It reflects upon both the vulnerability and resilience of marine, terrestrial and human ecologies as they are forced to relate to today's increasingly 'overheated' and artificially intelligent worlds.

Keith Armstrong is an experimental artist motivated by issues of social and ecological justice. His participatory practice encourages audiences to imagine collective pathways toward sustainable futures. Specialising in collaborative and experimental approaches, Armstrong's work incorporates innovative performance forms, site-specific electronic arts, networked interactive installations, alternative interfaces, art-science collaborations, and socially and ecologically engaged practice. His research asks how insights drawn from scientific and philosophical ecologies can help us to better invent experimental art forms, in the understanding that art practitioners must also seek to act as powerful provocateurs and social catalysts. Using radical research

methodologies, he has created over sixty major art works which have been shown extensively in Australia and overseas, and supported by numerous grants from the public and private sectors. Armstrong is the Artistic Director of *Eremocene* (Age of Loneliness).

Luke Lickfold is a sound designer, control programmer and interactive systems designer exploring fresh approaches to interactive system design and sound spatialisation. His work embraces collaboration, with a strong emphasis on the dynamic integration of sound, visuals, robotics, lighting, performance and audience participation. Recent key works (with Keith Armstrong/Lawrence English) include Light of Extinction, Dark Cartographies and Nightrage /

Nightfall. Lickfold is the Sound and System Designer for Eremocene (Age of Loneliness).

Matthew Davis is an experimental musician and artist interested in performance authenticity. His group Trendy Nightingale explore the relationship between traditional instrumentations and experimental electronic technologies. He has developed many different electronic musical instrument and installations, including a movement-based Grey Lady synthesizer shown at the Ableton University Tour (2014), virtual graffiti environment Paint by Light // Made by Light (2015), and Igneous' Fluidata Installation (2015). Davis is the Interactive Vision Designer for Eremocene (Age of Loneliness).



DID YOU KNOW? ARTIFICIAL INTELLIGENCE (AI) IS NOT NEW. RESEARCH INTO AI STARTED IN 1956 WHEN COMPUTERS WERE WINNING AT CHECKERS, SOLVING WORD PROBLEMS IN ALGEBRA AND SPEAKING ENGLISH.

PREPARE

- What do you know about artificial intelligence (Al)? Do some research and draw your own conclusion if it is something to fear or something to embrace.
- How is Al influencing our world?
- What impact does technology have on our environment? Is it a positive or negative effect?
- What do you think the term 'Age of Loneliness' means?

EXPLORE

- Describe your immediate response to Eremocene (Age of Loneliness). Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Armstrong and his collaborators to create Eremocene (Age of Loneliness).
- Describe the way Eremocene (Age of Loneliness) has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Why does the artist use vantage points for viewing and not just show the whole piece to everyone? How did the artwork change according to which vantage point you were looking through?
- How does the sound and vision work together?

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: FLUID MOTION, FIBRE OPTICS, VANTAGE POINT, BIOMORPHIC, EXTINCTION, BIODIVERSE, ARTIFICIAL INTELLIGENCE, MARINE ECOLOGY, TERRESTRIAL ECOLOGY, HUMAN ECOLOGY

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about *Eremocene (Age of Loneliness)*, what is the intended meaning and message of the artwork?
- Explain why Armstrong titled the artwork *Eremocene* (Age of Loneliness).
- Explain how *Eremocene* (Age of Loneliness) relates to the thematic focus of *Experimenta Make Sense*.
- Would the meaning of the artwork change if it was just seen as a whole rather than from different vantage points?
- What do you think the mysterious creature is supposed to represent?
- What sensations does the darkness evoke? Why has Armstrong chosen to present the artwork in this way?
- Armstrong believes that art practitioners must seek to act as powerful provocateurs and social catalysts. Is this true for all of the artists whose artwork is exhibited in Experimenta Make Sense?

MAKE

- Create an artwork that makes a comment about the vulnerability yet resilience of the environment.
- Create an artwork that fits inside a box and cut out various vantage points for the audience to view it.
- Write a story about a world where no organic, animal or human things survives – only artificial intelligence. What took place that caused this? What would this world be like?

USEFUL LINKS

Keith Armstrong official website https://embodiedmedia.com/



Access Remote Fervour 2017

2 channel looped video with sound by Nick Wilsdon, acrylic, water, electronics, aluminium. 2 tanks each 230 x 20 x 90cm. Video duration 6 mins and 7 mins. PHOTO BY REBECCA MANSELL © THE ARTIST

ELLA BARCLAY (AUSTRALIA) ACCESS REMOTE FERVOUR

Access Remote Fervour explores the interplay between the physical world and the immateriality of ideas, data, spectres and echoes. Taking inspiration from the ways humans store and transfer information – from written text in ancient Mesopotamia to giant underground server farms – the work considers the ethereal nature of data and thought.

Tanks of water feature in the darkened gallery. Mist swirls across the surface, gently rising and revealing human forms swimming across the glowing surface. Luminous echoes of the figures appear in the tanks. The human forms seem caught in a limbo between worlds, in an eternal cycle of formation and dissipation.

Access Remote Fervour suggests the eerie presence of a consciousness within the watery capsules, a life-force without physical form trapped in a state of threshold. With their protruding wires and organic fluid, the tanks have the look of a crazed science experiment, like an amniotic pool for a Cronenbergian digital birthing. They feel both digital and supernatural, pointing to something of the human soul caught in the electronic transfer of data and light. A Geist in the machine.

Ella Barclay makes installations in sound and light that channel the techno-romantic. With shape-shifting bodies floating in misty seas, nano visuals of fibre optics, and large-scale server networks, Barclay brings to light the physical spaces that data occupies and speculates a future of human-machine relationships.

Barclay's 2016 exhibitions include *That Which Cannot Not Be*, Vox Populi, Philadelphia; *I Had to Do It*, UTS ART, Sydney; *Bodies Go Wrong*, Orgy Park, New York; *Almost*, Instant 42,

Taipei; and *Light Geist*, Fremantle Arts Centre. Her 2015 exhibitions include *Elemental Phenomena*, Griffith University Art Gallery, Brisbane; *Subject to Ruin*, Casula Powerhouse; and *If You Dream You Are Naked, You Are Not Aware That You Are Dreaming*, 55 Sydenham Rd, Sydney. In 2016 Barclay was a resident artist at the Australia Council Studio, London; Instant 42, Taipei; and Casula Powerhouse, Sydney. She holds a BA (Honours) from the University of New South Wales, an MSc Digital Media from the University of Edinburgh and is currently a PhD candidate at the University of Technology, Sydney.



PREPARE

- Think and share with another student how you store and share your data.
- Do you still handwrite birthdays, calendar events, lists, etc.? Or do type them into your computer or smartphone?
- What would you do if all of your data was lost?
- What would happen if large amounts of the world's important data was lost?
- What do you think happens to the vast amounts of data generated in the world each day? Where does it end up? Who looks after it?
- Think about how humans have stored data in the past compared to how it is stored in the present day? What do you think the advantages or disadvantages are of the different method of data storage and information transfer?

EXPLORE

- Describe your immediate response to Access Remote Fervour. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Barclay to create Access Remote Fervour.
- Describe the way Access Remote Fervour has been installed in the exhibition space.
- How does the placement of the artwork affect audience

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: LOOPED VIDEO, MIST, LUMINOUS ECHOES, LIMBO, ETERNAL CYCLE, CONSCIOUSNESS, INTERPLAY, HUMAN/MACHINE RELATIONSHIPS, FERVOUR

DID YOU KNOW? A SERVER FARM IS A COLLECTION OF COMPUTER SERVERS USUALLY MAINTAINED BY AN ORGANISATION TO SUPPLY SERVER FUNCTIONALITY FAR BEYOND THE CAPABILITY OF A SINGLE MACHINE.

response?

- What effect does the mist give the artwork? How do you think the mist is made?
- Describe how sound is used in this artwork.
- Access Remote Fervour has been described as looking like a crazed science experiment. Is that what you thought when you saw it?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about Access Remote Fervour, what is the intended meaning and message of the artwork?
- Explain why Barclay titled the artwork Access Remote Fervour.
- Explain how Access Remote Fervour relates to the thematic focus of Experimenta Make Sense.
- What do you think the tanks represent? What about the water and the swimmers?
- Look up the definition of fervour and identify which meaning Barclay has used when titling her work. Justify your decision.

MAKE

• Create your own technology inspired artwork titled Access Remote Fervour.

USEFUL LINKS

Ella Barclay official website http://ellabarclay.com/ Ella Barclay Vimeo Channel - Video of Access Remote Fervour https://vimeo.com/221411312





pull 2017

Multi-channel audiovisual installation. Dimensions: variable. Duration 6:56 mins continuous loop

AN EXPERIMENTA AND AUSTRALIAN NETWORK FOR TECHNOLOGY (ANAT) COMMISSION © THE ARTIST

MICHELE BARKER AND ANNA MUNSTER (AUSTRALIA) PULL

From beneath the surface, an underwater cinematographer records the moment of a large waveform that breaks above. The event passes quickly, but in *pull*, that moment lasts infinitely.

pull is a multi-channel audiovisual installation that draws out the experience of this one moment, asking us to sense its lived time as extraordinary. Extending the experience of a wave breaking, it presents a single submerged event in very different ways. Projected on one wall, cinematic images shot at extremely high speeds follow the intensively slow movement of the large wave forming under the water. On the opposite wall, GPS data – tracking the cinematographer's movements while filming – is visually reworked through 3D animation. Designed as two seamless replays of one moment, pull presents an expanded sensorium. The sonic elements are immersive as well as directional, suggesting again the multiple perspectives from which any 'single' event can be sensed. pull is an audiovisual exploration of time and embodied perception, using water as a force that exists outside humankind's own short 'moment' in geological time. It considers the relations between our senses and the environment through these differences in time and scale.

Michele Barker and Anna Munster have collaborated for over twenty years. Their most recent work focuses on experimental cinema and responsive media environments as a way of exploring perception, embodiment and movement. Their work has been included in Vidarte, the Mexican Biennale of Video Art; MOCA, Taipei; The Photographer's Gallery, London; FILE Festival, Sao Paolo;

Museum of Art, Seoul; and the Art Gallery of New South Wales.

Following a residency at Eyebeam in New York, Barker and Munster developed the award winning multi-channel work *Struck*, which was exhibited in Australia, the US, China and Taiwan. Recent works include *évasion* (UTS Gallery, Sydney, 2014), an 8-channel responsive installation working across dance, performance and

the moving image; and the multi-channel interactive work *HokusPokus* (Watermans Gallery London, 2012), which explores the relations between perception, magic and early moving image technologies. This work was chosen to represent Australasia as part of the International Festival of Digital Art and the Cultural Olympiad in London (2012).



[above] **pull** 2017 A 2017 EXPERIMENTA COMMISSION, IN PARTNERSHIP WITH ANAT © THE ARTISTS

[right] **pull** (concept sketch)
A 2017 EXPERIMENTA COMMISSION,
IN PARTNERSHIP WITH ANAT © THE ARTISTS

PREPARE

- Have you ever been pulled under a wave when swimming or surfing at the beach?
- Do you know how waves are made? Conduct your own research and share your findings with your class.
- Surfers love waves, but they are not just for them.
 What is the purpose of a wave?
- Where are the biggest waves in Australia?

EXPLORE

- Describe your immediate response to *pull*. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Barker and Munster to create *pull*.
- Describe the way pull has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Being held under or pulled by a wave can be scary.
 How did you feel when you were viewing the artwork especially considering the wave never ends?
- The 3D animation represents the distance that the cinematographer travelled when filming. Did this distance surprise you?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about pull, what is the intended meaning and message of the artwork?
- Explain why Barker and Munster titled the artwork pull.
- Explain how *pull* relates to the thematic focus of *Experimenta Make Sense*.
- A number of the artworks in Experimenta Make Sense

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: INFINITY, MULTI-CHANNEL AUDIOVISUAL, 3D ANIMATION, SENSORIUM, SONIC, GPS DATA, LOOP



DID YOU KNOW? THE HIGHEST-EVER WAVE DETECTED BY A BUOY WAS 19-METRES AND HAPPENED BETWEEN ICELAND AND THE UNITED KINGDOM IN THE NORTH ATLANTIC OCEAN.

use water or liquid as an element. Make a list of all these artworks and describe how and why they have used water or liquid. Is there a common reason for the use of water or liquid?

GPS data was visually reworked to create the 3D animation. How do you think GPS data could be used to create other artwork? To get you started have a look at Sketchbook of a GPS Artist online at https://gpsdoodles.com/.

MAKE

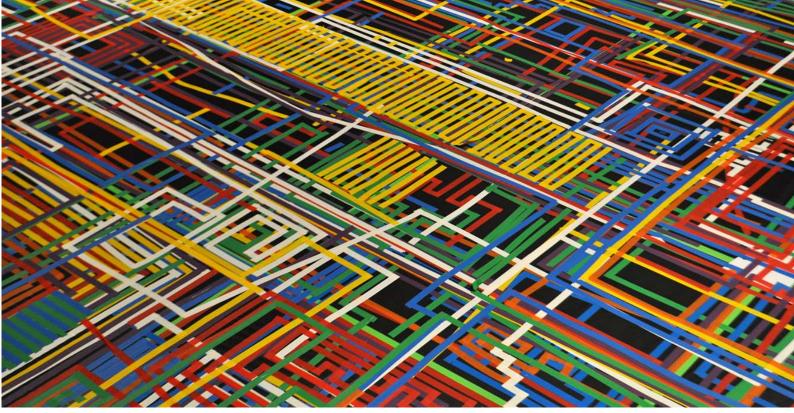
- Create an artwork, poem or narrative about being under a wave.
- If you have access to an underwater camera or a waterproof camera take a series of photos of what you can see or document your experience in the water.
- Create your own GPS inspired artwork.

USEFUL LINKS

Michele Barker Bio http://www.niea.unsw.edu.au/people/dr-michele-barker

Anna Munster Bio http://www.niea.unsw.edu.au/people/ professor-anna-munster





Drawing on Complexity (The Experimenta Series) 2017 Electrical tape, ply materials & rule station, participating agents. Dimensions variable PHOTO COURTESY OF THE ARTIST © THE ARTIST

BRIONY BARR (AUSTRALIA) DRAWING ON COMPLEXITY (THE EXPERIMENTA SERIES)

Drawing on Complexity (The Experimenta Series) takes the form of a series of collaborative, rule-based artworks, enacted over the course of the triennial. Part of a larger investigation into pattern formation, the works compare what emerges when different groups of people make a drawing together within a similar set of parameters. These parameters include using electrical tape as a medium, using the same sized area of floor as a drawing surface, running the session for the same number of hours, and working with the same set of compositional rules for individual and collaborative mark-making. The groups are sourced by galleries for each exhibition.

Inspired by complex adaptive systems and designed in collaboration with physicist Andrew Melatos, this body of work uses expanded collaborative drawing to enact a process that evolves from the bottom up, in real time. Like the weather, stock market and crowds, complex systems exhibit 'emergence' – meaning that larger patterns in the system evolve through interactions between the parts (rather than from a predetermined plan or hierarchy of leadership). This is often described as 'the whole being more than the sum of the parts'.

The rule-based drawing process is equal parts collaborative artwork, board game, team sport, science experiment and social experiment in which participants drive the outcome. Analogous to the design or programming of a game, the rules and boundaries set up by the artist determine conditions for an artwork to emerge, but not which artwork.

Briony Barr is a conceptual artist whose work explores patternformation and emergence. Comprising rule-based drawing, participatory installation and scientific experimentation, Barr regularly collaborates with fellow artists, scientists (typically microbiologists and physicists), and large groups of people.

She has staged collaborative drawing experiments at galleries, schools, universities, science institutions, art museums, civic art studios and conferences, involving the public, artists, primary and secondary students, physicists and astronomers. Through the application of different rules and boundaries (often designed in collaboration with physicist, Andrew Melatos), these artworks have explored scientific ideas such as complex adaptive

systems and self-organisation, sociological themes such as group dynamics and cooperation, and artistic themes such as playfulness, risk-taking and innovation. Sometimes, all at the same time.

Barr earned her BA (English) from The University of Queensland, BFA from the School of Visual Arts in New York City, and MFA from the Victorian College of the Arts in Melbourne. She has exhibited in solo and group shows in Australia, Mexico, America and South Korea, and is an honorary fellow of The University of Melbourne's School of Physics. Barr is also co-founder of artscience collaborative Scale Free Network.



PHOTO BY THERESA HARRISON © THE ARTIST

DID YOU KNOW? EARLY GREEK PHILOSOPHERS STUDIED PATTERN, WITH PLATO, PYTHAGORAS AND EMPEDOCLES ATTEMPTING TO EXPLAIN ORDER IN NATURE. THE MODERN UNDERSTANDING OF VISIBLE PATTERNS DEVELOPED GRADUALLY OVER TIME.

PREPARE

- Look around and make a list of all the patterns you can see
- Try to identify whether the pattern is manmade or a part of nature.
- Do you have a favourite pattern? If so, what is it?
- Patterns are not just in nature and drawings. Can you name other types of patterns?
- A participatory artwork is a form of art that directly engages the audience in the creative process so that they become participants in the work. As an audience member have you ever directly participated in the making of an artwork? If so describe how you participated and when did you know the artwork was complete?

EXPLORE

- Describe your immediate response to *Drawing on Complexity*. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Briony Barr to create *Drawing on Complexity*.
- Describe the way Drawing on Complexity has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- At what stage is the artwork at when you see it? Has
 it only just begun? if so what do you think it will look
 like when it is finished? If it is half-way through, what
 are you thoughts of it? What will it look like when it is
 finished. If you see it when it is finished describe what
 the result is.
- If you participated in the artwork can you describe how making the art made you feel. Was it hard to follow the rules? Was it difficult to begin where someone else had

finished? Was it difficult to leave without finishing the artwork? Did you or will you get a chance to see the finished work?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about *Drawing on Complexity*, what is the intended meaning and message of the artwork?
- Explain why Briony Barr titled the artwork *Drawing on Complexity*.
- Explain how Drawing on Complexity relates to the thematic focus of Experimenta Make Sense.
- "Rules and boundaries set up by the artist determine conditions for an artwork to emerge, but not which artwork". Why do you think an artist like Barr would allow audiences to interact with and finish her artwork? Research other artworks that allow for audience participation in the making of the artwork and compare these examples with Drawing on Complexity.
- Briony Barr worked in collaboration with physicist
 Andrew Melatos on *Drawing on Complexity* and is a
 founding member of the art-science collaborative Scale
 Free Network alongside microbial ecologist Dr Gregory
 Crocetti. Compare *Drawing on Complexity* with Scale
 Free Network's artwork *A Hierarchy of Eddies* and
 discuss why each piece is a collaboration and what are
 the benefits of working with others.

MAKE

• Meet in the Middle - In a pair, sit at a table or on the floor so that you are facing one another with a sheet of paper between you and that you can both reach. Each person starts by drawing on their half of the paper and eventually you will meet in the middle. You decide the rules. For example you are only allowed to draw a pattern or you can draw anything. When you are finished display your artwork for the rest of the class to see.

USEFUL LINKS

Briony Barr official website http://www.brionybarr.com/ Experiment 6 https://vimeo.com/216114892

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: PATTERN FORMATION, PARAMETERS, COMPOSITIONAL RULES, COLLABORATIVE, MARK-MAKING, REAL-TIME, RULE-BASED, PARTICIPATORY ARTWORK



AN EXPERIMENTA AND AUSTRALIAN NETWORK FOR TECHNOLOGY (ANAT) COMMISSION

Hello Future Self 2017

Custom software, custom ply scanning station, camera, pencils & paper, interactive projection. Dimensions variable.

IMAGES BY STEVE BERRICK AND CABE BERRICK © THE ARTIST

STEVE BERRICK (AUSTRALIA) HELLO FUTURE SELF

Hello Future Self explores our increasingly augmented world by allowing participants to create an avatar that unites human and robotic senses. The experience seamlessly blends physical and digital interactions, resulting in a collaborative digital animation. Participants must prepare for human technology integration by deciding how to alter their avatar's body. Which sense would you prioritise?

Inviting children to see their creations come to life, *Hello Future Self* is a participatory drawing project which transforms hand-drawn artworks into digital animations. Using a checkbox system embedded in each template - a nod to punch-card programming systems of the past - the work allows participants to customise their avatar's features after its digital birth. Using simple, accessible scanning technology, young participants are encouraged to engage without assistance.

Playfully interactive and designed especially for children, *Hello Future Self* is nonetheless powered by complex 3D worlds and computer vision techniques.

Steve Berrick is an artist and creative coder. With a degree in Computer Science, his work focuses on software and technology. Berrick creates software-driven experiences for interactive systems and performances. His collaborative practice has been presented in galleries, theatres, museums and the street.

Berrick is an artist with the ololo art collective, Graffiti Research Lab Perth and pvi collective. Recent collaborative works included *StickMan* (2017, with Stelarc); *Rewired/Remixed* (2016, with Stelarc); *The Automobile Lab*, City of Stirling (2016, with Sam Price and Chris Nixon); *Alter*, 2016 Festival of Live Art, (with Tamara

Saulwick and Peter Knight); *The Naked Self*, Arts House, Melbourne (2016, with Michele Lee and Tanya Dickson); *deviator* (2012, with pvi collective); and *ReFace*, 2009 Perth International Arts Festival (with ololo and WBMC).

DID YOU KNOW? ARTIST/ACTIVIST NEIL HARBISON HAS SET UP THE CYBORG FOUNDATION TO HELP HUMANS BECOME CYBORGS, DEFEND CYBORG RIGHTS AND PROMOTE CYBORGISM AS A SOCIAL AND ARTISTIC MOVEMENT.

PREPARE

- Take a poll in your class to see who has or has had an avatar.
- · Why do people use avatars and where are they used?
- Is there such a thing as a good or bad avatar?
- What is a cyborg? What are the advantages and disadvantages of becoming a cyborg?
- Think about your biological senses. Which sense do you think is the most important? Which sense would you improve if you had the chance?

EXPLORE

- Describe your immediate response to Hello Future Self.
 Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Berrick to create *Hello Future Self*.
- Describe the way Hello Future Self has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- If you participated in the artwork can you describe how making the art made you feel. Were you excited or nervous about how your avatar would turn out? How did you decide what your avatar should look like? Were there any rules or boundaries?

REFLECT AND RESPOND

- Drawing on the information you have researched online about Hello Future Self, what is the intended meaning and message of the artwork?
- Explain why Berrick titled the artwork Hello Future Self.
- Explain how *Hello Future Self* relates to the thematic focus of *Experimenta Make Sense*.
- Participants were asked to consider which sense was a priority for their avatar. Looking at the finished avatars is it clear which sense has the greatest priority?
- Hello Future Self, Drawing on Complexity and Catch Your Breath require participants to help create the artwork. Discuss the similarities and difference between the processes and the final artworks.

MAKE

 Create your own avatar that augments at least one of your biological senses using a free online avatar making app or other software that you may have access to.

USEFUL LINKS

Steve Berrick official website http://steve.berrick.net/

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: AUGMENTED WORLD, AVATAR, PHYSICAL INTERACTIONS, DIGITAL INTERACTIONS, DIGITAL ANIMATION, PARTICIPATORY DRAWING PROJECT, SCANNING TECHNOLOGY, DIGITAL BIRTH, BODY MODIFICATION



AN EXPERIMENTA AND AUSTRALIAN NETWORK FOR TECHNOLOGY (ANAT) COMMISSION

Apparatus and Method for Time Displacement (DEVICE 003).

Medium: Raspberry pi, 2-channel audio, microphone, speakers, electronics, plastic. Dimensions 20 x 23 x 10cm PHOTO COURTESY OF THE ARTIST © THE ARTIST

ANTOINETTE J CITIZEN (AUSTRALIA) APPARATUS AND METHOD FOR TIME

DISPLACEMENT

We organise ourselves according to a shared and precise measure of time, but our own perception of it is much more relative. Time speeds up and slows down, varying between people, activities, moods and memories.

Across three wearable devices, *Apparatus and Method for Time Displacement* investigates how we sense time. The first device (001) is a clock set to the wearer's personalised perception of time. The wearer is invited to press a button when they sense a minute has passed and the clock adjusts its calculations accordingly. Worn face-down around the leg or arm, the device displays the wearer's unique time on the floor next to them as they peruse the gallery. The second device (002) is a headset with a screen that streams video of the gallery space, recorded from different points in time. Time can be sped up, slowed down or compressed, visually morphing the past and present. The third wearable (003) device records sound and plays it back through a headset at a displaced time. The wearer can set a short delay. In doing so, they intimately experience the sound of moments just past.

Antoinette J. Citizen is a visual artist based in Melbourne. Combining disparate technologies and performance strategies, Citizen works across emerging technologies, computer programming, electronics, paper-based works, kinetic sculptures and installations.

Citizen holds a BFA (Honours) from the Queensland University of Technology. In 2015 Citizen was awarded a PhD in Visual Art

from RMIT University for research on the quantified self. Citizen has exhibited in solo and group shows around Australia including at the Gallery of Modern Art, Brisbane; Monash University Museum of Art, Melbourne; Artspace, Sydney; West Space, Melbourne; Institute of Modern Art, Brisbane; Casula Powerhouse, Sydney; Linden Centre for Contemporary Arts, Melbourne; and in international exhibitions in Luxembourg, Germany, the United Kingdom, Italy and New Zealand.



Apparatus and Method for Time Displacement (DEVICE 002).

Medium: Unity, generative video, Arduino, electronics, plastic. Dimensions variable.

PHOTO COURTESY OF THE ARTIST © THE ARTIST

DID YOU KNOW? EINSTEIN CALCULATED THAT THE FASTER WE GO, THE SLOWER TIME GOES AND CONVERSELY THE SLOWER WE GO, THE FASTER TIME GOES.

PREPARE

- Write your age on a piece of paper and then calculate how many days, hours, minutes and even seconds that equates to.
- Time displacement refers to the idea that new forms of activities may replace older ones. New activities that cause time displacement are usually technology-based. Those technologies are seen as responsible for declines of previously more common activities such as in- and out-of-home socialising, work, and even personal care and sleep. Calculate the number of minutes or even hours you spend engaging in technology based activities that are not school/work related. What would you do with this time if the technology was not available?
- Make a list of what events in your day are scheduled by time. How much 'free' time do you have?

EXPLORE

- Describe your immediate response to the three devices featured in Apparatus and Method for Time
 Displacement. Explain your response by making specific reference to the artworks.
- Identify the materials and techniques used by Citizen to create Apparatus and Method for Time Displacement devices.

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: TIME, WEARABLE DEVICES, HEADSET, PERCEPTION OF TIME.

- Describe the way Apparatus and Method for Time Displacement devices have been installed in the exhibition space. How does the placement of each of the artworks affect audience response?
- If you were able to wear one of the devices discuss how it affected your experience of the gallery or specific artworks? Did time speed up, slow down or did it become confusing to tell the real time?
- With Device 001, how did your definition of time differ from other participants' definition of time? Why do you think this is?

REFLECT AND RESPOND

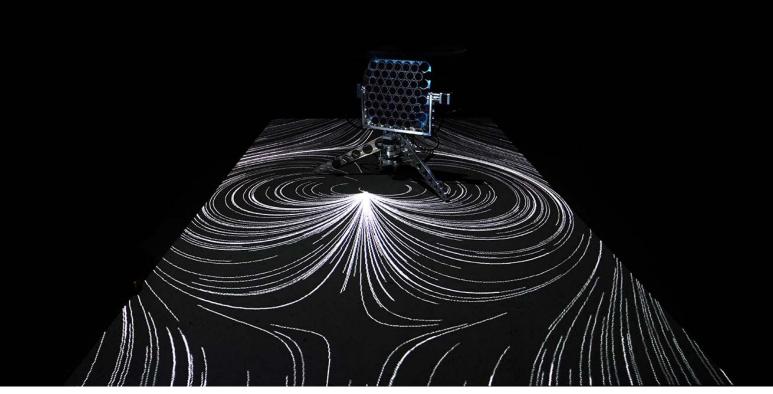
- Drawing on the information provided by the wall text and online research about Apparatus and Method for Time Displacement, what is the intended meaning and message of the artwork?
- Explain why Citizen titled the artworks Apparatus and Method for Time Displacement.
- Explain how Apparatus and Method for Time Displacement relates to the thematic focus of Experimenta Make Sense.
- Each device manipulated time in some way. If you did not get a chance to wear one of the devices can you explain how it changed the behaviour of the people wearing the device? Did they move faster or slower? Did they seem confused?

MAKE

 Create an artwork, animation or video that plays with the sense of time.

USEFUL LINKS

Antoinette J Citizen http://antoinettejcitizen.com/



Curious Tautophone – Tensor Field Ontology 2017 Robotics and responsive projection. 60 x 60 cm (robot) with variable projection PHOTOS COURTESY OF THE ARTIST © THE ARTIST

ADAM DONOVAN AND KATRIN HOCHSCHUH (AUSTRIA/GERMANY/AUSTRALIA) CURIOUS TAUTOPHONE – TENSOR FIELD ONTOLOGY

The name *Curious Tautophone – Tensor Field Ontology*, derives from projective auditory tests developed by psychologists Saul Rosenzweig and David Shakow and is based on behaviourist BF Skinner's verbal Summator tests. The original Tautophone can be thought of as an Auditory Rorschach Inkblot where a sequence of vowels was repeated trying to trigger the understanding of an actual word hidden in the subconsciousness of the listener. The robot's name is thus composed of the greek syllable *tauto-* meaning "repeating the same", and its curious nature as a philosophical as well as scientific instrument of art and music, psychology and physics.

Curious Tautophone – Tensor Field Ontology is ultimately about the concept of lenses and focusing. The robot controls a sound beam and sculpts the projection of a vector field, creating an audible and visual environment. Normally sound is intangible and the forces of electromagnetism are invisible. The unusual nature of hearing focused sound can be experienced as something unnatural and evokes a sense of uncanniness in the human observer.

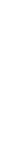
The role of the robot is to recalibrate the cognitive tissue that connects man and machine...

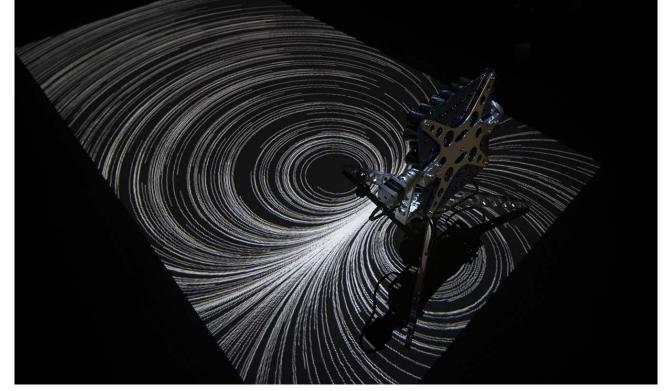
Adam Donovan and Katrin Hochschuh met through a mutual network of artists, architects and researchers during the installation of one of Donovan's pieces at the Museum of Digital Art in Zurich, Switzerland. Discovering their mutual interest in the complex combination of multiple fields of art and science, they

realized that their different backgrounds and competences merge very well and allow them to go deeper into these fields than one could alone.

Donovan is highly specialised in the field of scientific acoustics, researching focused acoustics and acoustic lenses in multiple fields of his artistic practice. Hochschuh has an architectural background in digital design and robotic fabrication, exploring architectural geometries, algorithms, swarm simulation and interactivity.

Their works and machines invoke an otherness or timelessness that is only present in the here and now.





DID YOU KNOW? THE TAUTOPHONE WAS USED AS AN AUDITORY APPERCEPTIVE TEST FOR THE STUDY OF PERSONALITY IN THE 1940s.

Curious Tautophone -Tensor field Ontology 2017 IMAGE COURTESY OF THE ARTISTS © THE ARTISTS.

PREPARE

- Working with a partner take it in turns to recite the vowel sounds.
- · Research how sound is created in humans.
- Research why people have accents.
- Research why people sound different.

EXPLORE

- Describe your immediate response to Curious
 Tautophone Tensor Field Ontology. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Donovan and Hochschuh to create Curious Tautophone - Tensor Field Ontology.
- Describe the way Curious Tautophone Tensor Field
 Ontology has been installed in the exhibition space.
 How does the placement of the artwork affect audience response?
- Describe the sound you hear in Curious Tautophone -Tensor Field Ontology. Can you understand it? Does the sound match the projected image? Is there a pattern between the sounds and the image projected?
- Does the robot in Curious Tautophone Tensor Field Ontology move? Has it been programmed or does it

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: ONTOLOGY, TAUTOPHONE, SOUND BEAM, VECTOR FIELD, LATENT SPEECH, DIRECTIONAL SOUND, METAPHYSICAL, PHYSICAL, VOID, WHITE NOISE.

respond to the interactions of the audience? Why do you think this is?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about Curious Tautophone - Tensor Field Ontology, what is the intended meaning and message of the artwork?
- Explain why Donovan and Hochschuh titled the artwork Curious Tautophone - Tensor Field Ontology.
- Explain how Curious Tautophone Tensor Field
 Ontology relates to the thematic focus of Experimenta
 Make Sense.
- Curious Tautophone Tensor Field Ontology has been described as a scenario where man, machine and virtual space are interwoven. Explain how this works.
- A robot is used in Curious Tautophone Tensor Field Ontology, do you think robots will be included in more future artworks or even create the artwork?

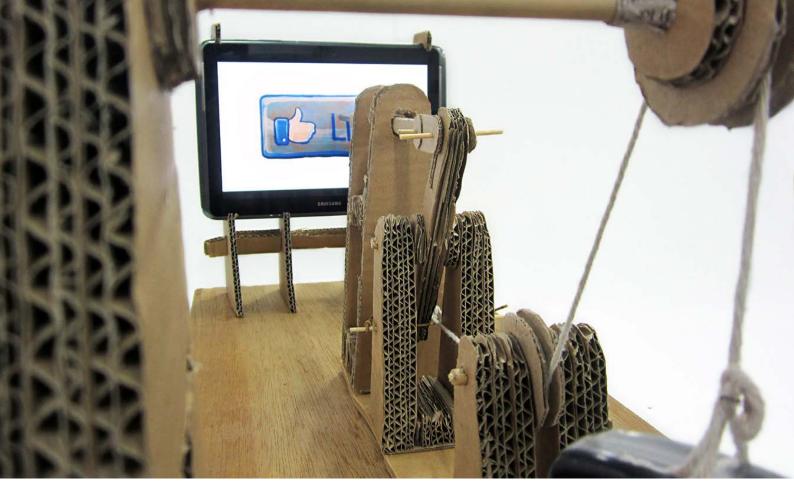
MAKE

- If you have the resources, try to create and code your own robot. There are a number of online tutorials to support you.
- Use a device to record verbal language and then edit it into a soundscape.

USEFUL LINKS

Andrew Donovan Official Website http://adamdonovan.net/files/index.html

Katrin Hochschuh Official Website http://k.hochschuh.de/



I dun good 2015

Mixed media, Interactive object: tablet, app, stylus pen, recycled cardboard, self-inking stamp, string, wood, paper. Dimensions 115 x 77 x 30cm (including plinth)

PHOTO COURTESY OF THE ARTIST © THE ARTIST

LAUREN EDMONDS (AUSTRALIA) I DUN GOOD

I dun good is an interactive artwork that reveals the uncomfortable conditions underlying political and social action performed online.

Social media's promise – to transform production relations, re-connect a fragmented society and distribute more power to the public – makes it an appealing platform for protest. This appeal, in combination with the commercial pairing of multimedia technology with ideas of enhanced personal agency, has resulted in heightened expectations of the power and effectiveness of online participation, 'protest' and social action. Recent history has demonstrated that the internet can be used effectively in organising mass political action, spurring real-world change. However, these events have been effective when social media is used, not to replace real-world action but to coordinate it. Developing out of an Honours thesis of the same title, *I dun good* uses elements of montage, astonishment and humour to disrupt and distance participants from the work. In doing so, it begins to expose the conditions of online 'action'.

Lauren Edmonds is a multimedia artist living and working in Brisbane, previously based on the Sunshine Coast. She completed a Bachelor of Fine Art (Class I Honours) at the Queensland College of Art, Griffith University in 2015. Dealing with socio-political subjects, Edmonds seeks to incite critical engagement with audiences and participants.

Edmonds works in a variety of media including drawing,

animation, installation and object making. More recently, she has become interested in making interactive artworks. She won two awards in the 2014 Sunshine Coast Art Prize New Media category and was a finalist for the 2015 prize, which is open to artists nationally. In 2014, she was a finalist in the Marie Ellis Prize for Drawing. Edmonds has held two solo exhibitions, in 2009-2010 at *Butter Factory Arts Centre, Cooroy* and 2012 at Tree Frog Gallery, Maleny.



PHOTOS COURTESY OF THE ARTIST © THE ARTIST

DID YOU KNOW? FACEBOOK USERS GENERATED 4 MILLION LIKES EVERY MINUTE IN 2016.

PREPARE

- Make a list of all the social media apps that your class uses.
- How many 'likes' have you used in the last 24 hours?
 Make a tally of the number of 'likes' for all the social apps that you use and also provide a tally for the individual apps that you use.
- · Why do you like something on social media?
- Have you ever signed a petition? If yes, do you remember what it was for? Have you ever signed an online petition? If yes, do you remember what it was for?

EXPLORE

- Describe your immediate response to I dun good.
 Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Edmonds to create *I* dun good.
- Describe the way I dun good has been installed in the exhibition space. How does the placement of each artwork affect audience response?
- I dun good requires interaction. How did you feel when you stamped the paper? Did you have a preference for what you wanted to see on the tablet?
- I dun good uses traditional material with modern

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: MIXED MEDIA, INTERACTIVE, SOCIAL MEDIA, MULTIMEDIA TECHNOLOGY, SOCIAL ACTION, PROTEST, PERSONAL AGENCY,

technology just like Andrew's *Moving from the Binary*. Are there any other artworks that do this in *Experimenta Make Sense*? Identify these artworks and if there are any other similarities between them.

REFLECT AND RESPOND

- Drawing on the information provided by the wall text about *I dun good*, what is the intended meaning and message of the artwork?
- Explain why Edmonds titled the artwork I dun good.
- Explain how I dun good relates to the thematic focus of Experimenta Make Sense.
- Why do you think Edmonds use the word 'dun' and not 'done'?
- Activism online is sometime referred to as slacktivism as it only requires a click of a button in some cases and does not necessarily translate into real-world actions.
 Do you think that this is true? Do people align themselves to a cause without knowing what the cause is?
- Can you think of some examples where social media has been used to affect social change? How was this achieved?

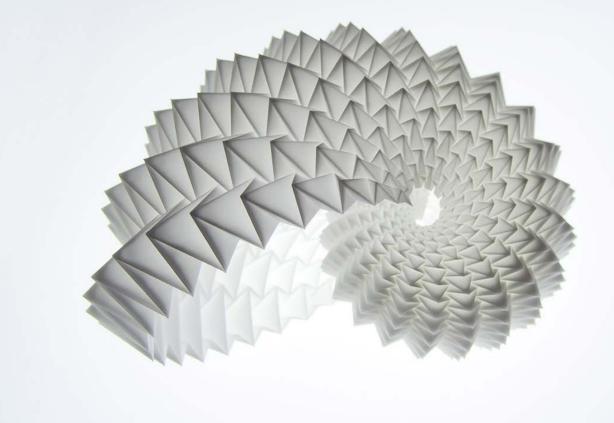
MAKE

- Make an artwork about social media and/or online action
- Create an artwork that you can post online.

USEFUL LINKS

Lauren Edmonds official website http://www.laurenedmonds.com/ idungood-2015/i-dun-good-2015/





The Folded Geometry of the Universe 2016 3D nylon print. Dimensions 65 x 70 x 30cm PHOTOS BY NICKY PASTORE © THE ARTIST

MATTHEW GARDINER (AUSTRALIA AND AUSTRIA) THE FOLDED

GEOMETRY OF THE UNIVERSE

How might we imagine something that is not only invisible, but can only be inferred by mathematics? The Folded Geometry of the Universe attempts to make sense of nature through the study of folding and technology. According to recent theories of physics, the universe began when separate dimensions folded into one, resulting in the Big Bang. Expansion commenced instantly and spacetime came into being.

Using folding as its metaphor, *The Folded Geometry of the Universe* imagines the infinite shape of a continually expanding universe. In this analogy, unfolding is expansion or time flowing forward. Each single fold represents a new space-time entity. Time flowing in reverse is contraction, the reduction of folds and events, back to nothing.

The Folded Geometry of the Universe is a static moment, a singular present but it invites audiences to imagine their own folded universes. The sculpture is a provocation to contemplate an infinity of folds, to follow the endless spiral geometry – infinitely large and infinitely small – of a universe breathing as time oscillates between being and nothingness.

Matthew Gardiner is a pioneer of 'Oribotics', a field of art/science that explores the convergence of origami, folding and robotics. Gardiner's works portray an altered future where folding forms are the fundamental fabric of life. His artistic process explores the concept of folding as code for matter, by creating works that exhibit material intelligence. A graduate of the Victorian College of the

Arts, Gardiner has worked on individual art projects and collaboratively with commercial and research organisations. His practice incorporates aesthetic and interactive experience design, manufacturing, rapid prototyping, expertlevel origami and code. Gardiner is a researcher at Ars Electronica Futurelab in the field of functional aesthetics. Recent exhibitions include: *ORI*LAB*, Ars

Electronica 2016; *ORI** Coding for Matter, Kyoto; *Project Genesis*, Ars Electronica Linz; *Surface to Structure*, New York; and *Artists As Catalysts*, Bilbao. His current activities include doctoral work on folding and technology, and a major new project supported by the FWF's Program for Arts-Based Research: *ORI** On the Language and Aesthetics of Folding and Technology.

DID YOU KNOW? SCIENCE CURRENTLY
THEORISES THAT APPROXIMATELY 85% OF THE
UNIVERSE IS FOLDED LIKE AN ORIGAMI SHEET.

PREPARE

- What is origami? Have you ever folded origami?
- What is geometry? What is folded geometry? What is spiral geometry?
- Patterns in nature are visible regularities of form found in the natural world. These patterns recur in different contexts and can sometimes be modelled mathematically. Working as a class, fill a display board with images of geometry in nature.
- Do you think that there is a relationship between art and science? Do you think that there is relationship between art and mathematics?
- How did the universe begin according to Science?
- Have you used a 3D printer? What did you make?

EXPLORE

- Describe your immediate response to The Folded Geometry of the Universe. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Gardiner to create The Folded Geometry of the Universe.
- Describe the way The Folded Geometry of the Universe has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Look at The Folded Geometry of the Universe from as many different positions and as possible. How does changing your position in relation to the artwork add to your understanding?
- How do art, science and mathematics merge in The Folded Geometry of the Universe?
- Why do you think Gardiner chose to 3D print this sculpture instead of folding it with traditional origami methods?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about *The Folded Geometry of the Universe*, what is the intended meaning and message of the artwork?
- Explain why Gardiner titled the artwork *The Folded Geometry of the Universe*.
- Explain how The Folded Geometry of the Universe relates to the thematic focus of Experimenta Make Sense.
- 'Everything is folded' Matthew Gardiner Explain your understanding of Gardiner's claim.

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: NATURE, GEOMETRY, FOLDED GEOMETRY, SPIRAL GEOMETRY, ORIGAMI, ROBOTICS, ORIBOTICS, SCULPTURE, THE BIG BANG, UNIVERSE, 3D PRINTING



The Folded Geometry of the Universe 2016
PHOTO BY NICKY PASTORE © EXPERIMENTA MEDIA ARTS

- Gardiner uses the term Oribotics to describe his artwork that fuses the ancient art of origami with robotic technology. Learn about oribotics online at http://www.matthewgardiner.net/art/Oribotics_A_brief_history. Explain how technology has been used to create *The Folded Geometry of the Universe*. *Note to teachers: While the following video was produced in 2010, it provides an informative overview of Oribotics by Gardiner: https://vimeo.com/16429167
- Gardiner's art hovers at the junction between art and science. Research some of Gardiner's other artworks and discuss how they are influenced by science.
- Gardiner's sculpture of the folded universe is a way of making sense of the infinity of space and our place in it. What does your idea of the folded universe look like?
 What shape would it take?

MAKE

- The Folded Geometry of the Universe draws on the fields of art, mathematics and science. Create an artwork inspired by and based on something that you have recently studied in a mathematics or science class.
- 'At the core of my artistic practice I attempt to make sense of the relationship between the fold and nature.'
 - Matthew Gardiner

Use origami to make objects from the natural world. Recommended link: Natural Origami - https://naturalorigami.wordpress.com/

USEFUL LINKS

Matthew Gardiner official website

http://www.matthewgardiner.net/

The Folded Geometry of the Universe

http://www.matthewgardiner.net/art/

The_Folded_Geometry_of_the_Universe

Unfolding Creativity - an interview with Matthew Gardiner https://www.aec.at/aeblog/en/2014/11/21/ unfolding-creativity/

Our Origami World

http://www.pbs.org/wgbh/nova/physics/origami-world.html



In My Shoes: Intimacy 2017 PHOTOS COURTESY OF THE ARTIST © THE ARTIST

JANE GAUNTLETT (UK) IN MY SHOES: INTIMACY

In My Shoes: Intimacy is a 360-degree experience which explores the power of human connection. Put aside your inhibitions, sit down with a partner and look into their eyes. Let the strangers guide you through their impromptu, unconventional and intense moments of intimacy.

Intimacy is designed for two people to experience three encounters from six very different perspectives. It tells the stories of two strangers, two comrades and two lovers. It explores the importance of intimacy in survival, relationships and sexuality from a first-person perspective.

Intimacy forms part of In My Shoes, an internationally-recognised empathy project. In My Shoes is an ever-expanding collection of first-person, documentary style interactive performances, which guide participants through the beautiful, the challenging, the mundane and the surreal aspects of being human.

Jane Gauntlett is a writer, designer and producer of interactive experiences. She has spent more than ten years working in interactive theatre, film and games. Her narrative-driven works explore the capacity for technology to intensify audience experience. In 2009, Gauntlett began working with audio technology and video goggles (Vuzix). She has since gone on to design experiences for Oculus Rift DK2 and Samsung Gear.

Gauntlett has worked as an artist and speaker for a diverse range of organisations and commercial companies including the Royal Shakespeare Company, Watershed Pervasive Media Studio, the UK's National Health Service, Unilever, Saatchi & Saatchi, and with technology developers working in the fields of virtual reality, augmented reality, artificial intelligence and haptics.



In My Shoes: Intimacy 2017
PHOTOS COURTESY OF THE ARTIST © THE ARTIST

DID YOU KNOW? THE TERM 'VIRTUAL REALITY' WAS FIRST USED IN THE MID-1980S WHEN JARON LANIER, FOUNDER OF VPL RESEARCH, BEGAN TO DEVELOP THE GEAR, INCLUDING GOGGLES AND GLOVES, NEEDED TO EXPERIENCE WHAT HE CALLED 'VIRTUAL REALITY'.

PREPARE

- What is virtual reality (VR)? If someone asked you to explain what VR is what would you say? Have you ever participated in a VR experience?
- What is intimacy?
- What is empathy?
- What does it mean to 'put yourself in someone else's shoes'?

EXPLORE

- Describe your immediate response to In My Shoes: Intimacy. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Gauntlett to create In My Shoes: Intimacy.
- Describe the way In My Shoes: Intimacy has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- In My Shoes: Intimacy is a 360-degree film that means
 that you can step into the film and be part of it rather
 than just watch it. How did you feel when you were participating in In My Shoes: Intimacy? What were you thinking as you were participating in In My Shoes: Intimacy?
- Of the three stories told by *In My Shoes: Intimacy*, which do you prefer and why?

REFLECT AND RESPOND

Drawing on the information provided by the wall text

RECOMMENDED AGE GROUPS: SENIOR SECONDARY
KEY THEMES, CONCEPTS AND VOCABULARY: INTIMACY,
EMPATHY, VIRTUAL REALITY, INTERACTIVE PERFORMANCE

- and online research about *In My Shoes: Intimacy,* what is the intended meaning and message of the artwork?
- Explain why Gauntlett titled the artwork In My Shoes: Intimacy.
- Explain how *In My Shoes: Intimacy* relates to the thematic focus of *Experimenta Make Sense*.
- What do you think In My Shoes: Intimacy challenges us to consider about our relationships with others? In My Shoes: Intimacy has been described as close as you can get to literally being somebody else. Do you agree?
- The tagline of In My Shoes: Intimacy is 'All we have is each other'. How does this tagline add to your understanding of In My Shoes: Intimacy?
- What techniques does VR use to give you the feeling of being in a different place and time? How effective is VR at making you feel you are in a different place and time?
- Why would an artist choose to use VR technology to encourage emphathy and understanding different perspectives?
- In My Shoes is an empathy project founded by Gauntlett in 2011. Intimacy is one of several artworks that form the project. Learn about the In My Shoes project online at http://janegauntlett.com/jane/.

MAKE

- Make an animation that shows the history of VR.
- Make your own artwork about human connection.
- Design a storyboard for your own VR short film.

USEFUL LINKS

Jane Gauntlett official website http://janegauntlett.com/jane/





The Thought Leader 2015
Single channel video. Featuring actor
Alex Ammerman. Duration 9:22 mins
VIDEO STILLS © THE ARTIST

LIZ MAGIC LASER (USA) THE THOUGHT LEADER

In *The Thought Leader*, a young actor delivers a monologue adapted from Fyodor Dostoevsky's *Notes from the Underground* (1864), using the format of the increasingly popular TED Talk.

TED (Technology, Entertainment, Design) is a global series of motivational speeches with the mission to promote the power of ideas to change attitudes, lives and ultimately, the world. TED Talks, primarily viewed as online videos, have promoted a forceful and inspirational presentation style across a wide spectrum of professions. Speakers propose idealistic solutions to contemporary issues but are often criticised for failing to offer tangible steps for achieving their utopian visions.

The Thought Leader insinuates the Underground Man's views into the TED Talk format, applying Dostoevsky's attack on the socialist ideal of enlightened self-interest to its contemporary capitalist incarnation.

Liz Magic Laser is a video and performance artist based in Brooklyn, New York. Her videos and performances intervene in semi-public spaces such as bank vestibules, movie theatres and newsrooms, and have involved collaborations with actors, surgeons, political strategists and motorcycle gang members. Laser earned a BA from Wesleyan University (2003) and an MFA

from Columbia University (2008). Her work has been the subject of solo exhibitions at Kunstverein Göttingen, Germany (2016); Mercer Union, Toronto (2015); Wilfried Lentz, Rotterdam, the Netherlands (2015); Various Small Fires, Los Angeles (2015); Paula Cooper Gallery, New York (2013); the Westfälischer Kunstverein, Münster, Germany (2013); DiverseWorks, Houston, Texas (2013); and Mälmo Konsthall,

Mälmo, Sweden (2012). Her work has also been shown at Swiss Institute (2016); Museum of Contemporary Art, Cleveland (2016); The Whitney Museum of American Art (2015); the Moscow Museum of Modern Art (2012); the Performa 11 Biennial, New York (2011); the Biennial of Graphic Arts, Ljubljana, Slovenia (2011); and MoMA PS 1, New York (2010).



The Thought Leader 2015 VIDEO STILL COURTESY OF THE ARTIST © THE ARTIST

DID YOU KNOW? THE FIRST SIX TED TALKS WERE POSTED ONLINE ON JUNE 27, 2006. YOU CAN WATCH THESE TED TALKS AT HTTPS://WWW.TED.COM PLAYLISTS/168/THE_FIRST_6_TED_ TALKS_EVER.

PREPARE

- What is a TED Talk? Have you ever watched a TED Talk? Do you have a favourite TED talk? Visit TED Talks online at https://www.ted.com/talks.
- The Thought Leader is an adaptation of a monologue from Notes from the Underground by Fyodor Dostoevsky. Written in 1864, the novella is also known as Notes from Underground and Letters from the Underworld. Use print and electronic resources to research Notes from the Underground.
- Who was Fyodor Dostoevsky? Use online resources to read and also read about *The Thought Leader*. Drawing on your reading and research, write a 50-word synopsis of *Notes from the Underground*.

EXPLORE

- Describe your immediate response to The Thought Leader. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Laser to create *The Thought Leader*.
- Describe the way The Thought Leader has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- What elements of The Thought Leader make it a recognisable TED Talk? What elements of The Thought Leader strike you as discordant with the TED Talk format?
- What is the presenter's message? Watch The Thought Leader again. Transcribe lines that you think are key to the presenter's argument. Was there a particular statement that resonated with you?
- What words best describe the presenter's lecture style?
 TED Talks are usually created to motivate and inspire.
 How does the audience respond to the presenter's monologue? Did you find *The Thought Leader* motivational or inspirational?
- 'Perhaps I'm only imagining an audience in order to feel more dignified as I stand here in parenthesis.' Explain the symbolism of the parentheses painted on the carpet.

RECOMMENDED AGE GROUPS: SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: MONOLOGUE, TED TALK, *NOTES FROM THE UNDERGROUND* BY FYODOR DOSTOEVSKY (1864), SELF-INTEREST, MEANINGLESSNESS, SATIRE

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about The Thought Leader, what is the intended meaning and message of the artwork?
- Explain why Laser titled the artwork The Thought Leader.
- Explain how The Thought Leader relates to the thematic focus of Experimenta Make Sense.
- What comment does The Thought Leader make about contemporary society? What comment does The Thought Leader make about the way we should exist in contemporary society?
- Why do you think Laser decided to cast a ten-year-old boy in the role of the presenter?
- Laser has described the audience's reaction as a representation of public apathy that is aggressive rather than passive. Explain how she has used editing to achieve this atmosphere of menace.
- TED Talks often address some of society's most 'wicked problems.' Wicked problems are those considered difficult or impossible to solve due to their complex interdependencies. In what ways do you think TED Talks contribute to the resolution of some of these problems?
- In the companion piece, My Mind is My Own (2015), Laser asked professional vocal coach, Kate Wilson, to teach her own daughter, eleven-year-old Ella Maré, to perform the role of a trainer in an instructional video. Watch My Mind is My Own online at https://vimeo. com/116574424. Write an analysis of the artwork.

MAKE

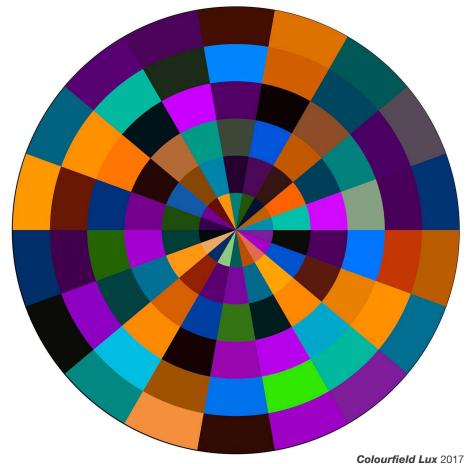
 If you had to give a TED Talk, what would you subject be? Write your own TED Talk. Rehearse your TED Talk. Present your TED Talk to the class. Ask a peer to film your TED Talk. Like Laser, you may choose to present a satirical TED Talk.

USEFUL LINKS

Liz Magic Laser official website http://www.lizmagiclaser.com/

The Thought Leader http://www.lizmagiclaser.com/?section=the-thought-leader

TEDBlog http://blog.ted.com/a-satirical-ted-talk-inspired-by-dostoevsky-and-given-by-a-10-year-old/



Generative computer installation.

Dimensions 40 x 40 x 5cm. Duration infinite
GRAPHIC REPRESENTATION © THE ARTIST

JON MCCORMACK (AUSTRALIA) COLOURFIELD LUX

Colourfield Lux is a new iteration of Colourfield (2009/2010), a generative ecosystem of artificial life agents that form symbiotic and stigmergic relationships based on their perceived colour.

Originally inspired by scientist and environmentalist James Lovelock's Gaia hypothesis – that organisms and their environment form a synergistic, self-regulating and self-supporting complex system – *Colourfield* creates an ever-changing, miniature model world of relationships based on individual colour. Over long periods of evolution, the simulation displays many of the features of real ecosystems: symbiosis, co-dependency, mimicry and predator-prey relationships.

Colourfield Lux is a circular screen surrounded by a black frame. It hangs on a wall like a discrete painting. However, the painting is always looking back at the viewer and responding to them over time. Colourfield Lux forms a meditation on technology, the environment, the self, and the connection between them.

Real environmental dependencies are introduced into the virtual simulation. Light and colour are sensed from the environment immediately in front of the work, which feeds back into the virtual ecosystem. Changing colour forces the agents to become adaptive to both their simulated and real environments. The evolutionary adaptive nature of the simulation allows the work to display complex dynamics over long time periods, rewarding extended engagement. It generates a self-renewing, never ending and never repeating sequence through its internal logic that is directed by the environment in which it operates, and so is unique to any environment.

Jon McCormack is an Australian-based artist working at the nexus of art, technology and society. His experimental practice is driven by an enduring interest and research in computing. McCormack's creative practice emerges from an amalgam of education pathways, with an Honours degree in Applied Mathematics and Computer Science, a Graduate Diploma of Art (Film and Television) and a PhD in Computer Science. McCormack's practice incorporates generative art, sound,

evolutionary systems, computer creativity, visualisation, virtual reality, interaction design, physical computing, machine learning, L-systems and developmental models. Inspired by the complexity and wonder of the natural world, his work is concerned with electronic after natures: alternate forms of artificial life which, due to unfettered human progress and development, may one day replace a lost biological nature. He is currently the director of SensiLab at Monash University in Melbourne.

DID YOU KNOW? LIGHT RECEPTORS WITHIN THE EYE TRANSMIT MESSAGES TO THE BRAIN, WHICH PRODUCES THE FAMILIAR SENSATIONS OF COLOUR. COLOUR IS NOT INHERENT IN OBJECTS. RATHER, THE SURFACE OF AN OBJECT REFLECTS SOME COLOURS AND ABSORBS ALL THE OTHERS. WE PERCEIVE ONLY THE REFLECTED COLOURS.

PREPARE

- Do you have a favourite colour?
- · What is the colour wheel? How does it work?
- What is colour harmony?
- · What is colour context?
- · What is colour psychology?
- What is algorithimic art?

EXPLORE

- Describe your immediate response to Colourfield Lux.
 Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by McCormack to create Colourfield Lux.
- Describe the way Colourfield Lux has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Were you looking at Colourfield Lux or was it looking at vou?
- Describe what you can see? Is the artwork responding to you? How? How do you know the artwork is responding to you? Devise a hypothesis and test it.
- What makes Colourfield Lux algorithmic art?

REFLECT AND RESPOND

MIMICRY, ADAPTIVE, SOFTWARE

- Drawing on the information provided by the wall text and online research about *Colourfield Lux*, what is the intended meaning and message of the artwork?
- Explain why McCormack titled the artwork Colourfield

Lux.

- Explain how Colourfield Lux relates to the thematic focus of Experimenta Make Sense.
- Who is James Lovelock? What is the Gaia hypothesis?
 What has he invented? Explain the connection between James Lovelock's Gaia hypothesis and McCormack's Colourfield Lux.
- Why is the duration of Colourfield Lux best described as infinite?
- Colourfield Lux can be categorised as software artwork. What is software artwork? Are there any other artworks in the Experimenta Make Sense exhibition that could be categorised as software artwork?
- Why do you think McCormack chose to reflect colour rather than other characteristics in the gallery environment?
- Research the artistic practice of McCormack. In what sense is Colourfield Lux representative of his artistic practice?

MAKE

Create a piece of art that expresses your relationship with colour.

USEFUL LINKS

Jon McCormack official website http://jonmccormack.info/ Colourfield

http://jonmccormack.info/artworks/colourfield/

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: GENERATIVE ART, ECOSYSTEM, COLOUR, SYMBIOTIC, STIGMERGIC, JAMES LOVELOCK, GAIA HYPOTHESIS, SYMBIOSIS, CO-DEPENDENCY,



LUCY MCRAE (UK) THE INSTITUTE OF ISOLATION

The Institute of Isolation is an observational documentary that contemplates whether isolation, or extreme experience, might be used as a gateway to training human resilience. Set in a near future reality, The Institute of Isolation is a fictional research and training ground, offering alternative methods to condition the body and adapt fundamental aspects of human biology. The film references genetic engineering, space travel, sensory deprivation and the changing relationship the body is forming with technology. If the body can be resolved in an environment of isolation, would we be more resilient, faster to adapt and more buoyant when faced with the obstacles of life beyond Earth's edge?

The film's protagonist played by artist Lucy McRae moves through a series of sensory chambers, spending time in an anechoic chamber examining the psychoacoustics of silence, and in a microgravity trainer conditioning the body for possible life in space. These fictional locations are used to make architectural inquiries into the role buildings could have on altering human biology on an evolutionary scale.

Lucy McRae is a sci-fi artist, film director and body architect, placing the human body in complex, futuristic scenarios that confound the boundaries between the natural and artificial. Trained in classical ballet and interior design, her approach is to influence culture by exploring scientific breakthroughs relating to health and the human body, while providing a feminine

point of view on emerging technology.

McRae's award-winning science fiction artworks have been developed in collaboration with leading institutes including NASA, MIT and Ars Electronica. Her work has been exhibited at the London Science Museum, Centre Pompidou and the Venice Biennale. McRae has consulted with companies such as Procter & Gamble,

Unilever, Intel and Aesop on the cultural impacts that emerging technologies will have on future lifestyles. She has also spoken and taught masterclasses on these themes at events around the world including TED Talks, WIRED Health, the Royal College of Art, Central St Martins, RMIT University, and most recently at MIT's Being Material conference in 2017.

DID YOU KNOW? ISOLATION, CONFINEMENT, AND THE OTHER STRESSORS OF SPACEFLIGHT CAN AFFECT CREW HEALTH AND MORALE AND CAN INFLUENCE MISSION SUCCESS.

PREPARE

- Define the meaning of the following words:
 - deprivation
 - isolation
 - resilience
- Lucy McRae the artist who created The Institute of Isolation is interested in the question 'What makes us human?' If McRae asked you this question how would you respond?

EXPLORE

- Describe your immediate response to The Institute of Isolation. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Lucy McRae to create The Institute of Isolation.
- Describe the way The Institute of Isolation has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Make a four-column chart. In the first column, make a list of the scenes. How does *The Institute of Isolation* begin? Make a dotpoint list of what happens next. How does *The Institute of Isolation* conclude? Watch *The Institute of Isolation* again. In the second column, add information about camera shots, camera angles and camera movement to your list of the scenes. In the third column, write a description of the setting of each scene. In the fourth column, describe the actions of the protagonist.
- Why do you think the artist has chosen to display the film across four separate screens?
- The film's protagonist is played by artist Lucy McRae.
 Describe the character McRae plays in The Institute of Isolation
- What makes The Institute of Isolation art?

RECOMMENDED AGE GROUPS: SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: ISOLATION, NEAR FUTURE REALITY, RESILIENCE, GENETIC ENGINEERING, SPACE TRAVEL, SENSORY DEPRIVATION, ANECHOIC CHAMBER, PSYCHOACOUSTICS, MICROGRAVITY, HUMAN BIOLOGY, EVOLUTION, OBSERVATIONAL DOCUMENTARY

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about *The Institute of Isolation*, what is the intended meaning and message of the artwork?
- Explain why McRae titled the artwork The Institute of Isolation.
- Explain how *The Institute of Isolation* relates to the thematic focus of *Experimenta Make Sense*.
- Why do you think McRae decided to use voiceover in the video work? How does the voiceover shape the audience's knowledge and understanding of the subject of the video work? How does the voiceover shape the audience's response to the video work as art?
- Add a fifth column to your viewing chart. In this
 column, make notes about the meaning conveyed in
 each scene. Use the content of you viewing chart to
 write a detailed commentary about *The Institute of Isolation*.
- 'We are in a different phase of evolution. No longer driven just by nature but human intent.'
 What does McRae mean by this statement?
- 'We can accurately measure the physiology of the body but the psychological responses to prolonged isolation are largely unpredictable.'

The Institute of Isolation explores the body and its adaptations to sensory deprivation and extreme isolation. McCrae's interest is how these factors can be used to make humans more resilient. What does The Institute of Isolation reveal about the impact of isolation? Why would humans want to become more resilient in this way?

MAKE

 The Institute of Isolation asks big questions and makes big statements about the future of human existence. Choose one of these questions or statements as the basis for your own artwork.

USEFUL LINKS

Lucy McRae official website https://www.lucymcrae.net/ Institute of Isolation

https://www.lucymcrae.net/institute-of-isolation





SonoLexic 2017

Mixed media installation, video, three channel sound (stereo + ultrasonic speaker), mild steel, wood, perspex tube, liquid. Dimensions 150 x 200 x 450cm. Duration 25 mins PHOTOS COURTESY OF THE ARTIST © THE ARTIST

GAIL PRIEST (AUSTRALIA) SONOLEXIC

SonoLexic is a sound driven installation that explores how we process, communicate and generate the listening experience through language. Proposing a new variant of synaesthesia, or 'ideathesia', SonoLexic considers the intimate cross-modal association of sound and words.

In a darkened room, a soundscape plays through standard speakers. At the same time a voiceover, meditating on the act of listening, is delivered via an ultrasonic hyper-directional speaker, which allows it to hover in a defined space. In the distance a glowing plasma tube – a proto hologram – displays liquid images of sonic visualisations and text. Sounds are seen at the same time as they are heard, the physical yet invisible nature of the aural realm captured in this ghostly image.

SonoLexic seeks a language of listening, exploring how we speak to ourselves and to others about what we hear. It also questions the extent to which a description of sounds can stimulate sonic imagining.

Gail Priest is a Sydney-based artist whose practice features sound as the key material of communication and investigation. She has exhibited sound installations and performed electro-acoustic compositions nationally and internationally including at ISEA2016, Hong Kong; Werkleitz Festival, Germany; the Sonoretum, Kapelica Gallery, Slovenia; Tokyo Wonder Site, Japan; Artspace, Sydney; and Performance Space, Sydney. She has undertaken several commissions for ABC Radio and

released five albums. She is also a curator of concerts and exhibitions, and writes factually and fictively about sound and media arts, in particular for *RealTime* magazine. In 2015-2016 Priest was the Australia Council Emerging and Experimental Arts Fellow, developing a body of ficto-critical work exploring what art will sound like in the future. Her upcoming projects explore an 'ideasthesia' of sound and text by developing a hybrid form of 'sound-writing'.



DID YOU KNOW? SYNAESTHESIA IS A PHENOMENON WHERE ANY TWO OF OUR SENSES CROSSOVER. SOME PEOPLE WITH THIS CONDITION EXPERIENCE THE CONDITION BY BEING ABLE TO TASTE SOUNDS WHILE OTHERS CAN HEAR COLOURS.

AN EXPERIMENTA AND AUSTRALIAN NETWORK FOR TECHNOLOGY (ANAT) COMMISSION.

SonoLexic 2017

PHOTO COURTESY OF THE ARTIST © THE ARTIST

PREPARE

- What is a soundscape?
- · Are you a good listener?
- We often talk to others about something we have seen? When do you talk to others about something you have heard? What words do you use to describe the experience of hearing sounds?
- What is your favourite sound?
- What does this sound make you think? What does this sound make you feel? Think about how other sounds affects your thoughts and emotions. Make a list of sounds and next to each sound write the thoughts and emotions that you associate with that sound.
- How can sound be art?
- Gail Priest, the artist who created SonoLexic claims it is an artwork exploring the concept of 'ideathesia'.
 Spend time online researching synaesthesia. What do you think 'ideathesia' is? Google 'ideathesia' and use the online references to refine your definition of 'ideathesia'.

EXPLORE

- Describe your immediate response to SonoLexic.
 Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Priest to create SonoLexic.

RECOMMENDED AGE GROUPS: SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY:

SYNAESTHESIA, IDEATHESIA, AURAL, SOUNDSCAPE, SONIC, ULTRASONIC, HYPER-DIRECTIONAL, PLASMA, HOLOGRAM, CROSS-MODAL, INSTALLATION

- Describe the way SonoLexic has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Make notes about the way you interacted with the artwork.
- Describe the sound that this artwork makes and explain how you think the sound is made.
- How do sounds, words and colour work together in this artwork?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about SonoLexic, what is the intended meaning and message of the artwork?
- Explain why Priest titled the artwork SonoLexic.
- Explain how SonoLexic relates to the thematic focus of Experimenta Make Sense.
- Having interacted with SonoLexic return to the notes you have made about ideathesia. Revise your explanation of ideathesia by adding an analysis of how SonoLexic represents this concept.
- What other artworks in the exhibition primarily rely on sound to express the artist's intention? What do the artworks have in common? How do the artworks differ?
- Research the artistic practice of Priest. In what sense is SonoLexic representative of her artistic practice?

MAKE

 For Priest, sound is the key material of communication and investigation. Design your own artwork that uses sound as the key material.

USEFUL LINKS

Gail Priest official website http://www.gailpriest.net/



WARNING: Strobe lights are used in this artwork.

AN EXPERIMENTA COMMISSION, SUPPORTED BY THE CITY OF MELBOURNE ARTS GRANTS PROGRAM.

A Hierarchy of Eddies 2017

Custom-built welded steel frame and form-ply chamber, steel fan base, pre-fabricated pedestal fan and light fixtures, polystyrene balls, electrical components. Dimensions $250 \times 240 \times 360$ cm. Duration variable

PHOTO BY ZAYLEE SAINT JAMES TURNER © THE ARTIST

SCALE FREE NETWORK (AUSTRALIA) A HIERARCHY OF EDDIES

Big whorls have little whorls Which feed on their velocity, And little whorls have lesser whorls And so on to viscosity. Lewis Fry Richardson, 1881 – 1953

Part scientific-model, part black-box theatre *A Hierarchy of Eddies* is an art-science experiment in staging the phenomenon of turbulence. Comprising two axial fans and ten litres of polystyrene balls enclosed in a chamber, this kinetic work enacts a constantly changing system, analogous to fluid flows everywhere: from inside our bloodstream, to rivers, tornadoes, rising smoke from a cigarette or cyclones on the surface of Jupiter. Framed by a proscenium, the moving balls act like pixels, drawing the currents of air as they circulate the chamber. Their actions reveal how higher levels of energy within the large-scale swirling structures, cascade into smaller and smaller scale structures. This dissipation of energy creates what is known as 'a hierarchy of eddies'. A hallmark of turbulence, eddies (also known as vortices or whorls) can form in unpredictable ways, so much so that turbulence is considered one of the greatest mysteries of science. *A Hierarchy of Eddies* invites audiences to keep pace with these mesmerising patterns as they form, collapse and reform.

Scale Free Network (SFN) is a Melbournebased, art-science collaborative founded by conceptual artist Briony Barr and microbial ecologist Dr Gregory Crocetti. Since 2007, SFN have developed their interdisciplinary methodology through workshops, participatory installations, exhibitions and publishing projects, created in collaboration with artists, scientists, writers and educators. SFN projects aim to visualise and imaginatively engage with the invisible majority (microbial communities, physical systems and forces beyond human perception), to question the human-scale lens through which we relate to the world.

SFN have presented their work in a diverse range of contexts nationally and internationally, including art galleries, museums, science institutions, festivals, conferences and schools. The list includes

the Museum of Modern and Contemporary Art, Seoul; South Australian Health and Medical Research Institute; the National Gallery of Victoria; the Royal Institution of Australia; Gertrude Contemporary; A Centre for Everything; ArtPlay; Counihan Gallery; Ipswich Art Gallery; World Science Festival, Brisbane; OtherFilm Festival; the Environmental Health Clinic; and the International Symbiosis Society Congress.



LEFT: PHOTO BY ZAYLEE SAINT JAMES TURNER. RIGHT: PHOTO BY BRIONY BARR © THE ARTIST

DID YOU KNOW? EVEN THOUGH POLYSTRENE BALLS ARE 95% AIR, THEY WILL STILL TAKE 500 YEARS TO DECOMPOSE.

PREPARE

- Scale Free Network refer to their artwork as art-science. Write a class definition of art-science. After you have visited Experimenta: Make Sense and interacted with A Hierarchy of Eddies, review and improve your definition.
- What is turbulence?
- · What is an eddy?
- What is a whorl?
- · What is a proscenium?

EXPLORE

- Describe your immediate response to A Hierarchy of Eddies. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Scale Free Network to create A Hierarchy of Eddies.
- Describe the way A Hierarchy of Eddies has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Describe the way you interacted with A Hierarchy of Eddies.
- Make a series of sketches or take a series of photographs of A Hierarchy of Eddies.
- Is A Hierarchy of Eddies a sculpture?
- · Explain the use of the intermittent strobe light?

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: HIERARCHY, EDDIES, TURBULENCE, AXIAL FANS, POLYSTYRENE BALLS, KINETIC, VORTICES, WHORLS, CHAMBER, PROSCENIUM

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about A Hierarchy of Eddies, what is the intended meaning and message of the artwork?
- Explain why Scale Free Network titled the artwork A
 Hierarchy of Eddies.
- Explain how A Hierarchy of Eddies relates to the thematic focus of Experimenta Make Sense.
- Why have the artists chosen to explore scientific concepts in this particular way?
- Using the sketches or photographs you have made of A Hierarchy of Eddies, create an annotated explanation of how A Hierarchy of Eddies works.
- 'Big whorls have little whorls
 Which feed on their velocity,
 And little whorls have lesser whorls
 And so on to viscosity.'
 Who is Lewis Fry Richardson? Explain the links between Richardson's poetry and A Hierarchy of Eddies.
- A Hierarchy of Eddies is a collaborative piece of artwork. Discuss what you think are the advantages and disadvantages of collaboration when creating artwork. Research Scale Free Network. In what sense is A Hierarchy of Eddies representative of the collaborative's artistic practice?

MAKE

 Google 'turbulence art' for inspiration. Make your own turbulence artwork.

USEFUL LINKS

Scale Free Network official website http://scalefreenetwork.com.au/
A Hierarchy of Eddies
http://scalefreenetwork.com.au/
project/a-hierarchy-of-eddies/





Life Support System 2016
Interactive inflatable sculpture.
Dimensions 350 x 300 x 300 cm.
IMAGE COURTESY OF REBECCA
CAREY © THE ARTIST

WARNING: This artwork features flash photography.

ANDREW STYAN (AUSTRALIA) LIFE SUPPORT SYSTEM, CATCH YOUR BREATH

Life Support System and Catch Your Breath use air as a medium to address the complex social and ecological challenges of our time at the global and the personal scale.

Every atom of the air we inhale has been part of the life cycle of another organism, the natural processes of the earth's systems, and the man-made processes of our economic systems. With the origins of our contemporary crises lying in the relationship between these global systems of nature, humanity and economics, *Life Support System* presents a model for visualising them at a human scale. Two vessels, symbolising nature and humanity, inflate and deflate with rhythms suggesting breathing and the cycles of nature. They are enclosed within another sphere that symbolises the economy and is inflated to a pressure governed by live share market data. The operating parameters and flow within the model are displayed on a screen mimicking a medical vital signs monitor.

Our breath is formless and invisible - lost to us once exhaled - unless it is enveloped and given shape with a balloon, a soap film or water. *Catch Your Breath* contemplates the intimacy of our breath, making this visible through the action of blowing a bubble in a tank of water and freezing it with high-speed flash photography. The resulting image promotes an understanding of the unique beauty of our own breath. Measuring the shape of our breath - 'profiling' in the language of forensics and marketing - allows us to compare it with those of others and to perhaps better appreciate our collective breath.

Andrew Styan is an emerging new media artist interested in developing strategies for shifting public engagement with the challenge of climate change. Using electronics, computer coding, interactivity and electromechanical devices to create installations, videos and kinetic objects, his practice makes visible the underlying causes of climate change. These conceptual and material concerns reflect a former career in industrial research as a metallurgist in the steel industry, and lifelong interests in nature, photography and science.

Styan has exhibited widely locally and nationally and in 2015 he was awarded the University of Western Australia's prestigious Dr Harold Schenberg fellowship for graduating artists. His recent theoretical and practical research focuses on the socio-economic origins that are common to all crises of ecology, equality and democracy. He is interested in the psychology behind the individual and collective inability to tackle these crises, and the social agency of contemporary art practices and institutions.





Catch Your Breath 2017
Interactive photographic installation. Dimensions variable.
PHOTOS COURTESY OF THE ARTIST © THE ARTIST

DID YOU KNOW? YOU BREATHE IN ABOUT 11,000 LITRES OF AIR EVERY DAY.

PREPARE

- Have you ever seen your breath?
- What is a life support system?
- When someone says, 'I have to catch my breath', what do they mean?
- Can you remember the last time you blew a bubble?
 What exactly is a bubble?

EXPLORE

- Describe your immediate responses to Life Support System and Catch Your Breath. Explain your response by making specific reference to the artworks.
- Identify the materials and techniques used by Styan to create *Life Support System* and *Catch Your Breath*.
- Describe the way Life Support System and Catch Your Breath have been installed in the exhibition space. How does the placement of the artworks affect audience response?
- Life Support System is an interactive artwork. What parts
 of the artwork did you interact with? Describe the experience of interacting with the artwork's various parts. What
 happened when you touched the control panel?
- What do you think the two vessels that comprise Life Support System represent?
- Catch Your Breath is an interactive artwork. Blow a bubble. What happened? Describe what it felt like to have your breath captured by Catch Your Breath.
- Describe the shape of your breath. Look at the images that capture the breaths of others. Is your breath unique?

RECOMMENDED AGE GROUPS: MIDDLE AND UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES CONCEPTS AND VOCABULARY: AIR ATOM

KEY THEMES, CONCEPTS AND VOCABULARY: AIR, ATOM, BREATHING, VITAL SIGNS MONITOR, INTIMACY, BUBBLE, COLLECTIVE, FORMLESS, INVISIBLE, EXHALE, HIGH SPEED FLASH PHOTOGRAPHY

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about *Life Support System* and *Catch Your Breath*, what is the intended meaning and message of the artworks?
- Explain why Styan titled the artworks Life Support System and Catch Your Breath.
- Explain how Life Support System and Catch Your Breath relate to the thematic focus of Experimenta Make Sense.
- Life Support System presents a model of the interactions between the three global systems that dominate our world. These three systems are the human, natural and economic systems. These systems are sometimes referred to as the 'people, planet, profit' concept. Use the Internet to research the 'people, planet, profit' concept.
- How does Life Support System show how these systems might operate and interact?
- What statement is Life Support System making about contemporary global challenges?
- How is Catch Your Breath building an archive of the formless and the invisible?

MAKE

- Make your own artwork inspired by the 'people, planet, profit' concept explored in Life Support System.
- Make your own artwork about breath and breathing.

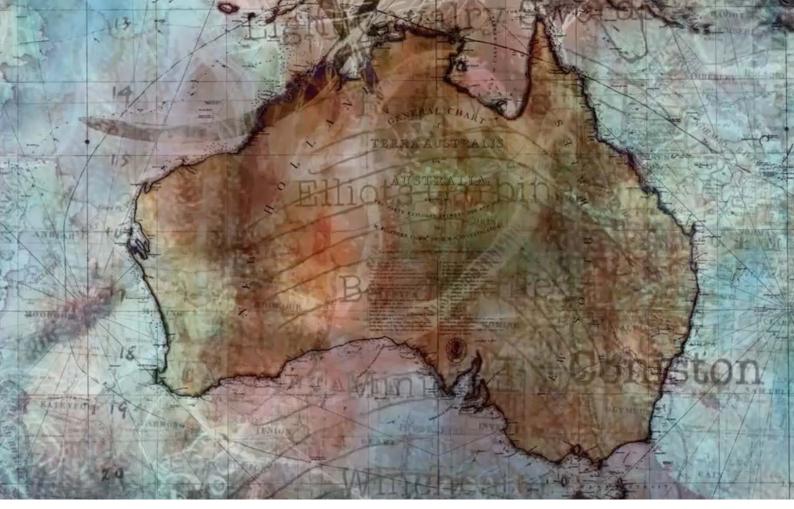
USEFUL LINKS

Andrew Styan official website https://andrewstyan.com/

Life Support System

https://andrewstyan.com/portfolio/life-support-system/
Catch Your Breath

https://andrewstyan.com/portfolio/catch-your-breath/



Aboriginal and Torres Strait Islander viewers are warned that the following artworks may contain images and voices of deceased persons.

the names of places 2016 Single-channel HD video. Duration 21:59 mins VIDEO STILL © THE ARTIST

JUDY WATSON (AUSTRALIA) THE NAMES OF PLACES, THE KEEPERS

the names of places presents a research-based mapping of Aboriginal massacre sites across the country. A significant aspect of the project is an invitation to the Australian public to contribute their own knowledge of any such massacres, to be incorporated into a database and website (http://thenamesofplaces.com/tnop/) that form part of the evolving project. the names of places creates a space where anybody can contribute their knowledge of massacres of Aboriginal people in Australia, so that the places, names and details of such events can become part of our collective consciousness.

the keepers is a video work that follows the journey of a 'behind the scenes' viewing of the Indigenous Australian collections held in the stores of the British Museum. The video conveys both the sensation of viewing the Indigenous collections (a privilege which artist Judy Watson knows few of her fellow Countrymen and women can afford), and what it is like for the objects themselves to be located out of Country, waiting for their return. The title given to the Curators of Collections in the British Museum are The Keepers.

Judy Watson's Aboriginal matrilineal family are from Waanyi country in north-west Queensland. Working from stories and memories, Watson reveals Indigenous histories, following lines of emotional and physical topography that centre on particular places and moments in time.

Watson co-represented Australia in the 1997 Venice Biennale, was awarded the Moët & Chandon Fellowship in 1995, the National Gallery of Victoria's Clemenger Award in 2006 and, in the same year, the Works on Paper Award at the 23rd National Aboriginal and Torres Strait Islander Award. In 2011, Watson's exhibition *waterline* was shown at the Embassy of Australia, Washington DC. In 2012, she featured in the Sydney Biennale.

Watson's work is held in major Australian

and international collections including the National Gallery of Australia; all Australian State Art Galleries; the MCA, Sydney; Taipei Fine Arts Museum; the British Museum, London; the Tate, London; Library of Congress, Washington DC; Kluge-Ruhe Aboriginal Art Collection, University of Virginia; as well as important private collections. She has exhibited widely over the past twenty-five years.



PREPARE

- Do you think the history of Indigenous Australians has been hidden? Why?
- Research who are the traditional owners of your local area.
- As a class discuss how European settlement affected the indigenous people of your area or state.
- What is the meaning of the word 'archive'?
- Why is it important to archive knowledge for future generations?
- What are the features of a documentary film? Can a documentary film be viewed as art?
- What is the meaning of the term 'keeper' to Indigenous Australians? Why is the role of keeper important to Indigenous Australians?
- What are artefacts? Does your family have a collection of artefacts that document your family's history? Where are these artefacts kept? Why are these artefacts important to your family?
- Explain the meaning of the term 'Country' to Indigenous Australians. How does this meaning differ from the non-Indigenous Australian understanding of the term 'country'?
- Why is it important for Indigenous Australian artefacts to be kept in Country?

RECOMMENDED AGE GROUPS: SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: INDIGENOUS AUSTRALIAN, MAPPING, MASSACRE, ABORIGINAL MASSACRE SITES, DATABASE, COLLECTIVE CONSCIOUSNESS, COUNTRY, REPATRIATION, RESPONSIBILITY, RECOGNITION, KEEPERS

EXPLORE

- Describe your immediate responses to the names of places and the keepers. Explain your response by making specific reference to the artworks.
- Identify the materials and techniques used by Watson to create the names of places and the keepers.
- Describe the way the names of places and the keepers have been installed in the exhibition space. How does the placement of the artworks affect audience response?
- Watch the names of places from beginning to end, taking note of all that you see and hear. Describe the use of sound in the names of places. How does it affect your viewing of the video work? Explain the use of colour in the video work. How does Watson use the map of Australia in the name of places? Describe the impact of the rolling text. Do you think the artwork is powerful? Why?
- Describe the setting of keepers.
- From whose perspective is the story of keepers told?
- Make a list of all that visitor to the archives touches.
 Use this list to explain the significance of touch to your understanding of keepers.
- · Were there any shots that you found confronting?

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about the names of places and the keepers, what is the intended meaning and message of the artworks?
- Explain why Watson titled the artworks the names of places and the keepers.
- Explain how the names of places and the keepers relate to the thematic focus of Experimenta Make Sense.
- This is the first time these two video works have been placed next to each other in an exhibition. How do you think the two videos relate to each other?



DID YOU KNOW? BEFORE 1788 AUSTRALIA WAS POPULATED ONLY BY THE INDIGENOUS PEOPLE OF AUSTRALIA - ABORIGINAL AND TORRES STRAIT ISLANDERS. THE ESTIMATED POPULATION AT THE TIME OF THE FIRST EUROPEAN CONTACT WAS 750,000 PEOPLE. the keepers 2015 Single channel video. Duration 9:15 mins VIDEO STILL © THE ARTIST

- When you first stood in front of the artworks, what did you see? How were your responses to the names of places and the keepers shaped by these starting points? When you watched the names of places and the keepers from beginning to end, how did your response to the artworks change?
- What political statement is Watson making with these artworks?
- Did you recognise any of the place names identified in the names of places? How did these moments of recognition impact on you? Choose one of the places named and use print and electronic resources to research the Indigenous and colonial history associated with this place.
- Explain the significance of the list of weapons. Why
 do you think Watson decided to place this text fifteen
 minutes into the video work? Describe the impact of
 the blood stains that appear on screen with this text.
- How does the names of places 'unhide' Australia's history?
- What role did the community play in the creation of the names of places?
- Explain the symbolism of the artefacts featured in *keepers*.
- How does keepers portray past and ongoing subjugation and violation of Indigenous Australians?
- Drawing on the names of places and keepers to inform your response, what responsibility do cultural institutions such as museums and art galleries have to redress the injustices of the past?

- How does Watson's Aboriginal Australian identity influence her artistic practice?
- How can artworks like the names of places and keepers shape our collective consciousness?
- What other artworks in the exhibition are concerned with Indigenous themes and issues? What do the artworks have in common? How do the artworks differ?

MAKE

• There is much debate in Australian society at the moment about how we should remember Australia's colonial past given the impact that the European settlement of Australia had on the population of Indigenous Australians. Use the Internet to locate media reports and commentary about this issue. Drawing on your knowledge and understanding of the debate, create a classroom installation that makes an artistic statement about this issue.

USEFUL LINKS

Art Gallery NSW - Judy Watson

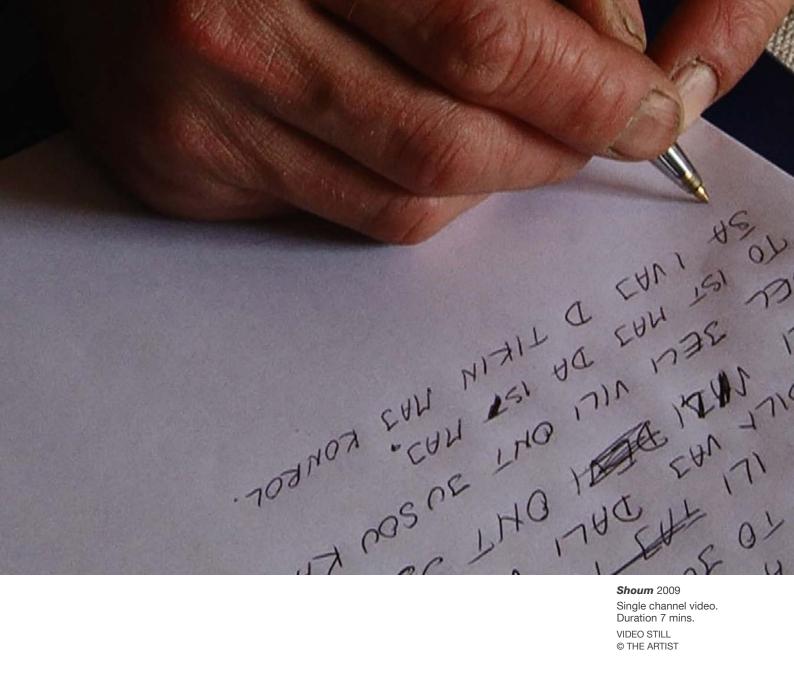
https://www.artgallery.nsw.gov.au/collection/artists/watson-judy/

the names of places

http://thenamesofplaces.com/tnop/

the keepers video excerpt

https://www.youtube.com/watch?v=affnSMUEAS4



KATARINA ZDJELAR (NETHERLANDS) SHOUM

Shoum starts with a blank screen. There is no image, only the sound of the Tears for Fears' 1984 song 'Shout'. Finally, there appears an iPod, a sheet of paper and the hands of two men from Belgrade, holding pens.

Over the course of the next seven minutes, Shoum depicts two attempts of deciphering the lyrics of 'Shout' as though they contained a coded message. The two men speak no English and so they phonetically transcribe what they hear, based on their own vocabulary and capacity to vocally interpret the unfamiliar. Cut off from the lingua franca of a globalised world, these two men create something of their own, something that lies between the foreign and the familiar.

Katarina Zdjelar is a Belgrade-born artist based in Rotterdam. Zdjelar graduated from the University of Arts in Belgrade and received an MFA from the Piet Zwart Institute of the Willem de Kooning Academie in Rotterdam, The Netherlands. Her audiovisual works focus on the performative powers of speech with a particular focus on the limits of language, on its vulnerability and malleability. Zdjelar's videos work as some form of backstage to the ideological imaginary of these changing,

dynamic, and accelerated times of ours. She consistently deals with alternative chrono-geographies, denouncing the flaws of the ideological acceleration, while unearthing its unrepresented

Her practice consists of working with moving image, sound, performances, book projects, and creating different platforms for speculation and exchange. Zdjelar's work has appeared in exhibitions and film festivals across Europe, the US and the UK.

PREPARE

- What languages do you speak?
- Have you ever spent time overseas in a country where you did not know the main language? How did you bridge the language barrier?
- Have you ever heard the term 'lingua franca'? What does it mean?
- Have you ever had to act as an interpreter? Share your experience with the class.

EXPLORE

- Describe your immediate response to Shoum. Explain your response by making specific reference to the artwork.
- Identify the materials and techniques used by Zdjelar to create Shoum.
- Describe the way Shoum has been installed in the exhibition space. How does the placement of the artwork affect audience response?
- Watch Shoum from beginning to end, taking note of all that you see and hear.
- 'Shoum Shoum Lajdi o Lau'
 Describe the language that the men use to write and sing. Do the written words resemble the lyrics of the song? What is the impact of hearing the men's voices?
- Explain the impact of only seeing the men's hands and cropped images of their faces.

REFLECT AND RESPOND

- Drawing on the information provided by the wall text and online research about Shoum, what is the intended meaning and message of the artwork?
- Explain why Zdjelar titled the artwork Shoum.
- Explain how Shoum relates to the thematic focus of Experimenta Make Sense.
- 'Shout, shout, let it all out
 These are the things I can do without
 Come on, I'm talking to you, come on
 In violent times
 You shouldn't have to sell your soul
 In black and white
 They really, really ought to know
 Those one track minds
 That took you for a working boy
 Kiss them goodbye

You shouldn't have to jump for joy

Shout, shout, let it all out

These are the things I can do without

Come on, I'm talking to you, come on

They gave you life

And in return you gave them hell

As cold as ice

I hope we live to tell the tale

RECOMMENDED AGE GROUPS: UPPER PRIMARY AND SECONDARY STUDENTS AT ALL YEAR LEVELS.

KEY THEMES, CONCEPTS AND VOCABULARY: CODE, LANGUAGE, DECIPHER, FOREIGN, FAMILIAR, TRANSCRIBE, PHONETIC, LINGUA FRANCA

DID YOU KNOW? TEARS FOR FEARS' 'SHOUT' IS NOT JUST ANOTHER SONG ABOUT PRIMAL SCREAM THEORY. IT IS MORE CONCERNED WITH POLITICAL PROTEST. RELEASED IN 1984, THE SONG WAS AN ENCOURAGEMENT TO PROTEST GIVEN THE FEAR THAT MANY PEOPLE FELT IN THE AFTERMATH OF THE COLD WAR.

I hope we live to tell the tale Shout, shout, let it all out These are the things I can do without Come on, I'm talking to you, come on Shout, shout, let it all out These are the things I can do without Come on, I'm talking to you, come on Shout, shout, let it all out These are the things I can do without Come on, I'm talking to you, come on And when you've taken down your guard If I could change your mind I'd really love to break your heart I'd really love to break your heart Shout, shout, let it all out These are the things I can do without Come on, I'm talking to you, come on Shout, shout, let it all out These are the things I can do without Come on, I'm talking to you, come on' Compare the lyrics of 'Shout' to the translation made by the men in Shoum.

- Explain the use of the subtitles. What did you think when you read the subtitle 'Damn English'?
- Shoum has a run time of seven minutes. When you first stood in front of the artwork, what did you see? How was your response to Shoum shaped by this starting point? When you watched Shoum from beginning to end, how did your response to the artwork change?
- What does Shoum challenge an audience to think about language?
- Research Zdjelar's practice as an artist. In what sense is Shoum representative of Zdjelar's artistic practice?
- What other artworks in the exhibition are about language and making sense of language? What do the artworks have in common? How do the artworks differ?

MAKE

 Create an audiovisual work that features you and a friend phonetically transcribing a song sung in another language. Like the men featured in 'Shoum' use your own vocabulary and capacity to vocally interpret the unfamiliar to write the lyrics of the song.

USEFUL LINKS

Katarina Zdjelar official website http://katarinazdjelar.net/about-2-2

Tears for Fears official website http://tearsforfears.com/ 'Shout' by Tears for Fears music video https://www.youtube. com/watch?v=Ye7FKc1JQe4

EXPERIMENTA AND EXPERIMENTA MAKE SENSE ONLINE

Experimenta

http://experimenta.org/

Experimenta Make Sense

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YouTube

https://www.youtube.com/user/emaexperimenta

APPENDIX 1 – AN INTERVIEW WITH JONATHAN PARSONS AND LUBI THOMAS

Interview conducted by academic and writer Maura Edmond with Experimenta Artistic Director, Jonathan Parsons and Experimenta Make Sense Co-Curator, Lubi Thomas.

Maura Edmond: First question, let's start at the beginning. Can you tell me a little bit about the genesis of the show, what some of the earliest seeds of inspiration for it were, and when you sensed that you were onto something that you wanted to make a triennial about?

Lubi Thomas: Okay, shall I go ahead and take that?

Jonathan Parsons: Yeah, yeah, sure, please start.

LT: When I was asked if I would be interested in cocurating with Jonathan on the project, I took that as an opportunity to check out what interesting shows and ideas had been occurring globally within the digital media and experimental arts space. There were a couple of shows that caught my attention. One was a show co-curated by Hans Ulrich Obrist and Simon Castets, called *Filter Bubble*. Unfortunately I didn't see the show but a phrase coming out of the curatorial discourse captured my imagination: 'The Extreme Present.' The term was trying to capture and reflect the impact of accelerating technological change on society and culture, and a general sense of the impossibility of keeping up with the pace of change.

Another show An Age in Our Own Making, (curated by Bonaventure Soh Bejeng Ndikung and Solvej Helweg Ovesen), engages with The Anthropocene and the idea that we are, as humans, having a significant impact on the earth's ecosystems. So, I started to think about questions like how do we understand the world? How do we keep up with ourselves? and how do we make sense of the world that we are making? Both the individual experience of the rush rush rush with no time to really stop, think and contemplate our actions, and the larger human technology impact on the world, all of which resonated for both Jonathan and I.

JP: And interestingly in our discussions the title came

quite early, then through an iterative process with the artists and their work the theme crystallised. It's an obvious thing to say, but useful nonetheless to repeat that of course some of the people who are constantly making sense of the world are artists. So, with these questions in mind and a working title, Lubi and I began our investigation into what media artists are saying about the here and now and what we might learn from them and then share with our audiences. As we discussed and debated the selection, amongst ourselves and our colleagues, other factors also came into the curatorial process, very practical things, you know, who's available? Who's doing interesting work? Who would best benefit from the kind of support and exposure that Experimenta is able to provide through the national tour?

LT: There were three main hubs that organised the show. How do we, or *can we* in fact, make sense of the world. That's around questions of scale, and using colossal data sets, which promise to give us insights that we've never had before. We were interested in artists that problematize this idea, or engage with data as an enabler, or who are indeed developing new data sets through their practice. Then there's the idea of making sense through our senses. Is knowing through data and non-corporal interfaces taking us to different experiences and types of understanding? And can our biological bodies and our sensorial systems, by which we make sense (certainly of the immediate environment around us), keep up with it all?

And the third was about *making* to make sense of the world. This relates to the rise in the *maker movement*, which is something that I truly believe reflects a human need to understand the world physically, moving beyond the screen

JP: Yes and those themes produced three key questions that were the provocations we provided to the

commissioned artists, and also guided us in the selection of invited artists who had existing recent works.

ME: Do you feel as though theme three – how do we make sense through making? – applies to your curatorial work? Do you feel as though through the process of making this show you understand the theme (or the artworks, or, hell, the world) differently?

LT: I would say absolutely. This is a personal journey. I think we're both personally invested. It was a personal and emotional and intellectual journey, rather than an impersonal, 'What is the current academic discourse?' It's not that at all, and I don't think we curate that way. The works really reflect that. They are all very personal responses from the artists. I think that's what makes Experimenta an accessible exhibition, and it has always traditionally been that way, and remains true for this show.

JP: It made me more acutely aware of the value a gallery can provide as a contemplative space, a place of reflection, something different to what is demanded by many of our technological devices that are designed for reaction, distraction or evasion. During the process I came across biologist EO Wilson's writing where he suggests that the great challenge for 21st century society is that "We have Palaeolithic emotions, medieval institutions and god-like technologies". Lubi and I felt that this conundrum can be seen expressed throughout the exhibition and why artists are so important because they are skilled at bringing an emotional dimension to complex institutions and technologies.

I'd also say that for me the process of making the show is not complete until the exhibition has its last presentation in mid 2020. This is because audience response is part of the process and their responses will no doubt open up surprising and unexpected understandings of the themes and as you say the world.

ME: I might take you up on that line on accessibility. Contemporary art can often *not* make sense to a lot of people. It can be obtuse and difficult and impenetrable. So, how easily do you think audiences will be able to make sense of this show, and do artists or curators have an obligation to help art make sense?

LT: You can take that one!

JP: Well, the short answer is yes, I do think curators have a responsibility to the audience. Institutions across the cultural sector are so different from the late 20th century where it was often completely acceptable if the audience didn't understand a thing, and in some ways, that was a badge of honour. Museums were only for researchers and art galleries were like an exclusive club. I think the shift to a greater audience focus is a good thing. Historically Experimenta has played a significant role in this shift, encouraging people to feel more comfortable interacting with art, because participation is often a critical component in

media artworks. There was a time, not so long ago, when you weren't' allowed to touch anything. Now sometimes we have the opposite problem, which is an achievement in itself! Antoinette Citizen's wonderful wearable devices, can *only* work if you're operating them, engaging with them, wearing them, touching them, experiencing them.

LT: and each of her artworks engages primarily with one of our senses. For instance, one of her devices is a set of headphones that delays sound to draw your attention to the key role hearing plays in our navigation of the world, something that is constantly in action and which we don't often think about as a way we make sense of our environment. Another is Andrew Styan's work, *Catch Your Breath* that you breathe into and have that ephemeral yet essential act of breathing captured and transposed into data. There are a number of works in the show that really give you an embodied experience of the ideas that we're thinking about.

JP: Talking about participatory work, one of the things we've found is that there's a blurring of the line between public program and the artwork now. Briony Barr's work, *Drawing on Complexity* is a classic example. It could be framed as a public program, but actually, when people come along and pick up a roll of tape, they'll co-creators of the artwork.

LT: I love work like Briony's because it has a lot of slippage around key notions about art-making. Who's making it? When is it complete?

ME: I guess that's another work, which is very much about the theme of 'making sense through making', involving a very tactile and hands-on process.

LT: I feel like we've had this central question, 'what is it to make sense' and it's been like a circular pool in our minds. We've been wandering around it, trying to look at it on different levels and from different perspectives. Then we've tried to collect works and engage artists who give us a multiplicity of ways in which to wade in and hopefully exit with different answers and more questions. There is no one answer, but I think it's important to alert people to the question 'how is it that we make sense?' how do our bodies and minds work together to make sense? With the rise of neuroscience, new discoveries about mind/emotion functions are currently shifting our understanding of ourselves.

ME: Okay. I might take a jump from neuroscience there. A lot of the science I read about seems to be basically doing MRIs and seeing which bits of the brain light up when people are doing different things. Visualising invisible reactions. That's a motif that comes up again and again in different works in the show. There are sound works which are about ways of visualising sound, and works about visualising breath, visualising the nano-scale, visualising the immaterial, visualising things which are socially hidden, such as in Judy Watson's work. But does visualising something really make it more comprehensible to us?

- LT: I think that although a lot of these works appear to have optic priorities, they're not, or that the visual is on equal terms, with other senses. I am relatively sceptical that data vis or infographics visualisations equates to new learning Is it knowledge or just more data?
- JP: That's one of the questions the show's asking. Does this help us? Does visualisation make sense of the world? In some cases yes and others perhaps not. But I think what's interesting about it is that there's a need. We're so used to understanding the world through our senses. But many of the things that we're grappling with now, particularly in the sciences, you can't experience directly through sight, touch or hearing but still for us to understand them we need to translate them into forms our senses can read.
- **ME:** I have one last question I wanted to ask, which is that there seems to be a funny paradox or contradiction in, on the one hand, works which are questioning the centrality of human experience to our understanding of the world, inviting us to think about what's beyond our perception, by making a work that prioritises human senses and perception. You know? There is something wondrous about the unfathomable, here, let us make it fathomable to you. Or, the world exists beyond human perception, here, let us render it perceptible to you.
- **JP:** That 's exactly what is so poetic about many of the works in the exhibition they inhabit that very contradiction such as Matthew Gardiner sculptural portrait of the universe contained in a light filled box.
- LT: To a certain extent, there's a celebration in that these things are still unfathomable, even when we think we can see them or sense them. So, a work like Scale Free Network's, is not trying to unpack that science. It's about, kind of ...

- **JP:** Giving you a feeling of the science.
- LT: Or Jane Gauntlett's practice that offers an experience into how different bodies make sense of the world. There's no singular perspective. We've really tried to give people an entry into the idea that different cultures make different sense. Different bodies made different sense. Different senses make different sense. I have a hearing issue so I use my senses in a different way to navigate the physical and social world from say someone with no hearing challenges.
- JP: This focus on the senses encouraged us to bring in a number of works that explores ideas around language, both in terms of what we physically hear and how we process the meaning of sound. Katarina's Zdjelar's video piece is a beautiful work featuring two Serbian men, who don't speak English, attempting to phonetically transcribe a popular Tears for Fears song into something that becomes their own shared, new vocabulary. Robert Andrew's work physically reforms traditional Yaruwu language words from their English text translations back into another, a reclaimed physical form created by mechanised rocks and ochre-like powder.
- LT: And we've tried to give people works that have different entry points. It's not all screen work. You're being made to stand up, sit down, look here, hear there, touch this and breathe that. I want you to feel like you've gone through a little bit of a sensorial gym. I hope nobody comes out and goes, 'We didn't feel, or like anything.'
- **JP:** I think it'd be hard for someone to go through this exhibition and not find something intriguing.

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Experimenta gratefully acknowledges the support of Daniel Besen.















This study guide was produced by **ATOM**. (© ATOM 2017) ISBN: 978-1-76061-058-6 **editor@atom.org.au**

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