Technology Is Not Neutral

Exhibition Catalogue

Edited by Anna Dumitriu, Gordana Novakovic
and Irini Papadimitriou

The Technology is Not Neutral project targets the frequent under-representation of the achievements of women in the field of digital art by highlighting the contribution of female artists in shaping what digital art is today. The concept was developed over two years by the curatorial team of Gordana Novakovic, Anna Dumitriu and Irini Papadimitriou, and comprises a touring exhibition featuring pioneering, recent, and newly commissioned work by Ghislaine Boddington, Susan Collins, Laura Dekker, Anna Dumitriu, Bhavani Esapathi, Julie Freeman, Kate Genevieve, Sue Gollifer, Luciana Haill, Nina Kov, and Gordana Novakovic, in addition to artists' workshops, and a symposium.

The curatorial concept focuses on the diversity of approaches and methodologies used by female digital artists, including the sequencing of bacteria, robotic performance, data as an artistic medium, biologically inspired simulation, site specific online transmission, digital print, kinetic art, telepresence, social media activism, drone choreography, brain wave art and hacking reality. The exhibition was launched at Phoenix Brighton as a part of the Brighton Digital Festival 2016, and then toured to Watermans Art Centre, London. Key features at both locations have been the gallery tour with the artists and curators as well as in-depth workshops by the exhibiting artists.

Whereas the touring exhibition focussed on highlighting the quality and diversity of the work of female digital artists, the accompanying events programme and the symposium addressed the causes and effects of the problem of under-representation, aiming to open up a space for challenging the status quo and the presumptions on which the history of digital art is written.
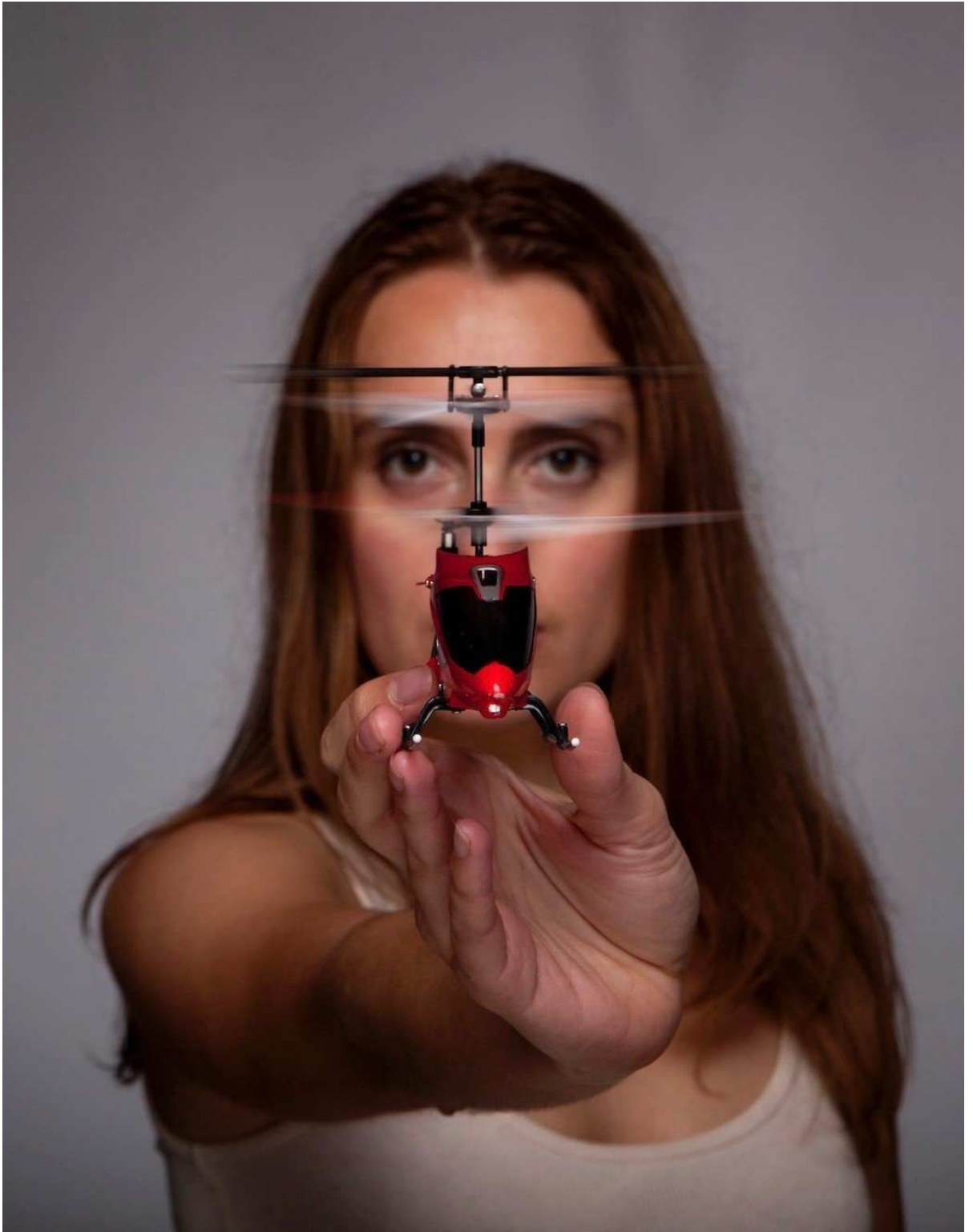
"skintouchfeel"

skintouchfeel was a series of works, evolving and re-iterating themselves between 1999 and 2004, emerging initially from a series of dance-tech workshops "CellBytes" and other creative gatherings directed by Ghislaine Boddington across this time period and earlier in London, Lisbon and Arizona. These images are taken from several public performances simultaneously held in 2 to 3 venues and connected via the internet. They show experimentation with a three way stream of bodies, working realtime, skin-upon-skin, with the lag and slowness of the technologies supporting the slow motion effect of intimacy upon our consciousness. These explorations by the sound and movement collectives shinkansen (1989-2004) and body>data>space (2004 to present) displayed the multiple potentials of streaming live performances, and was pioneer work into the development of virtual presence and virtual touch whilst dancing in cyberspace. Live sound, video and dance was combined in structured improvisational scores held at each physical venue, with a focus on portraying tele-intuition and digital intimacy to the watching public.

Biography

Ghislaine Boddington is Co-founder and Creative Director of body>data>space and Women Shift Digital and is a Reader in Digital Immersion at the Department of Creative Professions and Digital Arts, University of Greenwich. Ghislaine has been working internationally as a thought leader and pioneer advocating the use of the entire body as a digital interaction canvas, for over 25 years. She has in-depth expertise in body responsive technologies, immersive experiences and interactive interfaces, examining shifting identity politics through the convergence of telepresence, motion, touch, sense and gesture tech, focusing on the blending of the virtual and the physical. Ghislaine has curated, commissioned and consulted on 100s of arts, education and creative industry projects worldwide including leading several multi-partner EU projects, with an aim to enable wider public access to the topical debate on human machine interfaces. She regularly inputs as Studio Expert into BBC Click Radio (World Service) and presents into a wide range of sectors internationally, including two TEDx presentations. She is a co-curator for Nesta's FutureFest, creative consultant at the Innovation centre Here East and is on the expert committee for Eu Creative Media platform Risk Change - art, tech, migration.
http://www.bodydataspace.net/ http://www.womenshiftdigital.com/
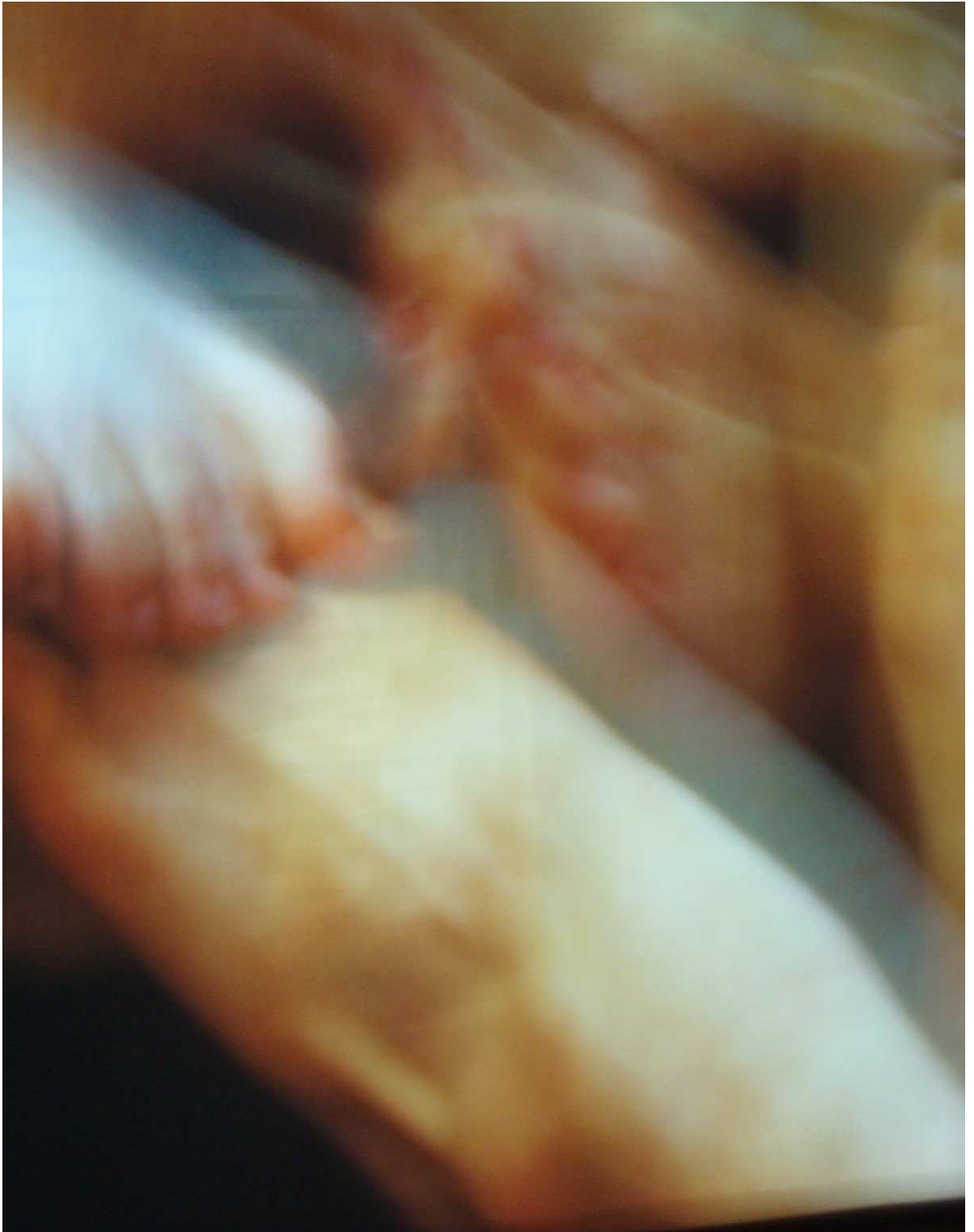
"Wembury and Woolacombe"

"Wembury and Woolacombe" are from a series of works by Susan Collins combining digital technologies with the classical traditions of English landscape painting. "Woolacombe" records the view from an iconic beach on the North Devon coastline, constructing images in real time over an extended duration. The images are transmitted to the gallery live, via the Internet having been assembled pixel-by-pixel, becoming atmospheric re-presentations of this evocative location. Cameras are in situ for twelve months recording the full cycle of the seasons, and the weather, from both locations over one whole year from September 2015. Each complete image is constructed line by line from the top left of the image to the bottom right over a six and a half hour period, approximately the time it takes for the tide to go in or out.

"Woolacombe" was commissioned by the Royal Albert Memorial Museum, Exeter for the exhibition 'Whatever the Weather' (2015-16) as part of a matching pair of Seascape works, Wembury & Woolacombe. The commission was to complement the National Trust's 50th anniversary year of the 'Neptune Campaign', a fundraising campaign which helped protect the nation's coastline.

The project was supported by the National Lottery through Arts Council England's Grants for the Arts and the Art Fund through the Art Fund prize for Museum of the Year 2012; with logistical support from the National Trust. The camera for Woolacombe is hosted by the Beachcomber Café, Woolacombe, North Devon. Programming and network technology was developed by Matthew Jarvis.

Earlier works in the series include "Seascape", a solo exhibition at the De La Warr Pavilion, Bexhill-on-Sea co-commissioned by Film and Video Umbrella, where a series of gradually unfolding digital seascapes were created using imagery captured in real time by network cameras installed at five vantage points across the South East coast of England to present a visual exploration into the natural cycles of tide, time and light; and "Fenlandia" and "Glenlandia", a series of 'pixel landscapes' exploring the relationship between landscape and technology over time. Whilst "Fenlandia" recorded minute changes in the constructed Fen landscape of eastern England, "Glenlandia" instead looked out over a place where technology is also implicitly embedded in the landscape - Loch Faskally, a manmade loch which services the hydroelectric dam in Pitlochry in Perthshire, Scotland. When lined up together the prints reveal another sense of time, from a thinning and widening band of nighttime showing the lengthening and shortening days throughout the year, to an occasional full moon in Glenlandia which appears as if a white comet is streaking through the image but is in fact the moon slipping through the night. This work can be viewed as a kind of 'open system', one inhabited and activated by light, day, night, weather, movement of the sun, the moon, the seasons and all these analogue variables that conspire to produce an infinite variety of unique images.

Biography

Susan Collins works across public, gallery and online spaces employing transmission, networking and time as primary materials. Most of her work is made in response to specific sites and situations.

Key works include In Conversation (1997); BAFTA nominated Tate in Space, Tate Online (2002); Transporting Skies (2002) which transported sky (and other phenomena) live between Newlyn Art Gallery, Penzance in Cornwall and Site Gallery Sheffield in Yorkshire; Fenlandia (2004) and Glenlandia (2005) - live year long pixel by pixel internet transmissions from remote landscapes; Seascape (2009) a solo show for the De La Warr Pavilion, Bexhill-on-Sea, and Love Brid (2009), a short film for Animate Projects.

Public commissions include Underglow (2005-6), a network of illuminated drains for the Corporation of London and Brighter Later (2013), a site specific light installation for the Radcliffe Observatory, Oxford driven by live weather data. Susan Collins is Slade Professor and Director of the Slade School of Fine Art, UCL where she established the Slade Centre for Electronic Media in Fine Art (SCEMFA) in 1995.
http://www.susan-collins.net

"Some Small Robots Perform Recent News Media Output Concerning AI"

1. "Will a Robot Take My Job?"
2. "Turing Mocks the Panic Over AI"
3. "Trained Eagle Takes Down Drone"
4. "Would You Have Sex With a Robot?"
5. "Google AI Ethics Board Remains a Mystery"

A group of small robot actor creatures roam, now and then interacting with one another, to approach, acknowledge, nudge, pursue or be pursued. The robots are about the size of a lobster or a large guinea pig. They are dressed in costumes made from digitally printed Japanese kozo paper and what seem to be plastic toys. Each robot "performs" a recent news item (from various sources) concerning artificial intelligence and robots. Much is hype, much is fear. Sources include the Daily Mail, Marie Claire magazine, IEEE Spectrum, the Guardian and BBC Online.

The audience is invited to read what they wish into the robots' behaviours, to match each robot with its corresponding headline, to speculate which media outlet might have been its source. Beyond this, the work questions how media representations of emerging technologies affect their reception and development - at a personal, commercial and social level - as well as the ethics and public policy that evolve with them.

Biography

Laura Dekker is a British artist whose work explores the reciprocal roles of technologies in how we experience, make sense of, and construct our world.
She examines these ideas through robotic and interactive works, combining physical materials, layered video, audio and techniques developed during many years' as a research scientist in computer vision, artificial intelligence and 3D imaging. Her works aim to engage the viewer-participant with a sensorially rich and provocative experience: virtual objects can intrude into the 'actual' world, or objects are activated with a kind of primitive consciousness, creating an oscillation between the virtual and the actual. There is always a performative aspect - at the point of production, reception, or both. Dekker's work is shown internationally at festivals, museums, parkland, historical sites and urban public spaces. She often works collaboratively with the London-based art collective XAP, whose diverse practices come together in experimental projects and performances.
www.lauradekker.io
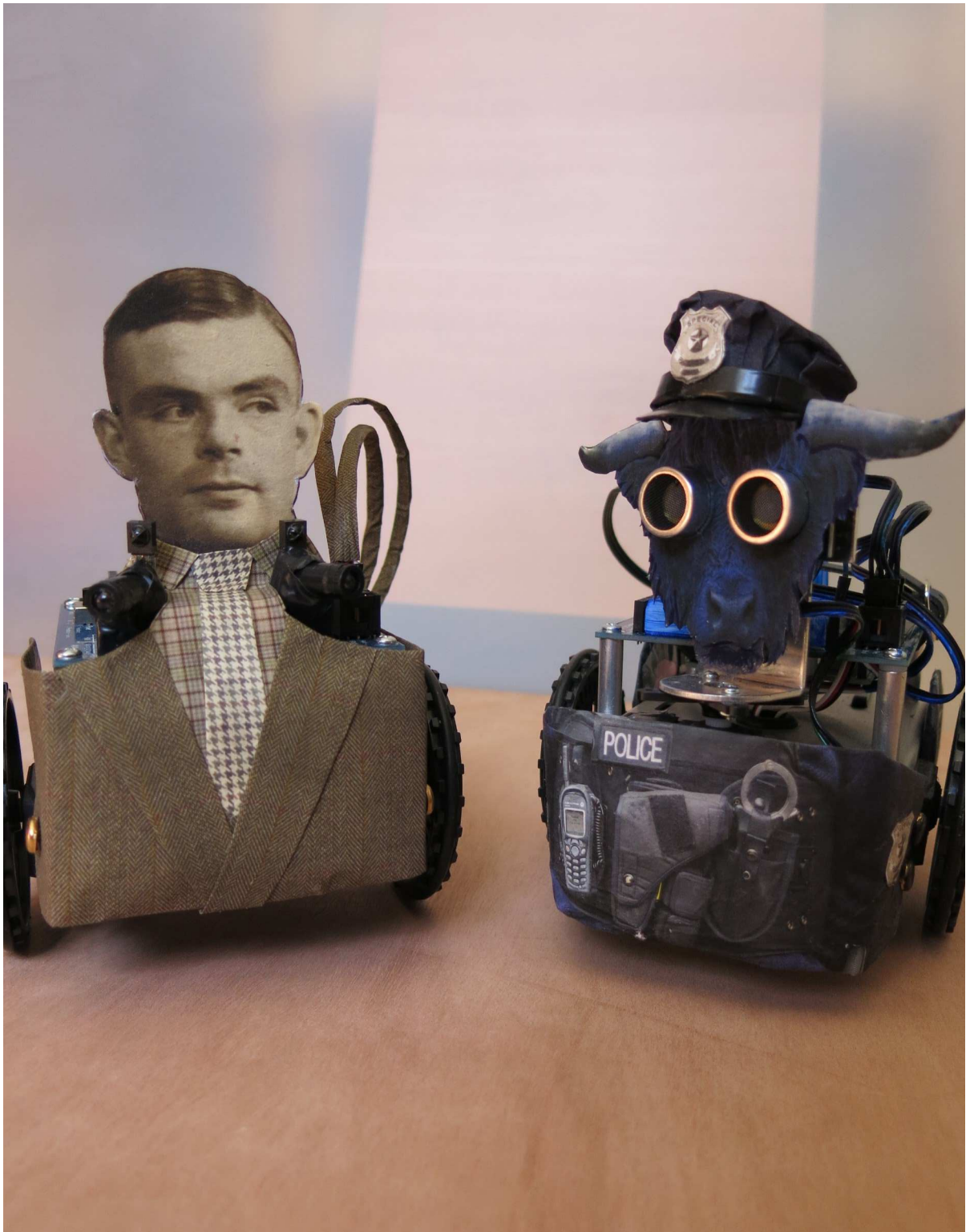
"The Sequence Dress"

Anna Dumitriu's "Sequence Project aims to artistically investigate the emerging technology of whole genome sequencing of bacteria, and consider what it means to us personally, culturally and socially. A genome is a kind of instruction book for a living thing. In the case of this project it means all the different fragments of DNA: guanine, adenine, thymine, or cytosine that go to make the basis for a bacterium, known as *Staphylococcus aureus*. Dumitriu worked embedded in the laboratories of The Modernisning Medical Microbiology Project (a collaboration between Oxford University and Public Health England) hands on with her science collaborators to undertake the work and explore the technology.

Staphylococcus aureus is a medically significant organism. It is currently suspected that it lives as a commensal organism on around 30% of the UK population, though the actual figure may turn out to be much higher as new research reveals further details about the fascinating organism. It likes to live in places like the front of the nose where is can hide out from temperature increases by the immune system designed to kill off bacteria, but also likes the sweatier parts of the body (under arms etc) and is surprisingly salt tolerant. In its drug resistant forms, such as MRSA (methicillin or multi drug resistant Staphylococcus aureus) and VRSA (vancomycin resistant Staphylococcus aureus) it has attuned itself to the ecological niche of unwell, immune compromised patients with broken skin (such as operation wounds or intravenous drips). It can kill patients but can also co-exist with us without any problem. Sometimes, for no known reason, the wild type of the organism can become pathogenic and even kill its host. It is medically very interesting, and through an earlier project Dumitriu found that out it lives on her. Dumitriu's research so far has culminated in her preparing, sequencing and assembling the whole genome (around 2.8 million base pairs) of the *Staphylococcus aureus* bacteria that lives on her body.

She discovered that this organism that lives on me has the blaZ gene, which confers resistance to beta-lactams, such as penicillin. It can be treated with methicillin and so is not a form of the famous methicillin resistant Staphylococcus aureus (MRSA).

Anna Dumitriu's installation consists of a dress with a video mapped digital projection created using the light output of an Illumina MiSeq as it sequences the whole genome of the *Staphylococcus aureus* bacteria from Dumitriu's body. The fully assembled genome of the bacterium is projected as a halo behind the dress. The video mapping is created in collaboration with Alex May using his software Painting with Light http://pwl.bigfug.com. The dress is impregnated with the Staphylococcus aureus bacteria from Dumitriu's body plus MRSA and VRSA bacteria. It is patterned using natural and clinical antimicrobials. All the components have been sterilised prior to exhibition.

Biography

Anna Dumitriu (1969) is a British artist whose work fuses craft, technology and bioscience to explore our relationship to the microbial world, biomedicine and technology. She has a strong international exhibition profile, having exhibited at The Picasso Museum in Barcelona (Spain), The Science Gallery in Dublin (Eire), The Museum of Contemporary Art (MOCA) Taipei (Taiwan), Waag Society Amsterdam (Netherlands), Art Laboratory Berlin (Germany), and The V & A Museum in London (UK). Her work is held in several major public collections, including the Science Museum London (UK) and Eden Project in Cornwall (UK). She works embedded in scientific and medical settings and is artist in residence on the Modernising Medical Microbiology Project at the University of Oxford (UK), a visiting research fellow: artist in residence in the Department of Computer Science at The University of Hertfordshire (UK), an honorary research fellow in the Wellcome Trust Brighton and Sussex Centre for Global Health at Brighton and Sussex Medical School (UK), and a research fellow at Waag Society (Netherlands). She recently completed a residency at the Liu Laboratory for Synthetic Evolution at The University of California in Irvine (USA) and the resulting artworks were featured in the groundbreaking exhibition "WETWARE" at the Beall Center for Art and Technology in Irvine (USA) curated by Jens Hauser and David Familian. Her work is featured in William Myers significant large format book on Bio Art, entitled "Bio Art: Altered Realities" published by Thames and Hudson in 2016.Anna Dumitriu a co-curated the exhibition. http://www.normalflora.co.uk

Inconclusive Diagnosis

'...uncertainty is the great unspoken secret of medicine' (Steven Hatch, 'Snowball in A Blizzard')

In this sculptural installation, Bhavani Esapathi explores some of the uncertainties that have left a scar both visibly on the outside as well as internally on how she views and interacts with the world. Each of the scars have a story of their own, she has gone through procedures such as lobectomy (surgical removal of a lobe of an organ and in this case, the artists' lung), two hemicolectomies; a procedure by which a part of the right side of colon is removed often in suspect of cancer but in the artists' case, the inflammation was incorrectly diagnosed as cancer and wrongfully removed and sustained life support with an induced coma.

The tracheotomy (on the throat) has left her with paralysed vocal cords thereby altering her voice, the lobectomy resulted in weakened muscular growth on one side due to scarring and the hemicolectomies are a direct misdiagnosis of early Crohn's Disease which was never recognised in her childhood growing up in India.

What do these scars mean? Can they tell a story of living with invisible, chronic diseases that remain out of our collective consciousness? Most importantly, this piece seeks to urge the viewer to interact with the artist, ask her questions and learn more about these various medical procedures and their long-term implications. Despite living with these scars for over a decade, the only confirmed diagnosis she has managed to receive is of Crohn's Disease with hesitant medications guided by possible Asthma, Ankylosing Spondylitis, Osteoporosis thrown in for good measure.

By tweeting directly at the artist using #InconclusiveDiagnosis (that is displayed on a screen next to the sculpture) she aspires to redefine how normalcy is perceived within the spectrum of health and enable a deeper understanding of what it's like to live with 5rchronic, incurable, invisible diseases.

Photographer: David Land.

Biography

The reluctant artist is a published writer, avid blogger and the Founder of The Invisible Labs; a social tech initiative focussed on Invisible Autoimmune Diseases. She has been bearing her experiences online for over two years now however, in this piece she literally bares to showcase the scars, each of which have a story of their own. We invite you to tweet at the artist @bhaesa with your scar related questions as well as explore various digital content curated for you to learn about the meaning behind the scars.

Having lived for over two decades with numerous health scares, Bhavani has received cancer scares, COPD diagnosis, ankylosing spondylitis-adjacent results on a regular basis. Inconclusive Diagnosis aims to incite curiosities of optimistic suspicion on how volatile diagnostics in fact is in modern medicine despite technological advancements whilst pointing out how social technologies can also aid in responding to such crises in chronic diseases. Her fleeting diagnoses have resulted in some amusing tales that are documented in telling the stories behind the scars.

www.bhaesa.net
www.theinvisiblelabs.com
@bhaesa

"A Selfless Society"

How can we think about a different way to live?

In an era when population increase, climate change, and the ideal of the nuclear family are putting pressure on the environment, on the affordability of everyday life, and on human well-being, do we need to actively evolve our social structures?

Naked mole-rats are altruistic eusocial mammals. Eusocial animals live in colonies with a single breeding female, and one or two breeding males; the rest of the community help to care for the young, provide food, and protect the nest. This cooperative lifestyle, and other adaptations, allow them to live in an environment where lone individuals have little chance of survival. Humans already have an altruistic nature; we see the older generation care for the children of their children, we care for friends and neighbours, and we can opt to put other's needs first. So how would it affect our relationships, our living conditions, our economic systems, our politics and our religions if we, too, became eusocial? Is a non-breeding female in our society selfish or selfless?

 A Selfless Society is an abstract animation influenced by real-time data from a live naked mole-rat colony. It uses data as an art material--exploring how we can take quantified measurement and turn it into an experience, a moment of contemplation. Creating work with real-time data from living systems can stimulate a connection to nature in unpredictable ways. The technologies open a communication channel (albeit one way for now) from the animal to us so that what we hear, see and feel is dynamically agitated by these non-human agents. Technology is not neutral in this process, it is designed, sculpted and scripted; the data translated by the artists' hand. But however tightly controlled the process, there is a gap--a space for the animals to fill and a place that cannot be synthesised. It is this gap that the naked mole-rats featured in A Selfless Society gnaw on to create a work with an edge of vulnerability.

The work is a part of a collaborative project called Rodent Activity Transmission systems (http://RAT.systems), with Dr. Chris Faulkes, Marcin Ignac (variable.io), and Matt Jarvis. We have been generously funded by The Centre for Public Engagement at Queen Mary University of London, Arts Council England, and are supported by the Data as Culture art programme at the Open Data Institute and OpenSensors.io.

Biography

Julie Freeman translates complex processes and data from natural sources into kinetic sculptures, physical objects, images, sound compositions and animations. Her work explores relationship between science and the natural world; questioning the use of technology in how we translate nature – whether it is through a swarm of zoomorphic butterflies responding to pollution levels; a lake of fish composing music; a pair of mobile concrete speakers that lurk in galleries spewing sonic samples; by providing an interactive platform from which to view the flap and twitch of dogs' ears; or enabling a colony of naked mole-rats to generate animation.

Over the past 15 years, her work has been shown at leading institutions including: the Victoria & Albert museum, London's Institute of Contemporary Art, Kinetica, Open Data Institute, Barbican Centre, and the Science Museum, as well as internationally in Brazil, Croatia, Lithuania, Luxembourg, Russia, Singapore and the USA. Julie has won awards from the Wellcome Trust, the Arts Council, and a fellowship from Nesta.

As a TED Senior Fellow and co-founder of the Data as Culture art programme at Sir Tim Berners-Lee's Open Data Institute, Julie helps people understand the profound impact that the web of data will have on our culture, and inspires people to connect with complex systems.Based in London, she is a doctoral candidate in Media & Arts Technology at Queen Mary University of London, where she is researching the impact of data on the 'Body Language of Objects'. She is a co-founder of Fine Acts, an organisation raising awareness of human rights through art.
http://www.translatingnature.org/
http://fineacts.co/
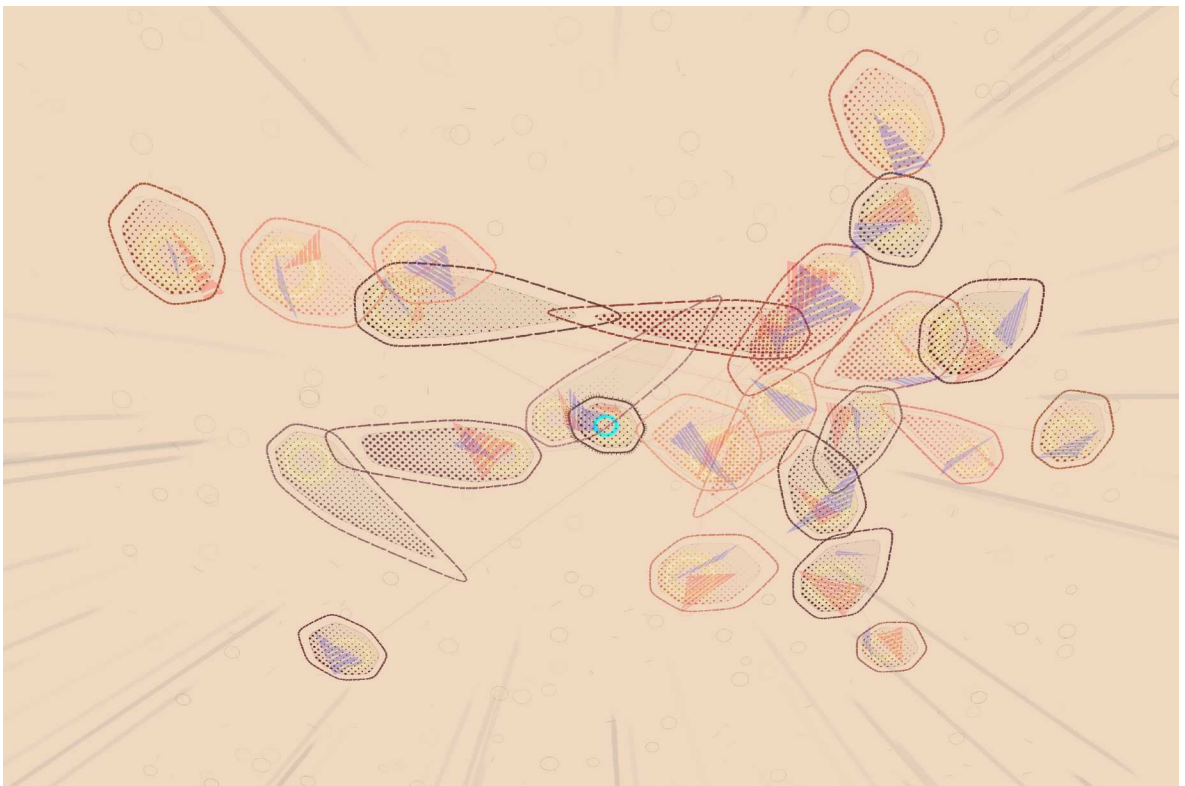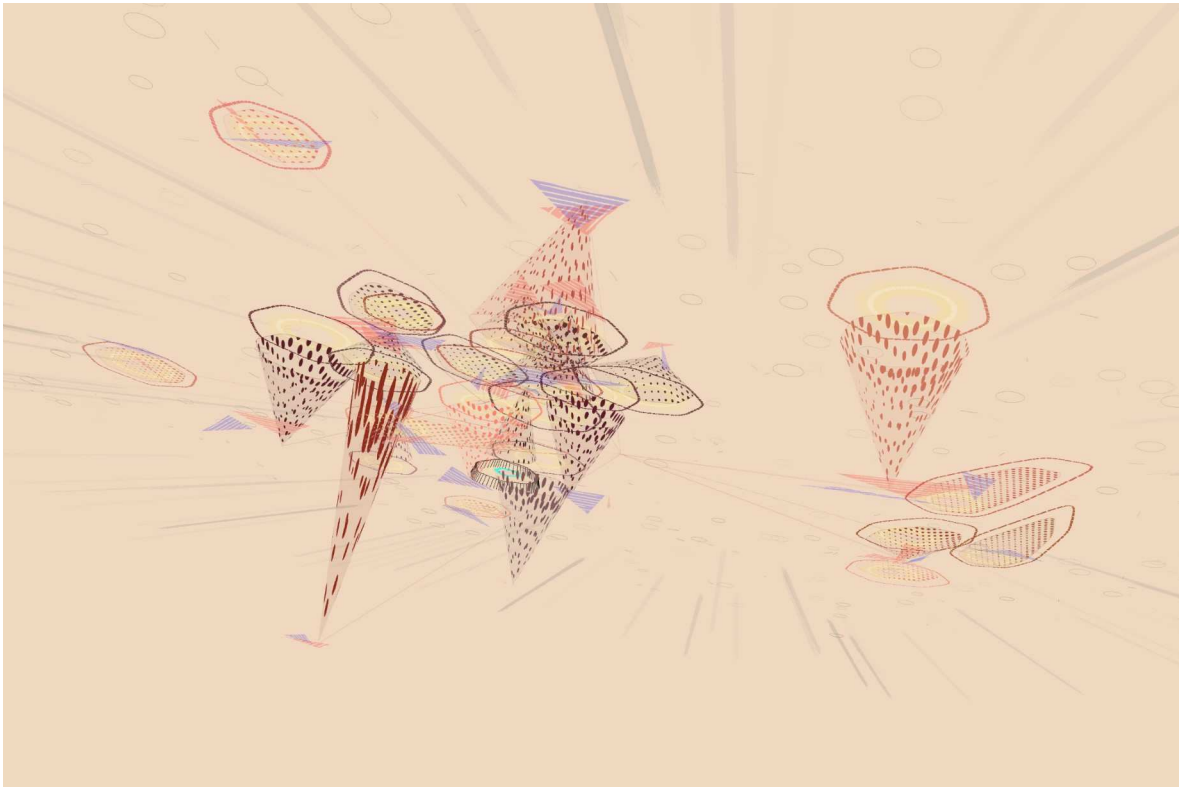
"Of The Spheres: Trust"
Trust is an immersive mixed reality experience created from recordings with the Leweton Community on the Pacific island of Vanuatu, one of the small islands effected by the changing climate. This interactive audio installation can be experienced through hacked headphones, which trigger layered soundscapes of song and water music in relation to the listener's movement. This work is part of Kate Genevieve's series ofthespheres.com - a project inspired by the Golden Disc aboard the Voyager probes and their speculative intention of communicating life on earth. Of the Spheres is an interdisciplinary creative technology project that explores the human attempt to innovate new means of communicating being alive on this planet across borders of language and shared understanding. Initiated at the SCANZ 3rd nature meeting at Parihaka, New Zealand in 2013 and continued on the streets of Paris during the United Nations Climate Change Conference COP21. In 2016, invited by Sandy Sur and with support from Further Arts and Biosphere Soundscapes, Kate Genevieve and Toby Gifford travelled to Espiritu Santo, Vanuatu to document the Leweton women's water music. The water music - a way of creating music from the rivers and the oceans by scooping and slapping water - has been handed down across generations of women of the Banks islands. Starting as an audio piece, Genevieve is growing the immersive piece "Trust" across the run of Technology is Not Neutral, through interactive live labs, immersive performances, hacking workshops and virtual reality experiences.

In her work Genevieve explores how we can use immersive technology to explore the micro and the macro: to explore intimacy and inner space and also to dramatise and mediate complex global realities through our personal, visceral senses. Can the technologies that have much to do with distancing us from embodied interactions, bring us back into relationship with our ignored ecosystems and the quieter, inchoate feelings of the body?

The questions that affect the Pacific Islanders, questions of where the people and culture will go if these lands are diminished by rising sea levels are not issues for the islands' inhabitants to hold alone. Of the Spheres recognises the critical value of communication technologies for creative action to meet the challenges of the present time and asks us to take on a planetary perspective, whilst respecting the paradox, the misunderstandings and the vital polyphony necessitated by this attempt. Refusing definitions of the "global" as a projection of the understandings of Euro-American societies, Genevieve addresses the individual's embodied experience and invokes the communicative alien - speculative friendly extra-terrestrial life - as one way to feel out what a relationship between the non human environment and human subjectivity might be at this time. Can we use creative communication technologies to help us evolve into the wise beings and pick up the message the Voyager probes sent out in the 1970s?

Currently, the project is directed by Kate Genevieve working with sound artist Toby Gifford in collaboration with the team in the Pacific: Sandy Sur, Tommy Dick and the Leweton Community. The Of the Spheres project has involved artists in New Zealand, America and Europe and invites collaboration. The project seeks to share resources and assets in support of open knowledge and open source culture.

Biography

Kate Genevieve is an artist, researcher and educator at chroma.space, the artist group she founded in 2010. At chroma.space she creates media performance, interactive art, urban disruption and games experiments playfully investigating the flexible relationship between the physical and the virtual, the real world and the imagined. Recent projects have shown at FACT Liverpool, Brighton Digital Festival, London's Science Museum, SCANZ 2013, Nimes 2016 and on the streets of Paris during ArtCOP21. Genevieve is working on a practice-based PHD at the University of Sussex, researching emotions, sensing and virtual reality with joint supervision from the School of Media and the Sackler Centre for Consciousness Science. Her work with Virtual Reality investigates how immersive audio, visual, touch and haptic environments enable us to "slip our moorings" and experience transformed relationships to our environment, to other people and to our own bodies. This research draws on both indigenous understandings and neuroscience research into how we feel the environment around us.

http://cargocollective.com/kategenevieve

UNTITLED

Sue Gollifer's work has developed in the last forty years according to a rigorous programme of formal experiment, through which sets of relationships evolved between shapes, colours and tones, using various mathematical sequences including Fibonacci numbers, and modular symmetry. At first these relationships in her work were concerned with the surface of the work: illusions of depth or movement were made explicit as illusions, by using a systematic grid arrangement, and maintaining the symmetry of the overall design. Later, perspective was incorporated into the work, so that the arrangement could be read as a depiction of a space with depth, although never as a 'scene ': the space depicted exists solely in the work.

Uses of new technologies have assisted her in being able to discover creative and surprising solutions to problems in her work. The memory and speed and the vast network of options allow new thought processes to be explored and discarded painlessly as the ideas take shape, develop and germinate. One attraction of new technologies, of course, is the convenience: calculations which once occupied hours, and involved painstaking measurement with ruler and compass can be completed with greater accuracy in seconds, leaving more time for the purely human judgments which remain fundamental to art. Another is the possibility of creative error: a step taken with uncertainty can result in chaos, in which case it can be quickly unmade; or, more rarely, it can produce or suggest an order unforeseen in its complexity. In these cases the device is incorporated into the repertoire of available options, and the process of refinement and discovery continues.

Perhaps even more significant is the possibility offered by detaching the images, or the relationships which determine the images, from their material base. Although ultimately all experience of art derives from the perceptions of artist or viewer in the context of material sensations, computer technology enables the sources of these sensations to be temporarily encoded as streams of digits. In this form they can be modified in scale, directed into a wide range of printing or reproductive media, or almost instantly transmitted over vast distances. In these ways, the specific material form of the image can be made less obsessive.

The transaction between artist and viewer becomes less that of a negotiable object, more that of a dialogue about perception, and when Gollifer started to make prints she was motivated by precisely that possibility: "its renewal through new technology continues to motivate my work".

The work being shown in this exhibition covers a range of my work and the use of technologies, from an early screen print produced in (1972), a printed construction (1976) to more recent giclee prints (1998, 2000 & 2016).

Biography

Sue Gollifer works at the intersection of art and technology. As someone who works as an artist, curator, organiser, professor, researcher, chair and board member she embodies this intersection across many venues. A pioneer of early computer art, she has continuously explored the relationship between technology and the arts and has written extensively on this subject. Although formally trained as a Fine Artist and not as a Computer Scientist and in the early years and had no access to computer facilities, she instead turned her self into a computer. Her work is held in both national and international public and private collections. She is the Executive Director of the ISEA International Headquarters, and is on a number of National and International Committees, including the ACM Digital Art Community (DAC), Computer Arts Society (CAS) and Phoenix Brighton. She has been a curator of a number of International Digital Art Exhibitions including, ArCade, the UK Open International Biennale Exhibition, of Digital Fine Art Prints 1995 – 2007 and the SIGGRAPH Art Gallery Exhibition'04: Synaesthesia and the "Intuition and Ingenuity" art exhibition to celebrate the Alan Turing Centenary 2012 and the HOT PLATE Exhibition (2010) & William Latham Exhibition Mutator 1 & 2 (2013) at Phoenix, Brighton. She is on the Editorial Board of Digital Creativity, a referred journal published by Routledge, and is the art editor and curator of the visual section 'Artist Space', which examines the work of artists and printmakers using digital technology. In 2006 she was awarded an iDMAa Award, The International Digital Media Arts Award for her 'Exceptional Services to the International New Media Community'.

http://arts.brighton.ac.uk/staff/suegollifer
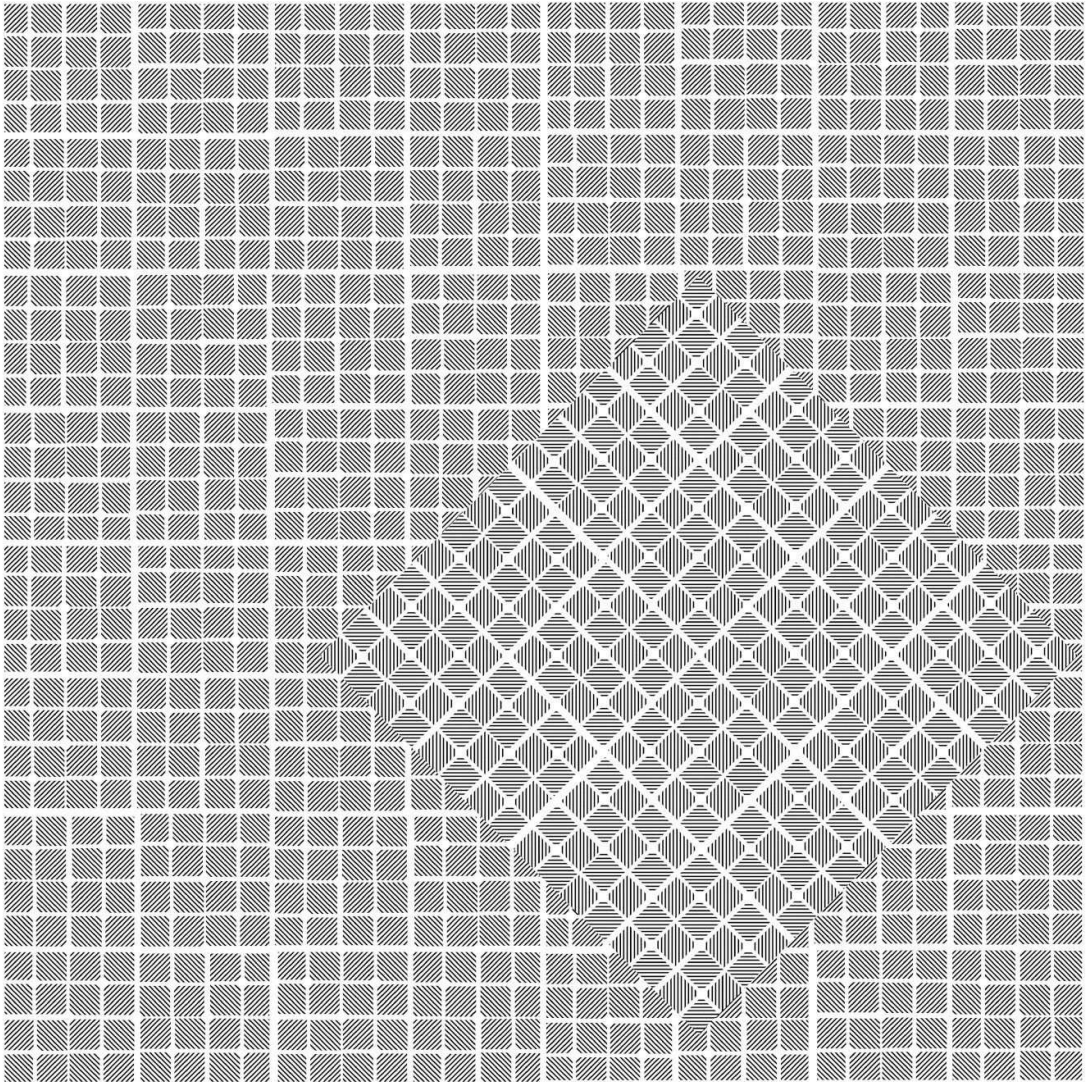
"Sleep Cycles"
A mixed media installation exploring dreaming, reverie and consciousness comprised of the brainwave (EEG) visualisation of a vivid dream recorded by the artist, video-mapped and projected over an oversized book (as a digital 'dream journal') and accompanied by a series of ready-mades and personal fine pen illustrations.

Animated dream data showing theta waves and REM (rapid eye movement) eye oscillations is a continuation of the 5 stages of sleep made by a series of domed glass cloches. Sitting atop 2 rolls of pianola paper, they protect delicate dream fragments and contain the 'NREM' stages 1-4 of sleep (including a 14 million year old fragment of Bohemian meteorite 'moldavite', zincite and and a cerebral looking agate). Other details include mugwort capsules, a vintage sand timer, a portrait of a 'shadow self' beneath a mirror, theosophical volumes by Madama Blavatsky and empty Victorian bronze frames waiting for the next content to be loaded.

The significant repetition of green elements in the cloches has been interrogated using a new Gestalt technique the artist learned at The International Association for the Study of Dreams in the Netherlands in June 2016. The work has been created following a four year investigation into the neurophysiology of lucid dreaming as research fellow in Sussex University and personal exploration of sleep consciousness.

In the corner the hypnagogic and hypnopompic collages made in Mexico sit either side of a seat referencing Dali's infamous "Slumber with a key" technique. This allows the sitter to reliably harness creative ideas from reveries upon dosing (when fallen keys sounding act as an alerting reminder to write the first idea in mind) beneath a Victorian linnet cage following the artist's exploration of the Spanish female Surrealist Remedios Varo and her avian mystical figures. Surrounded by a further 15 "Oneiricals" – very fine ink illustrations in a variety of vintage frames, made from prolonged states of Reverie since 2014.

Biography

Luciana Haill is a contemporary surrealist working with brainwave monitors; her recent practice has focused on artist Brion Gysin's Dreamachine, Entoptic visualsand the phenomena 'Flicker'. She has developed this into a series of performances and installations involving the real- time recording and sonification of the brainwaves of individuals in the participating audience. The 'Phrontesterion' (EEG & Dreamachine) referencing the notion of 'The Visionary' has been shown internationally including The Royal Academy & The Royal Institution London, The Waag Society in Amsterdam and KIBLA in Slovenia.

Luciana experienced viral meningitis as a teenager which led to her fascination with the brain. She has been using brainwave (EEG) recording technologies creatively in her practice since 1994 and is considered a pioneering artist in her field. Haill's art emanates from 'hypnagogic' reverie, entrainment (neurofeedback) and the exploration of liminal and altered states of consciousness such as lucid dreaming. Her work researches pioneers in neuroscience, sleep laboratories & cybernetics whilst simultaneously exploring serendipitous & parallel interconnections from surrealism and 'The Beats', and is expressed in installations involving neuro-technologies, digital media, performance, sound and her fine line drawings. http://www.lucianahaill.co.uk

Image credits: Guido Mencari (SPILL Festival 2014)
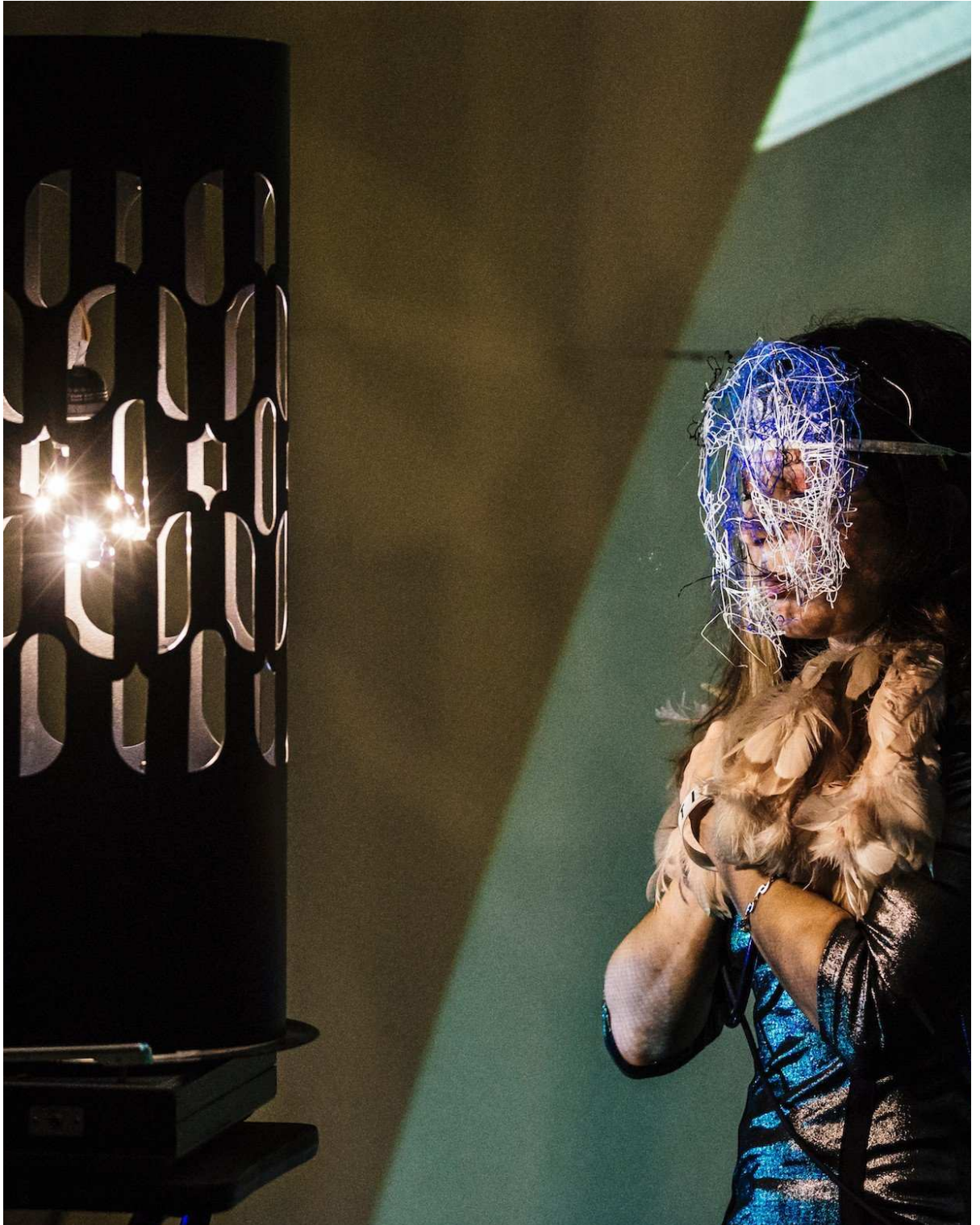
"Constant Sensing"

This installation is the first of a series, with the ultimate goal to mix immersive virtual reality and First-person view drone filming. Questions of identification to images through the body, projection of the unconscious into virtual territories and human/machine communication are at the core of the artist's work. Here, the artist plays with the aesthetics of gaming, drone video, avatar representations and the ever narrowing frontier between 'rendered' and 'real' images. The First-Person View (FPV) goggles used in the installation display are commonly used to remotely pilot drones via onboard cameras. The artist is subverting the idea of control, power and agency that a first-person view can give by creating a possibility between a first person view and a third person view. From seeing ourselves through the eye of the machine, to becoming the eye of the machine - and back.

About "Constant Sensing"

"New Aesthetic is a sense that we're learning to "wave at machines"—and that perhaps in their glitchy, buzzy, algorithmic ways, they're beginning to wave back in earnest." James Bridle.

Technological progress can inspire an almost morbid/sublime fascination due to its potentially transcendent power. The concept of this series is one where machines develop an aesthethic of their own, of whom they are the only judge and jury. The starting point is this current question: If the aesthetics of art is defined by the technological limit of a genre, then who is, or who will be the true judge of its quality? The ultimate macabre fantasy (in the psychological sense) of our era is one of an "endism", the idea that "the future doesn't need us".

The artist is inspired by this fantasy scenario: the slow and complete outing of the human element from the process of creation. The road to post-human art would go through a necessary loss of the aesthetising value of human gaze.

Our role is then simply one of a voyeur. It's not about getting a glimpse on how machines see us, or "our world" anymore; it's about us getting a glimpse into the process of machines looking at machines.

But we're not there, yet.

The man/avatar is symbolically situated, in a spatial and temporal in-between, within the rubbles of a past industrial revolution, at the dawn of the current, 4th industrial revolution, facing a wall. His presence is seemingly unavoidable.

Pilot: Lörinc Matyas, Man: Benjamin Jarret

Biography

Nina Kov is a choreographer and researcher. She completed her MA in choreography at TrinityLaban in London, where she is based. As creator of the first ever duet between a dancer and a mini helicopter ("Copter" PlacePrize Semi finalist, 2012), Nina is a pioneer in human-flying machine choreographic interactions. She is the Artistic Director of Drone company "Dancing with Drones", a project featuring interactive movement between a flock of drones and dancers. Her works have been shown at Sadler's Wells, the Royal Opera House, the Science Museum. Most notable achievements include: DanceDigital Associate Artist and the commission "Divide by Zero" in 2011 with Hellicar&Lewis, "Vuong 10" in collaboration with Catarina Carvalho in 2014 (Wayne McGregor|Random Dance), and being awarded NewEurope 100 Challenger of the year 2015.
http://www.dancingwithdrones.com
http://www.ninakov.com
http://unnecessaryresearch.tumblr.com/OrganisedAgitation

Untitled

The idea of combining computer-generated images with painted surfaces led Gordana to start playing with and learning from the first generation of IBM personal computers in 1984. What fascinated her were the hybrid forms that emerged from the powerful tensions between computational processes and fine art aesthetics, rather than the aesthetics of the visual output of an algorithm, or the possibility of mechanical art. Creating this particular piece in 1990 involved using a program designed for geologists for the 3D representation of landscapes to generate visual outputs printed by a pen plotter, which were photo-enlarged and printed on canvas. She then made clay sculptures based on her drawings of human cells and used these as models for the painted elements. This series of early works established her artistic method of crossing and merging disciplines and media that has defined her artistic practice for decades.

"Fugue"

The Fugue project began in 2005 and is the work of an interdisciplinary team, with Gordana and composer Rainer Linz collaborating with computer scientists Dr Peter Bentley, Dr Anthony Ruto and Dr Richard Newcombe, and immunologists Dr Nada Pejnović and Julie McLeod. It was inspired by the way that fear spreads (and is spread) through the mass media, mutating as it goes, in a manner very similar to a virus spreading within the human body, and the piece took the form of the human immune system fighting a virus. At the heart of the piece is a complex piece of scientific software, an artificial immune system algorithm, which accurately mimics the cascading responses to infection of the human immune system. No two responses will ever be the same, and the time scale and outcome of the struggle is always unpredictable. However, Fugue does not just display what could be seen under a microscope. Instead, the artists have transformed the data generated by the artificial immune system into symbols that express the dynamics and the rhythm of the biological processes. It is entitled 'Fugue' because the artists found inspiration in the resemblance between the complex interplay among the elements of the immune system and the complexities of the musical form fugue. While the visuals reflect one view of events in the underlying immune system algorithm when it is infected by an artificial virus, the sound reflects another less direct view of the same events, enriching and deepening the overall perception of the unfolding drama.

Biography

Originally a painter, Gordana Novakovic has been experimenting with digital technologies since the mid-1980s. For the last twenty years she has concentrated on developing interactive projects at the confluence of art, science and technology through extended interdisciplinary collaborations with scientists, composers, and technologists. As long-term artist-in-residence at the Computer Science department, University College London, she founded and curates the Tesla Art and Science discussion forum. She has received funding from a variety of organisations, and her work has been featured in many international exhibitions and conferences. Gordana is currently working on her concept of neuroplastic art, exploring the possibilities of new interactive art forms based around the emerging science of neuroplasticity – the brain's ability to rapidly and radically reconfigure itself in response to novel sensory inputs.
http://fugueart.com
http://gordananovakovic.org