

**FOUNDATION'S  
EDGE**

**ARTISTS AND  
TECHNOLOGY**

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PREVIOUS Benjamin **FORSTER**  
A *written perspective* (still) 2012  
video  
indefinite  
Courtesy of the artist

# INTRODUCTION

**'The serious artist is the only person able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception'<sup>1</sup>.**

Marshall McLuhan

We live in an electric age, one driven by powered devices. It is arguably the age of the technophile<sup>2</sup>. Devices and gadgets that promise to improve our everyday lives through efficiency and convenience surround us. From 'smart' technologies, such as computers, tablets, and mobile phones, to the humble refrigerator or washing machine, these technologies have changed the way we live, and subsequently, the way we look at ourselves. Further, they are seductive by design—carefully crafted

with sleek sophistication and user-friendly interfaces; they look good and feel good—and instill a must-have desire in the consumer.

In addition to beguiling the consumer, technology has played muse to artists for centuries—from early explorations into motion and duration as seen in the zoopraxiscope<sup>3</sup> creations of Eadweard Muybridge, to the kinetic and light installations of Thomas Wilfred and Laszlo Moholy-Nagy in the 1920s, on to the television and video exploits of Wolf Vostell and Nam June Paik from the late 1950s, and finally the emergence of the term 'new media' to describe the influx of new technologies used in the creation of artworks—artists have used, repurposed, and invented electronic

media in ways that delight the senses, baffle the mind, and offer profound insights into the implications of culture<sup>4</sup>.

The place of technology in art does not always centre on the high-tech or cutting-edge, and *Foundation's edge: artists and technology* presents the work of artists who embrace the use of readily available or outdated commercial technologies as their choice of material. The modus operandi of these artists—shared by many great artists who produced the seminal work of the last century—is the exploitation, deconstruction, and reworking of technology to their own creative ends. They seek to understand the materiality of technology not by simply assuming

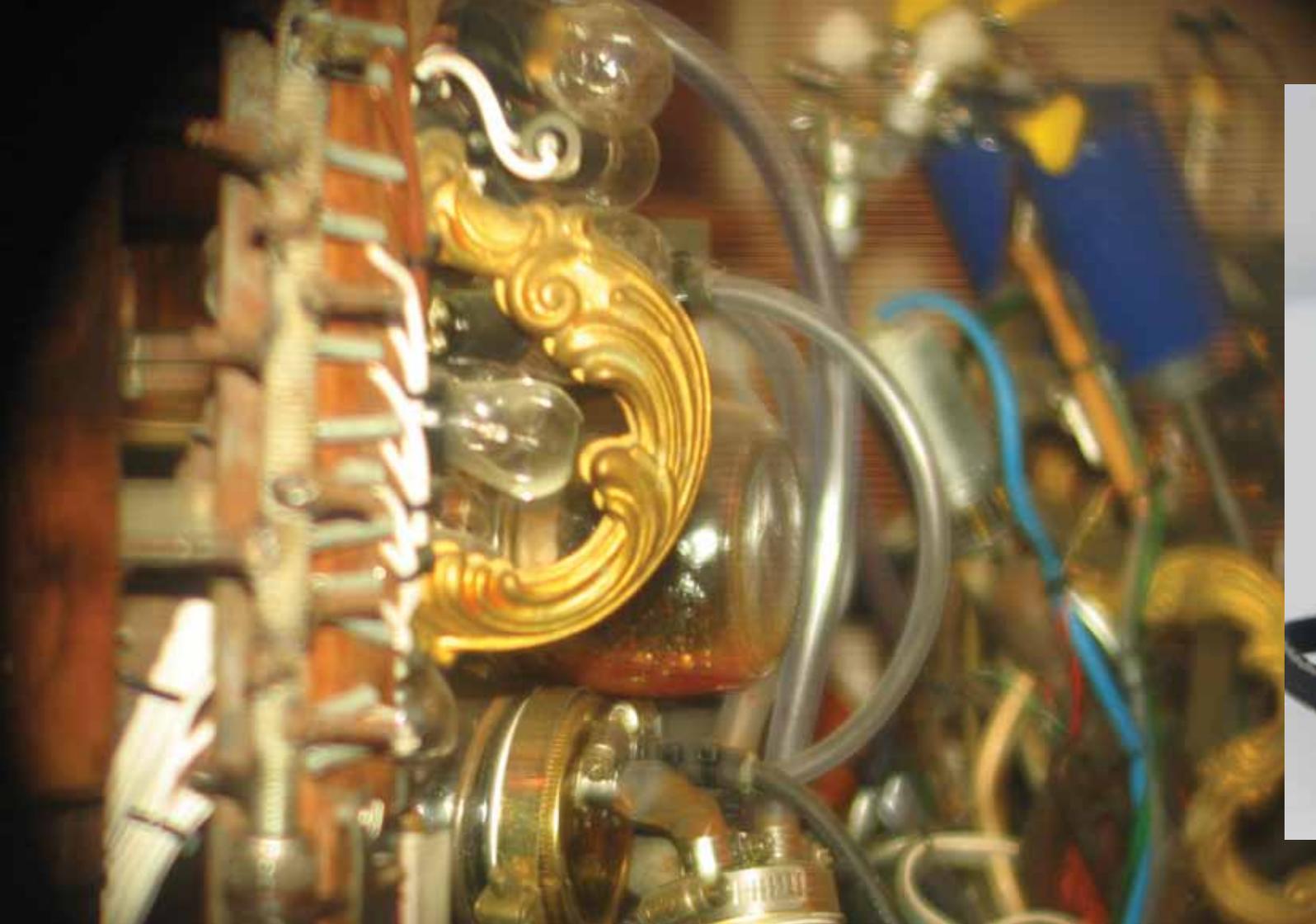
and adhering to all it promises, but by pulling it apart, literally and figuratively, and playing...

<sup>1</sup> Marshall McLuhan, *Understanding media: the extensions of man* (London: Routledge, 2001), 35.

<sup>2</sup> A love of, or enthusiasm for technology.

<sup>3</sup> Created by Muybridge in 1879, this device projected images from rotating glass disks in rapid succession to give the impression of motion. It is considered a forerunner to the movie projector.

<sup>4</sup> Edward Shanken ed., *Art and electronic media* (London: Phaidon, 2009), 15.





## MICHAEL CANDY

One of the first pieces of technology to have a profound impact on the visual arts was the camera. Photography revolutionised image making by virtue that it was able to capture more information and more detail than other image making processes. In essence, it presented itself as capturing the 'truth'.

While personal camera technology is not a recent phenomenon, the advent of the smart phone has seen the level of ease with which an image can be captured and shared move from accessible to ubiquitous. Not only can an image be captured in an instant, but with the help of photo manipulating software such as the popular Instagram, tricks of the darkroom necessary to correct bad

lighting and focus—to ultimately present our selves and our lives in a better light—are carried at hand.

The deconstruction and analysis of everyday devices and the technological archetypes that surround them is at the heart of Michael Candy's practice, and with *Frank* 2010, Candy has taken on the camera. *Frank* is a fully functioning three-megapixel camera that Candy crafted from the remnants of broken and obsolete cameras. Far from sleek, *Frank* is a humble, handmade machine, housed in a body of wood and brass fittings with his name branded like a model number in hand lettering.

*Frank's* outward features belie the images he produces; the results could

PREVIOUS Michael **CANDY**  
*Frank* 2010  
found components, wood, brass, plastic  
12 x 15 x 9cm  
Courtesy of the artist and Ryan Renshaw Gallery

Michael **CANDY**  
*Untitled (1-4)* 2010  
digital print on paper  
18.5 x 25cm  
Courtesy of the artist and Ryan Renshaw Gallery

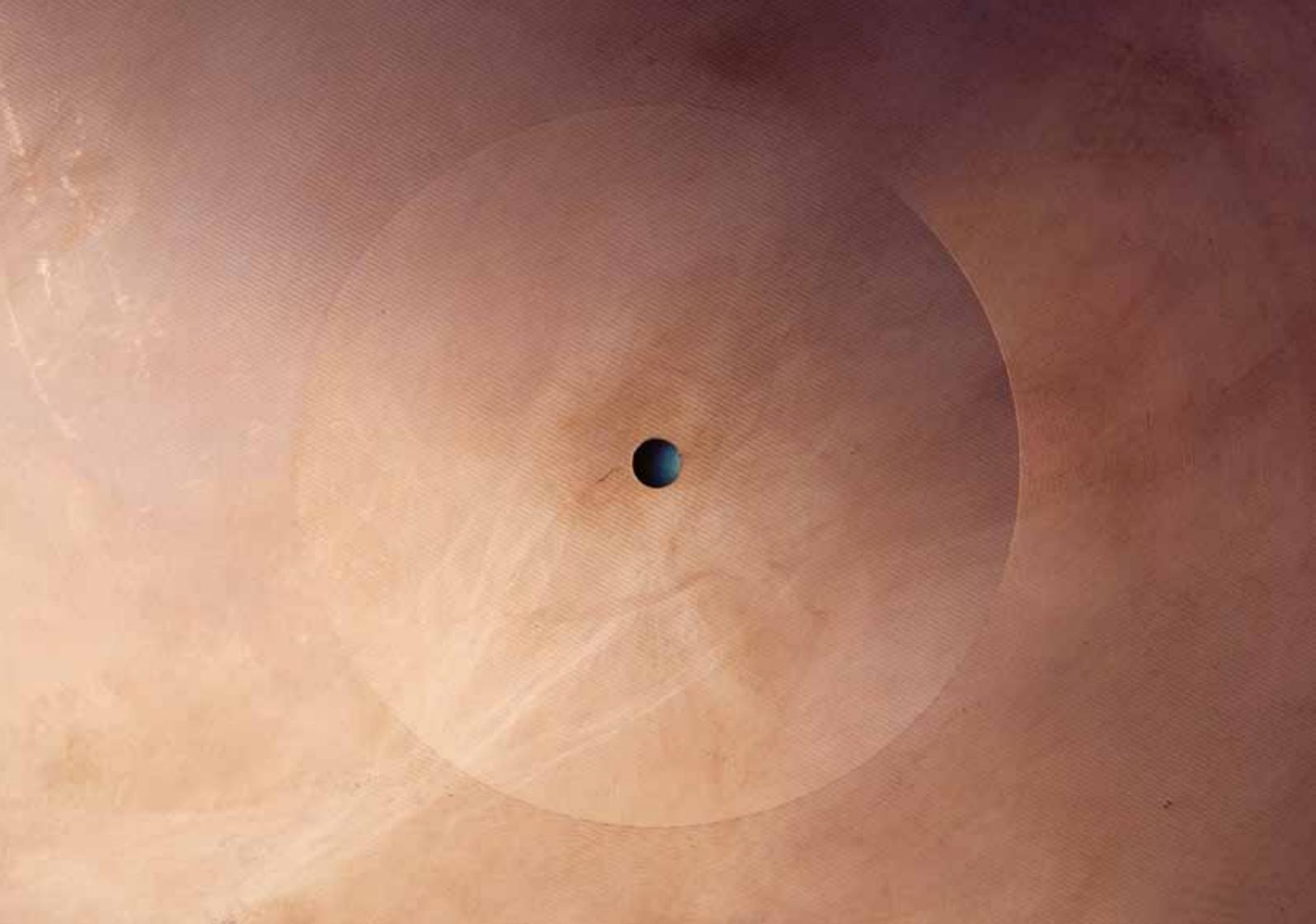
be mistaken for something snapped on a high-end smart phone and run through Instagram: the colour is saturated; the quality, grainy; and the image, vignetted—all hallmarks of vintage photography. The subject matter—flowers, cats, and television moments—is plucked from everyday life in an arbitrary way.

Unlike Instagram and the smart phone technology used to operate it, *Frank's* components span some 40 years—a 'Frankenstein' child of the obsolete technology that new technologies, such as Instagram, try to emulate. Instagrammed photos emphasise the nostalgia of photography, by rushing to fake the emotion of old photographs in a moment, they compress time and negate history<sup>5</sup>. Ultimately, Candy exposes that

what is seemingly new is not that new after all.

<sup>5</sup> Ian Crouch, "Instagram's instant nostalgia," *The New Yorker*, April 10, 2012, accessed February 26, 2013, [http://www.newyorker.com/online/blogs/culture/2012/04/instagrams-instant-nostalgia.html#slide\\_ss\\_0=1](http://www.newyorker.com/online/blogs/culture/2012/04/instagrams-instant-nostalgia.html#slide_ss_0=1).





## LAWRENCE ENGLISH

In 1977, NASA launched two unmanned probes into space, *Voyager 1* and *Voyager 2*, destined to explore the far reaches of our solar system. Primarily sent to study Jupiter and Saturn, after a string of discoveries their interstellar mission was extended to explore the outermost reach of the sun and beyond, they remain on their mission to this day. Each craft carry with them a 12-inch gold-plated copper phonograph record, known as 'The Golden Record': a compilation of images and sounds of Earth, encrypted into binary code. The records were intended as a combination time capsule and interstellar message to any civilisation, alien or far-future human, which the Voyager craft may encounter<sup>7</sup>.

Lawrence English has likewise chosen this as a mode of communication to explore what exists at the edge of perception. For *Heavy nothing (iteration)* 2013, two 12-inch copper records play on audio turntables. The records are not cut with a musical score or other data, but nothing—they are simply cut with a consistent groove. Regardless of their lack of 'data', as the stylus follows the groove, sound is generated as the whirs and frequencies of the process by which they have been created become audible. Likewise, for *I'll be your mirror (iteration)* 2013, three records made from mirrored acrylic play, once again cut with 'nothing'.

English subtly shifts the perception of the viewer/listener. He begins by

PREVIOUS Lawrence **ENGLISH**  
*Heavy nothing (iteration)* (detail) 2013  
Technics SL-1200 turntables, copper, electronics  
dimensions variable  
Courtesy of the artist

Lawrence **ENGLISH**  
*For silence (edited John Cage)* 2013  
digital print on paper  
30.5 x 30.5cm  
Courtesy of the artist

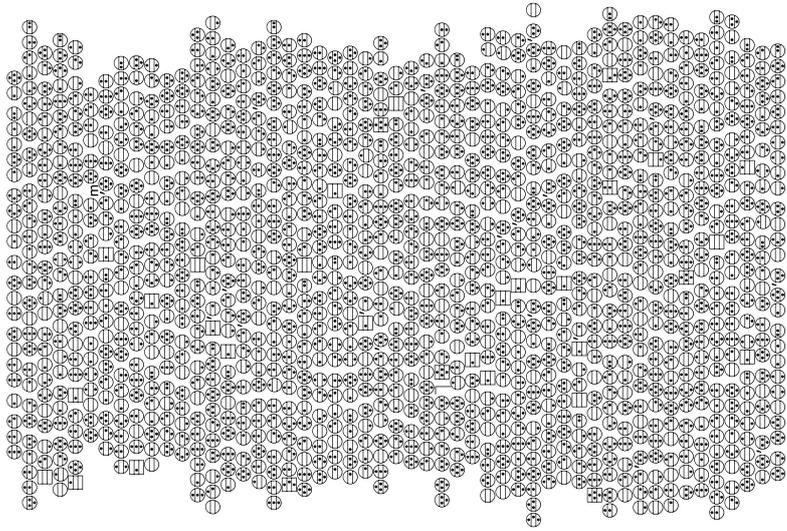
disrupting the inherent expectations of what it is to listen to a record played on a turntable. The immediate expectation is to hear music. John Cage suggests, "our intention is to affirm this life, not to bring order out of chaos, nor to suggest improvements in creation, but simply to wake up to the very life we're living"<sup>8</sup>, and these works draw attention to this. The 'nothingness' of what is audible in fact commands the viewer/listener to actively *listen*, not passively *hear*. This change in perception opens up a new world of audibility that encompasses more than what is emanating from the electronics, but includes the scope of sonic information reverberating from, and breathing life into the space.

English describes *Heavy nothing (iteration)* as being 'a little Neanderthal' in contrast to *I'll be your mirror (iteration)*, which he likens to 'a futuristic vision from Japan'<sup>9</sup>. Possibly the first is a nostalgic vision of a future past—a vision that looked outward to the far regions of our knowledge—and the second, a mirrored vision of the narcissism of looking inward. Regardless, they are iterations or propositions for the possibility of perception.

<sup>7</sup> "The Golden Record," *Voyager: The interstellar mission*, accessed February 21, 2013, <http://voyager.jpl.nasa.gov/index.html>

<sup>8</sup> John Cage, *Silence: Lectures and writings, 50th anniversary edition* (Middletown: Wesleyan University Press, 2011), 95.

<sup>9</sup> Conversation with the artist, January 17, 2013.





## BENJAMIN FORSTER

Computer intelligence is both marvel and mystery. At times these machines—with their ability to compute and process information at high speeds—seem remarkably smart. At others—most often when they aren't doing what we the human operators are telling them—they appear confounding. Computer intelligence is based on applying methodologies and approaches to problem solving and has its basis in mimicking human understanding.

If this is the case, can a computer be taught how to draw? This question was the starting point for Benjamin Forster's ongoing drawing machine project. For *Drawing machine (output = plotter)* 2009, Forster has programmed a computer to draw. Forster created

a computer algorithm that talks to a plotter: a vinyl cutter designed to produce computer graphics based on mathematical expressions based around points, lines and curves, that has been modified to hold a pen. The result is an endless output of unique drawings. Forster's interest in drawing stems from questions about what makes a drawing distinctly human, and the program he has designed tries to simulate the human characteristics of drawing. Each drawing is unique, much like every human mark, but if human beings solve problems using fast, intuitive judgments, and if we see the act of mark making or drawing as an extension of this, does the conscious step-by-step deduction by which a computer makes marks render the result

PREVIOUS + NEXT Benjamin **FORSTER**  
*Drawing machine (output = plotter)* 2009  
modified rabbit plotter, computer, custom software, ball  
point pen, paper  
dimensions variable  
Courtesy of the artist  
Installation view, *Primarvera* 2012, Museum of Contemporary  
Art Australia  
Image courtesy Museum of Contemporary Art Australia  
Photograph: Alex Davies

as a 'drawing'?

Work in computer intelligence focuses on language; computers are programmed to recognise words and understand their meaning. Categorising language, however, with its inherent ambiguity and subtlety, is nearly impossible. In written language, punctuation is employed to give structure, organisation, and intonation to written words; the intent is to clarify meaning. In *Constellation* 2013, punctuation as a structure becomes the subject of the work. Each character of the alphabet within a text is removed, leaving only points of punctuation. The punctuation is then redistributed around a point according to a formula, and a constellation of now-meaningless meaning-marks is formed.

A computer, of course, cannot really understand words. Instead, it is designed to scan text to seek patterns and probabilities. In Forster's video work, *A written perspective* 2012, an algorithm that detects characteristics of the written word has been applied to footage of a suburban shopping centre. Anything not deemed language is erased; however, the algorithm has made mistakes; some forms that it identifies as words or letters are not and what is left is a confused landscape of meaning and non-meaning.

Forster's work ultimately draws parallels between technology-based systems and human-based systems of reason and logic, and goes on to question the authority of these systems to create meaning. These

systems are designed to be impartial,  
however, when applied to humanity,  
their inherent inadequacies—and at  
times sheer absurdity—become apparent.



## CAITLIN FRANZMANN

Light is fundamental to our perception of space. It allows us to experience form, and the relationships between forms. Light is also ephemeral, existing only in a moment, constantly moving and shifting. The exploration of light in art is not recent. Since the Renaissance, painters and photographers have replicated its properties to create space in two dimensions. In contemporary art, however, this most ephemeral of 'things' has become both medium and material.

Caitlin Franzmann's practice is engaged with ideas of challenging the purely aesthetic or purely conceptual tendencies of contemporary art. Franzmann does this by creating immersive environments that evoke a sensory experience for the

viewer, and in *Light render 2012*, light plays an integral role.

In the work, a video camera is focused on the frame of a cube suspended at eye height; one side of the frame is enclosed with a mirror. A video feed is captured in real-time and projected onto a 'screen' of light generated from a slide projector—the light from the slide projector intermingling with the light from the data projector image—while fragments of light reflect off the mirror and dance around the walls of the space. When the viewer interacts with the cube, their image, or fragments of it, becomes part of this cycle of reflection, capture, and projection.

PREVIOUS + NEXT Caitlin **FRANZMANN**

*Light render* 2012

double projection, live video feed, timber, mirror

dimensions variable

Courtesy of the artist

Franzmann toys with two-and three-dimensional perspective. The cube, the simplest of three-dimensional shapes, and the viewer, a more complex three-dimensional image, are both 'rendered' in two dimensions on the gallery wall via the projection. Rendering implies a faithful and accurate two-dimensional representation of a three-dimensional object, and as the image is produced via a live video feed, the light and shadow is faithful. As the objects move, however, so does the rendered image; the work becomes not an instance of representation past, but instances of representation based on real time<sup>6</sup>. This endless loop of change means that the viewer has no other option than to surrender to, and be of, the moment.

Franzmann has carefully crafted an ephemeral environment from light, transparency and reflection to create a confounding space in which the viewer has no choice but to succumb to their senses. Once perception is engaged, the focus shifts away from the materiality of the work to the subjective simplicity of how it *feels* to be seeing and knowing.

<sup>6</sup> Simon Penny, "From A to D and back again: the emerging aesthetics of interactive art," *Leonardo electronic almanac*, April, 1996, accessed February 27, 2013, <http://simonpenny.net/texts/atod.html>.





## ROSS MANNING

Liquid crystal displays (LCDs) are an ever-present part of our lives. We engage with them daily while staring at our computer screens or televisions, or scrolling through our phones. They have become essential to the way we consume information and communicate, and they do it all in colour. Using the light-modulating properties of crystals, LCDs are made up of a suspension of liquid crystal sandwiched between two sheets of glass. When an electrical charge is applied, the aimlessly floating crystals align, and with the addition of light and filters, colours are refracted and images created.

The phenomenon of colour creation, light, and movement, in both the natural and the technological world, is of

ongoing interest for Ross Manning. In *Liquid crystal display* 2013, nine LCD panels are mounted to the wall of a dark room, butted against one another to form a three by three grid. Suspended in front of these screens is a video camera focused on a single cut-glass crystal that rotates. The camera captures the image of the crystal, its movements, and the play of light from its surface. The live feed is refracted over the nine panels, creating a wondrous and endless loop of morphing light, colour and form that dances and sways.

The man-made crystal that Manning has chosen is a Swarovski Aurora Borealis crystal, the surface coated with a finish that is designed to give it a rainbow appearance. The natural phenomenon of

PREVIOUS + NEXT Ross **MANNING**

*Input Ruins* (detail) 2009

7 LCD monitors, cut glass crystal, colour video camera,  
electronics

dimensions variable

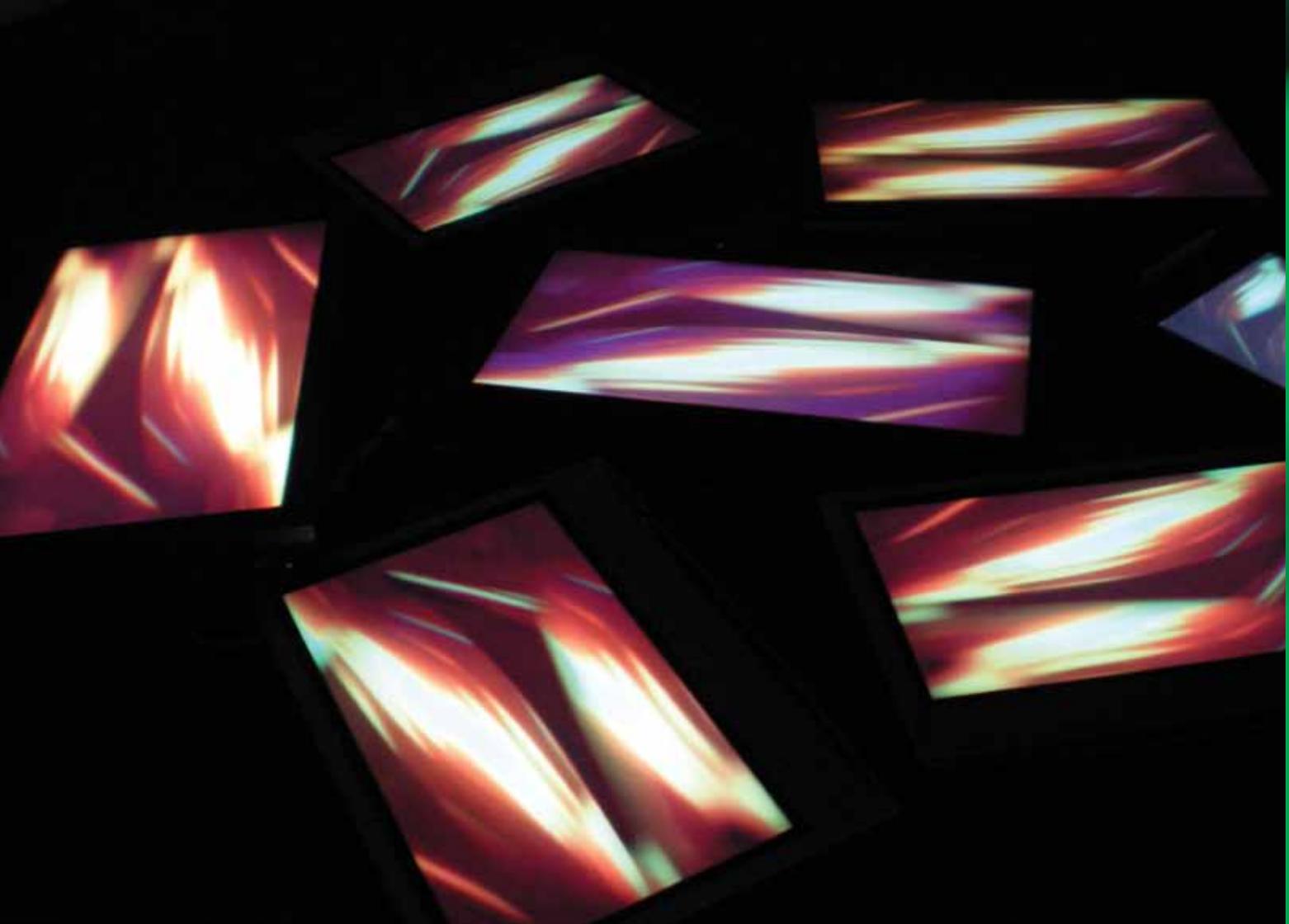
Collection of The University of Queensland

aurora borealis (the Northern Lights) from which the crystal takes its name, occurs when electrons enter earth's upper atmosphere via solar winds and encounter atoms of oxygen and nitrogen. The electrons, when plummeting into the earth's atmosphere, are 'excited', and, on colliding with atoms they return to a 'ground' state. In this flux of electrical change, shifting combinations of colour are visible in the sky.

In light of this, we can see how Manning reveals the mechanics of the machine. The hanging crystal is a single representation of the floating liquid crystals. In their liquid state, these crystals act just like electrons in their excited state, and when there is a shift in energy, the crystals align,

just as the electrons become stable. The result is a spectrum of colour.

There is something quietly poetic in the way that Manning has dissected literal and figurative discourse around our screen-based culture. Screens are fundamental to the way we view and gain access to the world, but Manning makes us pause and contemplate the magic within the materiality of these objects. Rather than being seduced by the screen as a portal, we look through the screen or into it, and the inherent magic of the simplest of things—light—is revealed.





## KEN + JULIA YONETANI

While we live in an electronic age, we also live in the shadow of an energy crisis. It is a given that the time will come when supply will no longer meet demand, and that the fossil fuel model of energy production is—as the term suggests—a fossil. What is left is a handful of sustainable alternatives and nuclear energy.

Ken and Julia Yonetani question ideas of a nuclear future in *Crystal Palace: the great exhibition of the works of industry of all nuclear nations* 2012. The work takes its title from 'The great exhibition of the works of the industry of all nations'—a showcase of modern industrial design and technology of the time—that took place in a glass structure referred to as the 'Crystal Palace' in

Hyde Park, London, in 1851. What we are presented with is a room full of opulent uranium glass chandeliers. As the name suggests, uranium glass contains small traces of depleted uranium, and, when fitted with ultra violet bulbs the chandeliers' glass beads glow iridescent green: a clear visualisation of radiation. The effect is at once overwhelmingly beautiful, ethereal, and strangely eerie. Each chandelier is crafted from a mix of antique and new parts, and named after nations that operate active nuclear power production. The scale of each chandelier correlates to the level of that nation's output. It is not surprising to find that the largest and most lavish in the series is titled *USA*.

PREVIOUS Ken + Julia YONETANI

*Crystal Palace: the great exhibition of the works of industry of all nuclear nations* (detail) 2012  
uranium glass, metal, UV lights  
dimensions variable  
Courtesy of the artists, Artereal Gallery, Sydney and GV Art, London

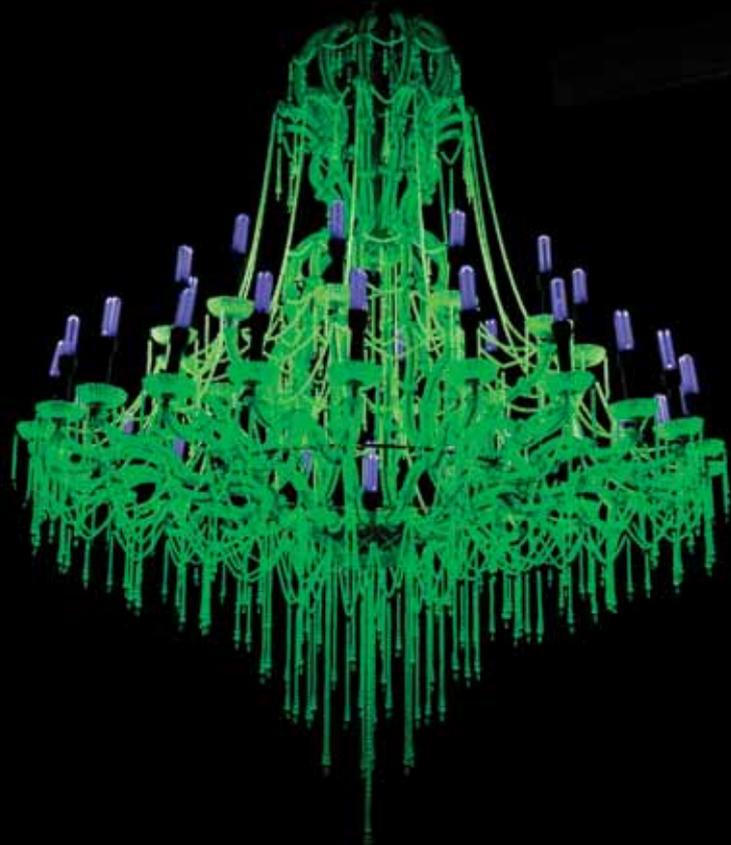
Both Ken and Julia Yonetani were born in Japan, and these works were made in response to the Fukushima Daiichi nuclear disaster of 2011. While they critique nuclear energy, they also comment on nuclear warfare. When chandeliers from *Crystal Palace: the great exhibition of the works of industry of all nuclear nations* formed part of a larger exhibition held at A4 Centre for Contemporary Asian Art in 2012, the exhibition was titled *What the birds knew* after an alternate title for Akira Kurosawa's film *I live in fear* (1955). In the film protagonist Kiichi Nakajima is convinced that Japan will be affected by an imminent war, and declares that the birds would flee if they knew of this impending threat. Japan is no stranger

Ken + Julia YONETANI

*Crystal Palace: the great exhibition of the works of industry of all nuclear nations (USA)* 2012  
uranium glass, metal, UV lights  
dimensions variable  
Courtesy of the artists, Artereal Gallery, Sydney and GV Art, London

to implications of nuclear warfare—only two nuclear weapons have been used in the course of war, both detonated over Japan (Hiroshima and Nagasaki) near the end of World War II.

*Crystal Palace: the great exhibition of the works of industry of all nuclear nations* becomes a symbolic warning of the promise of nuclear energy, and the extravagance of consumerism and peacetime prosperity. Ultimately, we are left questioning the utopian promise of a nuclear future.





PREVIOUS Benjamin **FORSTER**  
*Drawing machine (output = plotter)* 2009  
modified rabbit plotter, computer, custom software, ball  
point pen, paper  
dimensions variable  
Courtesy of the artist  
Installation view, *Primavera* 2012, Museum of Contemporary  
Art Australia  
Image courtesy Museum of Contemporary Art Australia  
Photograph: Alex Davies

NEXT Benjamin **FORSTER**  
*A written perspective (still)* 2012  
video  
indefinite  
Courtesy of the artist



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