

**THE TRANSDISCIPLINARY IMAGING CONFERENCE AT THE INTERSECTION BETWEEN ART,
SCIENCE AND CULTURE**

1st – 3rd July 2016 | Plymouth, UK

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LOCATIONS:

<http://transimage.i-dat.org/>

Roland Levinsky Building, Plymouth University Campus,

<https://goo.gl/maps/Wamx1o3mmv62>

Morning/Final Sessions/Parallel Sessions A: Lecture Theatre 2 (LT2, Ground Floor Atria/Reception space).

Parallel Sessions B: Room 206/7 (2nd floor across the atria bridge).

WIFI:

Delegate login details:

Login to Eduroam

Username: visitor003

Password: t^i6nguLate

(if you are wondering ^ is shift/6).

The “withPlymouth” free login wifi is also available.

CONFERENCE DINNER (pre-booked):

20.30, Saturday 2 July.

River Cottage Canteen & Deli Plymouth

<https://www.rivercottage.net/canteens/plymouth>

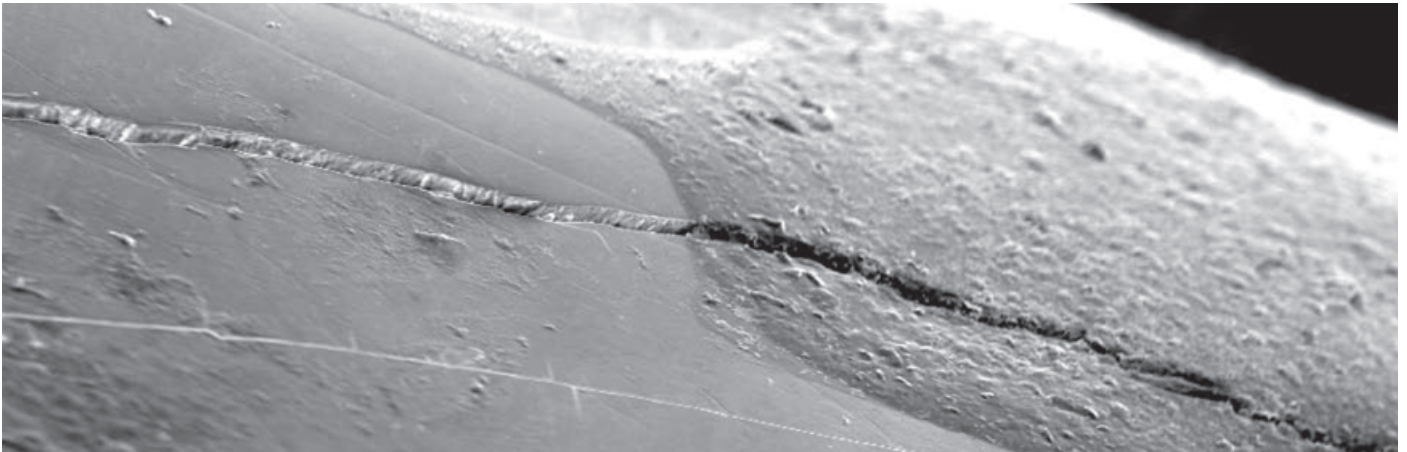
Royal William Yard, Plymouth, PL1 3QQ

TRANSCALAR WORKSHOPS.

The Fourth International Conference on Transdisciplinary Imaging at the Intersections of Art, Science and Culture 2016 – THE ATEMPORAL IMAGE – invites participants for the Conference workshops hosted by the Plymouth Electron Microscopy Centre and the Immersive Vision Theatre on the Plymouth Campus. A limited number of places, on a first come basis, are available and participants must be registered with the Transimage Conference first.

<http://transimage.i-dat.org/workshops/>

Workshop 1: STASIS

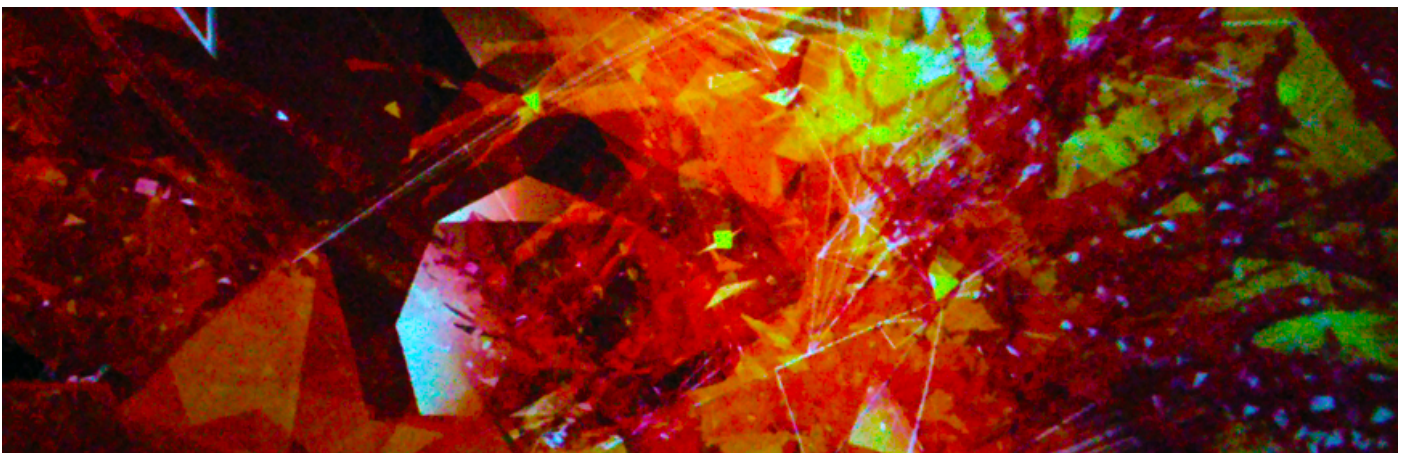


When: Friday 1 July, 11.20-17.00 / Location: Plymouth Electron Microscopy Centre.

Frozen in time a spluttered in gold, the Scanning Electron Microscope (SEM) image is beyond light, captured by a focused beam of electrons, these images are not photographs – no photons were harmed in the making of this workshop.

Workshop Leaders: Gianni Corino and Roy Moate

Workshop 2: IMMERSION



When: Saturday 2 July. 11.20-17.00 / Location: Immersive Vision Theatre.

Fulldome: A transdisciplinary instrument for manifesting (im)material and imaginary worlds, this spatial-temporal bubble is a polysensory polypsical anomaly in the history of media technologies, sitting somewhere between a scientific instrument and a funfair ride.

Workshop Leader: Luke Christison.

PROGRAMME (ABSTRACTS [in order of appearance])

Friday 1 July.

9:45: Keynote presentation by Arthur I Miller <a.miller@ucl.ac.uk>

Art, Science, Technology and the Scientific Image.

ABSTRACT:

Increases in abstraction, or dematerialisation, of the scientific image from the 15th century to the present reflects the struggles of scientists trying to visualise worlds beyond our senses. Although succeeding images were replaced, some never faded away. Rather they were clues for proceeding into ever-deeper domains of the micro- and macro-cosmos. I will discuss how this came about amidst intense, and sometimes personal struggles, concerning mathematics, philosophy, science and aesthetics. The 21st century brought further surprises for the image, and aesthetics as well, when art, science and technology fused and data visualisation became an art form.

10:45: Respondent Paul Thomas

11:00 – 11:20 coffee

11:20 – 12:40: The Anachronic Image. Chaired session Mike Phillips.

Presentation 1: Edward Colless <ecolless@unimelb.edu.au>:

“Oubliette”.

ABSTRACT:

Deep underground on the Finnish island of Olkluoto, a corporation has been excavating the world's largest nuclear waste repository. Once filled, the site will need to be sealed and left intact for one hundred thousand years to avoid contamination of the earth's surface. The defenses for this massive sarcophagus will need to survive and resist geological or meteorological interruptions, but also human curiosity or treasure hunting. This poses not only an engineering problem but a semiological one: how can a warning sign be written or depicted that will still be decodable for an almost unimaginably remote future? The problem is dramatized when one considers it only took a generation for the human race to lose the ability to read Egyptian hieroglyphs, and for hieroglyphs to then remain a mystery for fifteen hundred years until a fluke archaeological discovery of the code. Such a warning sign to stop the opening of radioactive tombs also suffers the likely indecipherability of those messages naively engraved on the plaques attached to Discovery spacecraft sent out of the solar system into deep space and deep time, with images of a naked Edenic couple etched into the metal, along with a recording of Bach's third Brandenburg Concerto (which is probably unplayable on even our own technology now). This paper will address both the anomaly of these manufactured “future fossils”, and also eclipse of meaning in pictograms or glyphs from a deep past, also buried in caves and tombs in comparison with the oubliette, or deep, dark pit in which prisoners were thrown to be forgotten.

Presentation 2: Leon Marvell <leonmarvell@gmail.com>:

Grey.

ABSTRACT:

In 1987 the well-known fiction author Whitley Strieber published the non-fiction book *Communion*, in which Strieber documented his bizarre encounters with alien beings. The book immediately became a best-seller. On the cover of the book is an image of one of the alien beings painted by artist Ted Seth Jacobs, under the exacting guidance of Strieber himself. The being is called a Grey.

Strieber would follow up the success of *Communion* with a further account of his experiences, *Transformation: The Breakthrough*. On the cover of this book is another painting of a Grey, but the image has been not-so-subtly modified.

This paper will firstly present a brief overview of the popular history of this late millennial icon, the Grey, and then unravel its iconographical significance, drawing upon such diverse sources as a parodic episode of the television series *The X-Files*, Strieber's texts themselves, the structural "sacred geometry" of Greek Orthodox icons and apophatic theology. These phase-shifts, as archived on the cover of Strieber's books and elsewhere, will reveal the Grey in all its anachronic, apophatic monstrosity.

Presentation 3: Guillaume Savy <g.savy@student.unimelb.edu.au>:

What Cannot Be Unseen.

ABSTRACT:

Palinopsia is a visual disturbance that causes images to persist even after their corresponding stimulus has left, to the extent of causing discomfort. Its etiology is still poorly understood, although ongoing research hints at neurological and migraine-related vascular anomalies. While entoptic phenomena (which make parts of the eye's anatomy become conspicuous in one's field of vision) force us to see things out of place, palinopsia's inescapable ghost-like manifestations impose on us a vision of things out of time. As the flow of images we encounter in our lives increases, immanentising the new age imperative of impermanence, so do unwelcome experiences of collective palinopsia. This paper offers an introduction to current research surrounding palinopsia and the presenter's experience of the phenomenon, before describing and analysing instances of mass palinopsia—when cultural memes outstay their welcome and the

Presentation 4: Chantal Faust <chantal.faust@rca.ac.uk>:

Haptic Aesthetics: Don't stand so close to me.

ABSTRACT:

In a scene from 'The Day of the Doctor': the 50th anniversary episode of *Doctor Who*, the Doctor and his companion Clara walk into The National Gallery in London and are presented with a 3D oil painting of an impossible scene: a scene from the future. One of the given titles of the work is *No More*. Clara's outstretched hand reaches out to touch the skin of this painting that has no surface, only depth. She cannot believe her eyes. She reaches out to touch, to touch no more. *Noli me tangere*. *Touch me not: I am not in the time of your world*. This episode has often been taken up in painting and it is always known by these words, by this uttered phrase. Relating to a sense of touch, haptic visuality implies an intimate form of looking, where meaning is formed with the graze of the eye over and into a subject/object. Through digital interfaces, the trace of a gesture—and the time of its tracing—can be made visible in a kind of fusion of time and space. This paper will focus on touching, on subjectivity and haptic vision, the trace and the (inter)surface, the pressure of touch in—and out—of time.

12:40 – 1:00 Discussion

1:00 – 2:00 Lunch

2:00 – 3:00 Parallel Sessions (A) + (B)

Parallel Sessions (A): Hyper-Image. Chaired by Seth Riskin

Presentation 1: Scott Hessels <s.hessels@cityu.edu.hk>:

TIME FLIES: Visualizing Aerial Technologies

ABSTRACT:

The world's largest environmental disaster was felt by no one. When the Chinese military recently demonstrated their anti-satellite missiles, deadly debris was scattered across our heavens further than any other manmade event in history. Our increasingly crowded skies are creating safety hazards that are proliferating without public awareness partially due to our inability to visualize and display the massive, trans-scalar real estate and activity of aerial technologies. Each industry has become adept at tracking their own assets yet none has succeeded in finding a model that represents the entire evolving techno-system in one visual strategy.

Celestial Mechanics is a multi-year artistic research project investigating not big data but big data spaces. By creating speculative prototypes that employ non-linear perspective, kinetic display, immersion and non-terrestrial temporality, iterative visual strategies are being developed to present the global scale of hardware above us. The research explores how our understanding of movement, direction and speed are informed by a dependence on perspective's framed view—a view that is rapidly becoming merely a default rendering mode in our emerging understanding of virtual reality. This paper considers alternative historical perspective imaging options as well as kinetic display to offer new possibilities for the representation of movement and time through space. It will present prototypes in hybrid mediation to assist in both industry and public understanding of a crisis that is global yet invisible.

KEYWORDS: aerial cartography, non-linear perspective, atemporality, data visualization, kinetic sculpture, display systems

Presentation 2: Abbie Reese <abbie.reese@gmail.com>:

Young Nuns: A Digital Site of Memory

ABSTRACT:

In my interdisciplinary relationship- and research-based para-ethnographic practice, I explore individual and cultural identity, public and private performances within heterotopias, and the process of becoming or liminality as one transitions through a rite of passage into a new social role. For the past ten years, I have been conducting interviews with young American women as they have discerned and responded to a perceived religious call. I met "Heather" in 2005 and interviewed her over the course of six years; she joined a cloistered order in 2011 and became "Sister Amata". (She chose aliases to reflect her order's values of anonymity.) Shocked to learn of her plans two weeks before she entered the monastery, her family can now visit four times a year, always separated by a metal grille. This penance serves a purpose, enabling Sister Amata to pray for humanity. Her digital traces remain accessible: blog postings, her Facebook page, messages with her moniker on Catholic forums – StarvingArtiste, FutureNunJMJ, and PopeJP2Rocks.

The discernment process is something of an interstitial state of indeterminacy; the women form social networks online – insulated and private built communities. I am developing a multimedia archive, drawing upon forty hours of oral history interviews, still photographs, video footage, and digital footprints. This digital site of memory will document the interior journeys and narratives of six women, including the cloistered contemplative nun and another woman who became a professional boxer. The archive will reflect, conceptually, the virtual world of their online communities and their pursuit of the ineffable.

KEYWORDS: reflexive practice, arts-based research, digital archive, para-ethnography, built community, heterotopia

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Presentation 3: Ricardo Melo <ricardo@ricardomelo.net>, Miguel Carvalhais:

Unpredictability in Everyday Photography: A Case Study

ABSTRACT:

With the growing popularity of camera-enabled devices such as smartphones, photography has become commonplace: a trivial, routinely engaged practice done without much thought. The act of photography, due to the ever-increasing capacity of these devices to accurately record an image of the real—and one that does not differ from the expectation of the photographer when previewing it through the virtual viewfinder of a smartphone—has become a series of brief, predictable actions, without much thought or consideration on the whole interaction.

As accidents, chance and unpredictability has a long history in providing serendipitous and creative breakthroughs, we attempted to restore a sense on uncertainty and randomness to the quotidian photographic moment through the creation of a mobile application that randomly, and without the interactor's control, transforms and manipulates a taken photograph, making it unfamiliar— thus creating defamiliarisation—and allowing for surprise to be once more part of the process while increasing the engagement between the photographer, subject and created image. We have also began preliminary evaluations which have showed a positive impact of the concepts of this experimental application in the creative process.

KEYWORDS: interaction design, user experience, photography, defamiliarisation, randomness, serendipity.

3:00-3:20 Discussion

Parallel Sessions (B): The Evolving Image. Chaired by Mathew Emmett

Presentation 1: Paola Lopreiato <paolalopreiato@hotmail.com>:

The garden in the Brain, this curiosity.

ABSTRACT:

And he and I, perplex us-If positive 'twere we-Or bore the Garden in the Brain - This curiosity (E. Dickinson).

When I talk about art and installation or describe my work I often use the term "Garden in the Brain" as a definition of a visionary space, which continuously overlaps with reality. The garden, which is a real and external, close to the word brain or mind, something interior, share the same quality: they both mean, in fact, a limit, a boundary and the transit between outside and inside, what is and what is not yet. Installations are a combination of time and place in which the artist starts an investigation on the self, later continued by the audience that gets involved in the work, one room after another, finding more elements and new perspectives, real or fake. Audience is familiar to the surplus of images often offered in the exhibitions but this does not prevent from the creation of always-new relationships between objects, natural and human, real and visionary. Still and moving images, the design of space and sounds are processed by a dreamy and childlike view, opening the work to imaginary geographies that welcome and is mix with the outer macro or nano spaces, fragments of nature or complete landscapes. Everything loses its integrity and divorces from its original context but finds a new life in micro and macro compositions where "Nature is a haunted house--but Art--is a house that tries to be haunted" (E. Dickinson).

KEYWORDS: vision, multimedia, immersion, phenomenology, emotion, interaction.

Presentation 2: Helen Collard <helen.collard@northumbria.ac.uk>, Philippa Jackson:

Finding prana: electronic, visual and sonic experiments in search of atemporal being.

ABSTRACT:

Consider your last breath, it will be an exhale, whilst your first was an inhale. Your entire life is encompassed between an inhale and a final exhale: breath could be said to be our physical counter of time. This paper outlines a inter-disciplinary research collaboration between an artist/yogi and the Brain, Performance and Nutrition Research Center at Northumbria University, a bioart project that seeks to go beyond the notion of a profane temporal body and aims to sonify and visualise breath as a notion of atemporal being.

In Yogic philosophy prana is a concept meaning both breath and life and pranayama is the psycho-physical practice of controlling or regulating the prana. During pranayama practice the length of the retention and suspension between an inhale and exhale is gradually increased and it is here, in these liminal, atemporal moments that yogic practice considers key to controlling and mastering the mind.

This bio-art project employs the use of NIRS (Near Infrared Spectroscopy) to take real-time brain-state data during a live pranayama performance. NIRS records the moment-to-moment concentration changes of oxygenated and deoxygenated hemoglobin in each hemisphere of the brain. This is sonified and visualised in real-time. NIRS is now, a re-appropriated control system, for sound, image and light creation, controlled by the artist's moving breath (present and temporal) and the artist's suspended breath (absent and atemporal). This correlative visual and sonic bio-feedback installation offers visions and auditions that explore the possibility of perhaps an other perceptual modality and an other kind of being in the realm of the atemporal.

KEYWORDS: Bioart, NIRS, prana, atemporal, biofeedback, audiovisual.

Presentation 3: Anneke Pettican <a.pettican@hud.ac.uk>, Chara Lewis, Kristin Mojsiewicz:

Freud's figure-ground in motion: macabre, rare, banal, eerie and sentimental.

ABSTRACT:

Brass Art's intervention into Freud's house became an attempt to grant its solid objects, furniture and rooms, a light, apparitional quality. The performances at Maresfield Gardens were recorded with three Kinect sensors; the laser's touch does not differentiate, rendering all objects - alive, dead, static, breathing - with the same shining, white pixel brilliance. In this way, objects and places that formed the props and settings for our performances took on an intense luminosity, and appeared to hover and tilt in a horizon-less figure-ground.

This interplay of focus, proximity and perception returns us to the atemporal image. As artist Susan Hiller in her own observations of the Freud Museum states, 'Close consideration of its beautiful, utilitarian, tedious, scholarly, macabre, rare, banal, eerie, and sentimental objects produces a picture in which figure-ground relationships seem to constantly shift.' (Hiller 2000)

This paper will introduce the new, multi-screen sonic work Brass Art is currently developing. It will examine the way in which our recorded performances draw attention to the unconscious, the atemporal and the uncanny. In this new artwork, we foreground the loop, the arc and the full 360° revolution, with the intention of amplifying and revealing some of the unfolding narratives embedded in Freud's London home. As Eliot wrote in *Little Gidding*, 'What we call the beginning is often the end/ And to make an end is to make a beginning.' (Eliot 1942)

KEYWORDS: performance, Freud, Kinect, uncanny, loop, atemporal

Presentation 4: Joel Zika <joel.zika@deakin.edu.au>:

The Dark Ride Project

ABSTRACT:

Since the early days of the American amusement park the dark ride has been a constant feature. Whether in the form of indoor scenic railway, spook house or walk through haunt, it is a universal experience. Taking early advantage of electricity, the dark ride became the earliest example of a fully programmed multimedia experience. It featured elements like triggered sound, lighting and a moving point of view that would not be seen in cinema until years later.

With the growing ubiquity of cinema in the 20th century this once revolutionary entertainment became relegated to a position of nostalgic oddity.

While many of the media experiences and products of the early 1900's have been recorded or documented in some way, the dark ride has not. This paper introduces 'The Dark Ride Project' a framework for archiving and documenting this unique media experience. The project examines the links between early and current immersive technology and also adopts said technology (VR, Photogrammetry, High ISO CCDs) to store and archive the rides themselves.

Rare access to Melbourne's Luna Park Ghost Train is used as a case study for the system. The examination focuses on how best to record, store, re-experience and most importantly; how to contextualise the experience within a complex web of intangible cultural heritage. The project addresses the limitations of current technology and the gap between real experience and the virtual.

3:20-3:30 Discussion

3:30-4:00 Break

4:00- 5:20: Parallel Sessions (A): Temporal Location. Chaired by Gema Fernández-Blanco

Presentation 1: Iouliani Theona <iouliani@gmail.com>, Dimitris Charitos:

Instant Place: Investigating the transforming nature of photographing places.

ABSTRACT:

In this paper we investigate the emerging relationship between digital photography of urban locations and the places they depict. We argue that as digital photography becomes more ubiquitous this relation is rendered more destabilised.

At first, we examine the latest photographic technologies, the so-called algorithmic turn in photography, as manifested particularly in the case internet enabled smartphones with embedded cameras and how these affect the practice of photography. As we shift from the optical lens to the digital sensor, to capturing data, to computational processes of image analysis, reconstruction and manipulation, it can be suggested that the activity of photographing is respectively being transformed from an act of representing to an act of interpreting the world around us. Furthermore, considering that the camera is but one among various other sensors available in smartphones, we discuss the potential of employing several sensing devices to enrich the visual record of a place with layers of metadata, such as temperature, humidity, wind direction or CO2 readings as well as biometric user data like galvanic skin response, heart rate, etc. in order to create a more context aware representation. Secondly, we address the processes of producing and consuming digital images of places. From the semi-automated capturing (for instance Microsoft's SenseCam, or Google Glass) to the immediacy of sharing and participating in the life cycle of digital images in social media, we propose that photographs of places are becoming increasingly detached from the spatiotemporal configuration within which they were produced and are assuming a certain autonomy. To extend this line of thought we consider the activity that takes place after uploading an image on a social media platform, involving its entanglement with comments, annotations, audiovisual input, along with the emotional impact that the interaction with all these forms of content may have with potential interlocutors who participate in this process. We suggest that once an image is shared, it evolves into a dynamically transformable network bringing together actors, data, software and content, thus renegotiating the original relationship between the photograph and the photographed location.

Presentation 2: Julian Staddon <julian.staddon@fh-salzburg.ac.at>:

Data Body Augmentation and Post-biological Organ Trade.

ABSTRACT:

The concept of augmentation predates the contemporary computer vision iteration of the term and in fact, within art the term has a long rich history. This paper will examine augmentation, from an imaging point of view, with a particular focus on representation of the body and the methods that artists have used historically to augment the body, from medical imaging through to current post-digital techniques such as mixed reality interfacing.

With the advent of representation, specifically of identity and individual bodies, emerged this notion of the data body. Originally a passive phenomena, over the years data bodies have evolved to become symbiotic entities for individuals (for example social profiles/digital footprints etc) and it is becoming increasingly necessary that we examine the role of these data bodies, how we represent them, how they augments us and how this contribute to the evolution of post-biological identity.

With the monetization of online data, new issues such as ownership and privacy in particular are emerging and as our data body augmentations become more ubiquitous and embedded in our physical/biological bodily existence, the need for serious discourse in this area emerges. This paper seeks to provide a foundation for such a discourse, using relevant examples from art and theory to do so.

KEYWORDS: Augmentation, Data Bodies, Post-biological Identity, Mixed Reality Art, Embodiment, Ownership

Presentation 3: Mathew Emmett <mathew.emmett@plymouth.ac.uk>:

Pulsating Hennig Brand's Condensate.

ABSTRACT:

Alchemical depictions suggest that through the active participation of transformative processes, a neural-immersive experience is triggered, where a melding of the physical outer world with the immaterial cognised domains may be achieved. These moments of transformation occur through an identification of and resonance between space, time and causality. Within this order the duality of mind and matter enfold each within the other, where at a deeper level these processes are in a continuous activity of collapse and expansion.

Dr Mathew Emmett will set upon promoting a dialogue between art, sound, theory and science through the interpretation of Hennig Brand's discovery of phosphorous around 1669. Consequently, the paper will explore Joseph Wright's painting (completed in 1771) that depicts Brand's discovery. Further, these alchemical explanations will be heuristically explored as an active space composed by forces of interactions between electronic sound, interaction, video and new media technologies in accordance to the creation of new, extended realities that encodes these dimensions of immersion.

In this paper Emmett will present his explorations through an artistic mode of enquiry, revealing a series of works that interrogates the perception and experience of space and consciousness through multimodal techniques. The paper will also present findings from the Lichtturm Solingen project, where Emmett collaborated with Eberhard Kranemann to develop these theories in the creation of a site responsive audiovisual performance, Dusseldorf 2016.

KEYWORDS: Alchemy, Consciousness, Art, Science & Electronic Media

Presentation 4: Gianni Corino <G.Corino@plymouth.ac.uk>:

Image or to image?

ABSTRACT:

The proliferation of images towards an iconic communication in the hypermediacy of social media, locative media on one side and the visualization of data produced by the Internet of Things on the other side questions the essence of how reality is represented.

The common understanding of what is an image is related to the representation of things and persons but this seems not the case anymore in the case of instant messaging and social media but even more in the context of distributed and networked IoT. IoT extends the idea of social media to embrace things in the equation into something that the author defines as Thingbook. The Thingbook, the social network of things, generates images of us from the perspective of things and based on a heterogeneous system of technologies that sense and capture the world in realtime. Through the realtime dimension the reality shifts from a representational paradigm to a performative one. It becomes as the philosopher James William says, on the making.

The paper will collect evidence of how hypermediacy is changing communication more and more from linguistic to iconic and also it will look at how and where the convergence of the Facebook with Thingbook is happening. This will be both a look into practices that make extensive use of image in the immediacy of communication and into evidence of how information coming from sensors is recomposed into images but also to a certain extent how the discourse around image and IoT questions our concept of reality.

KEYWORDS: performativity, Internet of Things, hypermediacy, things, representation, reality

4:00- 5:00: Parallel Sessions (B): Image as matter. Chaired by Regina Dürig

Presentation 1: Alekander Četković <acetkovic@acm.org>:

Refracted Gaze Of The Quantified Self

ABSTRACT:

Quantified-self advocates use of measurements obtained from a variety of sensors around them and store these digitally for further analysis and as a log of their lives. Their aim is to discover patterns in their lives which they have not previously been aware of, or they strive to achieve certain goals. Their motto is 'self-knowledge through numbers'.

I would like to put the image of oneself created by quantified-self methods into the perspective of the refracted gaze, a term used by Lutz and Collins to describe a hidden curriculum of anthropologists using Polaroid photographs to observe natives as they receive self-knowledge by observing their own portraits. They point out that mirrors and cameras are tools of self-reflection and surveillance, as each creates a double of the self, a second figure who can be examined more closely than the original - a double that can also be alienated from the self, taken away, as a photograph can be, to another place.

The deconstructed image that is created through the quantified-self experience is supposed to create an objective and impartial picture of the self. Yet, at the same time, the interpretations and visualisations of such data are strongly influenced by the designers of the different apps with which it is tracked and displayed. Not only does the digitalisation alienate the action from the experience, but it can be seen as a further step towards an abstraction of ourselves and the opposite of what the quantified-self is supposed to be about, bringing us closer to our bodies.

KEYWORDS: quantified-self, abstract user, determinism, user perception, embodiment

Presentation 2: Clarissa Ribeiro <almeida.clarissa@gmail.com>, Mick Lorusso:

The Cat's Eyes Nebula.

ABSTRACT:

This paper presents an interactive installation that is a result of the artists' conversations on entanglement in arts, from which a short manifesto emerged. This effort implies in investigating, theoretically and in the practice, ways and processes through which we affect and are affected by each other and the world around by means of interacting in a quantum level that is vibrational, potential where consciousness can be viewed as a complex dynamic event, constantly engaged in the act of self-creation. The subtle apparatuses that integrate the work consist simultaneously in a memory and an actualization of possible entanglements between the two artists that are collaborating for its production – Clarissa Ribeiro and Mick Lorusso. The actual “Cat's Eye Nebula” (NGC 6543), according to NASA, is a visual 'fossil record' of the dynamics and late evolution of a dying star, and is one of the most complex planetary nebulae ever seen, captured by NASA/ESA Hubble Space Telescope. The structures of the Cat's Eye are so complex that astronomers suspect the bright central object may actually be a binary star system – a bipolar geometry produced by two stars surrounded by cocoons of gas blown off in the late stages of their stellar evolution. The stars that produced as a memory the “Cat's Eye Nebula” were in the processes of becoming two giant diamonds, silently entangled in faraway skies. Being installed at the same time in Shanghai, at the Roy Ascott Studio Gallery, and in Los Angeles, at the Art|Sci Gallery, in February 2015, the work consists of two black boxes where the complex geometric patterns generated by the irregular reflection of a red laser beam, when crossing a diamond-like prism that moves according to visitors' vibrations captured by a piezoelectric sensor, are captured by a hidden webcam and send, via live streaming video, to the entangled exhibition space.

KEYWORDS: laser beam refraction, noisy image patterns, non-locality, live video streaming

Presentation 3: Roberto Zanata <robertozanata@gmail.com>:

MEDIA ELEMENTS (AUDIO, VIDEO)

ABSTRACT:

In this paper we examine the project of a PARTICLE SYSTEM and the approaches to the Leap Motion applied to a multimedia interactive installation done with Processing¹ and Supercollider². Supercollider is a programming language for real time audio synthesis and algorithmic composition. Processing is an open source programming language and environment for people who want to create images, animations, and interactions". It is designed to be used by artists, therefore does not require deep programming knowledge and it makes the task of practical implementation of ideas rather simple and immediate. It is very close to Java language but the possibility to implement interaction and 2D/3D graphics or animation of a particle system is much easier. A particle system is a collection of many minute particles that together represent a fuzzy object. Over a period of time, particles are generated into a system, move and change from within the system, and die from the system.

KEYWORDS: Multimedia, Particle, Processing, Supercollider, Leap Motion, Installation

5:00-5:20 Discussion

Saturday 2 July

9.00: Registration

9:30: Welcome

9:45 Keynote presentation by Rachael Armstrong <Rachel.Armstrong3@newcastle.ac.uk>

Living images.

ABSTRACT:

This presentation asks whether ephemeral traces that are produced at interfaces between liquid and air can actually shape material events.

At a time where we need to synthesise new, fertile relationships with the natural realm, the concept of “living” images is introduced. These are produced spontaneously by natural systems and inscribed in rich multi-layered soil-like matrixes, as part of a “natural computing” process. Methods and instruments that may enable us to adopt an experimental approach to working with these transient, dynamic images are considered, which include the symbolic reading of traces in practices like scrying, to photography, algaeponics, dissipative structures, quantum biology and the material transformations of metabolic apparatuses. A range of experiments – such as Future Venice, Future Venice II, the Rauschenberg Residency Moon Writing project and Persephone – will be used to suggest how new toolsets may assist our exploration of what it means to be an image maker activating the liminal space between the ephemeral and material realms of the natural world.

10:45 Respondent Jane Grant

11:00 Break

11:20-12:40: Organic Image. Chaired by Michael Straeubig

Presentation 1: Charissa N. Terranova <terranova@utdallas.edu>:

La prise du temps: The Captured Time of the Biocentric Image

ABSTRACT:

In 1994, philosopher Michel de Certeau wrote of la prise de parole, the capturing of speech, and its seminal role in political agency. For de Certeau, the use of language as a mode of resistance in the student uprisings of May 1968 constituted a unique seizure of power.

This paper is about la prise de temps, the capturing of time, within sci-art hybrids. In particular, the French phrase refers to the distillation of the temporal process of biological development in still and moving biocentric images. While I use the word “biocentrism” to refer to scientific imagery deployed in the context of modern and contemporary art, the word has a very specific meaning and lineage. According to László Moholy-Nagy expert Oliver Botar, biocentrism [Biozentrum] is a strain of biologicistic Neo-Romanticism, which materialized in Germany in the mid nineteenth century as a form of education by way of natural forms and oneness with nature. Biocentrism in Moholy-Nagy’s thinking is driven by themes of intuition, idealism, holism, the unity of the mind and body, and the oneness of organic and inorganic matter.

I argue that la prise de temps of the biocentric image triggers a process of awe and wonder which then culminates in the drive for scientific literacy: a will to understand the biofunctionalism of living complex systems. Deliberation over sci-art hybrid images catalyzes a digression of wonder, which is then followed by continual speculation, recognition of the order underlying beauty, and Yügen. In the term Yügen, I

invoke the Japanese concept connoting “cloudy impenetrability...exceptional elegance or gracefulness.” (Gilbert and Faber 1996: 133) The word describes any shape or form that is in the process of change, characterizing “movement in stillness” and “the embodiment of form in changing substance.” (Gilbert and Faber 1996: 133)

This paper foregrounds *la prise de temps* in contemporary bioart (works by Adam Zaretsky and Jill Scott) in the history of sci-art exhibitions, in particular György Kepes’s 1951 exhibition, *The New Landscape*, at MIT’s Hayden Gallery. [Image 1] The goal here is to reveal the politics of scientific literacy at work in biocentric images within art across time – beyond their presence as mere abstract biomorphic forms and in addition to referencing Foucauldian biopolitics.

KEYWORDS: biocentrism, biology, sci-art hybrid, *la prise de parole*, György Kepes, embryology

Gilbert, S. F. and M. Faber (1996), “Looking at Embryos: The Visual and Conceptual Aesthetics of Emerging Form,” in Alfred I. Tauber (ed.) *The Elusive Synthesis: Aesthetics and Science*, Dordrecht, NL: Kluwer Academic Publishers, pp. 125-152.

Presentation 2: Yanai Toister <ytoi7928@uni.sydney.edu.au>:

The Privileges of the Quasi-Photographic Image

ABSTRACT:

Numerical representation enables more than just efficient processability and increased programmability. As it makes obsolete qualities that have previously been used to categorize individual media it also increasingly blurs the borders between them. Thus, the same keyboard, mouse and screen routinely replace what were once distinct and clearly separate technologies – the typewriter, drawing table, microphone and Steenbeck. Text, image, sound and film are nowadays mere variants of one another - potentially interchangeable data-as-media manifestations.

Therefore it should be seen as no less than surprising that so many contemporary systems still use images as their almost-exclusive output channel. After all MRI scans can easily provide acoustic representations of our inner organs and astronomical ‘observation’ instruments can equally yield text. An even greater conundrum is the fact that, of those many images, a baffling ratio appears in photographic form. Why this persistence on familiar pseudo-verisimilitude? What are the privileges of quasi-photographic aesthetics?

Much wizardry is always required to make data packages look recognizable. This decision, when taken by the creators of imaging algorithms, is of course ornamental but it is also much more. In acting as mere effect quasi-photographic images can function as sophisticated ‘go-betweens’ that weave together selected aspects of the physical world with the augmented world of data in ways that other media simply cannot. Thus, perhaps it is time to consider the possibility that the quasi-photographic need not be understood only as a form of interface but also as a concession required by and for our inferior human processing capabilities.

KEYWORDS: numerical representation, data-as-media, quasi-photographic, effect, ornament, interface.

Presentation 3: Ruth Kerr <kerrut@gmail.com>:

Becoming Cellular: Life, death and immortality in the age of biotechnology

ABSTRACT:

Recent advances in biotechnology have enabled the production of an array of new and fascinating forms of life. However, these new life forms and synchronous biotechnological advances call into question the meaning of life, death and immortality. This paper will focus on my project, 'Becoming Cellular', which incorporated laboratory grown cancer cells and the development of their topographic data into interactive virtual immersive large-scale environments. On this basis I propose to explore how these cellular

landscapes act as an iteration of the effect of the atemporal in terms of living and dying as dematerialised, cultural mediations.

In an era where we recognise our bodies as a “multi-species ecology”, made up of multifarious biological components such as cells, how does this redefine our predominant human vision of life, death and immortality? How does this inform our vision of the natural environment and to what extent is it sustainable to distinguish our own “human” bodies from this environment? This paper will outline a posthuman approach to an art-science transdisciplinary practice incorporating cutting edge virtual reality systems such as the Oculus Rift. Using an Atomic Force Microscope (AFM) we produced ultra-resolved images of dying cancer cells which were developed into immersive virtual cellular landscapes as a means of engaging the viewer with the reality of dying cancer cells as environmental entities. This approach confronts the embroiled manifold of the human-cell relationship through the writings of Rosi Braidotti on the posthuman and Karen Barad's agential realist framework.

KEYWORDS: Virtual; immortality; AFM; cellular landscape; ecology; posthuman.

Presentation 4: Tobias Klein <ktobias@cityu.edu.hk>:

Chemical Atemporality

ABSTRACT:

This paper will articulate today's perception, production and consumption of the digital image in the context of historical mechanisation, photographic development and a designed prototypical chemical reactive hyper-temporal setting. Digital materiality is here explicitly designed through a time-base performative image transitioning from the image to the image as palimpsest in the post-digital.

We will introduce the topic by giving a brief historical overview of devices that allowed the start of mechanic production and reproduction of the image. We will discuss the invention of the Camera Obscura as devices of image generation and highlight a change of the image starting from early 15th century drawing machines to today's plethora of computer numeric controlled drawing machines of the likes the Polargraph and designers/artists such as Pablo Garcia and Juerg Lehni.

In particular, the paper will look in more detail to the transition from image through mechanical production to the change of medium in the form of photographic image development. We will present our own research by design into the impermanent and hyper-temporality of the chemical image as a result of digitalisation and computer numeric controlled drawing machines. The project titled “liquid light” articulates sensorial data and vector based input to an ephemeral image drawn using a temporal photo-chromic reaction stimulated by multiple overlaying UV laser emitters. The result is a chemical animated image – a piece de resistance and transformation of the atemporality of digital data.

KEYWORDS: drawing, palimpsest, CAD/CAM, photochromic, digital materiality

12.40 – 1:00: Discussion

1.00 – 2.00: Lunch

2:00-3:00 Parallel Sessions (A) + (B)

Session (A): Space/Time. Chaired by Gianni Corino

Presentation 1: John Matthias <john.matthias@plymouth.ac.uk>:

Emergence of Machine Ecologies at sub-millisecond timescales

ABSTRACT:

It has recently been shown in models of the large-scale techno-social system of the global financial market (1) that below a certain temporal threshold below which humans cannot perceive and make decisions (2), machines form an ecology which causes a proliferation of 'ultrafast extreme events' which destabilise the markets themselves.

Moreover, the transition to this temporal regime appears to be abrupt and similar to a phase transition in physical systems. This paper will introduce some contextual ideas in the light of this around the idea of human-human, human-machine and machine-machine interactions considering the temporal and the relationship between the individual and the collective.

1. Neil Johnson et. al. 'Abrupt rise of machine ecology beyond human response time' Nature Scientific Reports Article number 2627 (2013)
2. Saariluoma, P. Chess Players' Thinking: A Cognitive Psychological Approach (Routledge, New York, 1995), p. 43.

Presentation 2: Chris Speed <c.speed@ed.ac.uk>, Elisa Giaccardi:

Predictive Materialities: Casting Algorithms in the Design Studio

ABSTRACT:

"That awkward moment when you realize plastic dinosaurs are made of actual dinosaurs."

@BrianRathbone 6:08 AM - 1 Feb 2016

This paper reflects on a series of workshops under the title Predictive Materialities at the Technical University of Delft that introduced designers to the potentials of working with data technologies in order to prepare them for a near future in which algorithms will become partners in their design studio. Central to the proposition for the workshops was an awareness that data is providing an enriched sense of provenance for everything that we encounter, produce and consume. As we construct data value chains, our knowledge of where things come from deepens and we understand who held artefacts before us, what they are made of, and what people did with them to make them valuable. Networked into constellations, data is allowing us to see beyond the discrete cells in which artefacts were valued according to one social, environmental or economic model and instead understand a myriad of values. However, in this atemporal flood our modern propensity as designers to make something else, something new, is suspended as we reflect in awe at the histories of people, connections and materials that are so much more profound than our meagre action.

To relinquish the grip of paralysis that prevents the designer from acting again (for this is all we have) the authors introduced a design brief for workshop participants in which they were invited to design objects based upon the digital shadows of another participant. 3D printed and received through the post with no identification of the sender, the objects became predictions of what somebody might need in the near future, based upon their history. Cast as predictive materialities, the project forecasts that predictive analytics will begin to anticipate what we need not only as software, but as material products and services and challenge the role of the designer as cultural provocateur. Able to recall shapes, forms, gestures and

functions far beyond human memory, the algorithmic designer is able to compresses all histories and futures to produce patterns for 'things' that far exceed our feeble imaginations.

Presentation 3: Mark Titmarsh <mark.titmarsh@uts.edu.au>:

Retrieval Life in Defrag'd Time.

ABSTRACT:

Visual experiences given to us by a proliferation of screen platforms in everyday life have created infinite and infinitesimal differences amongst a common pool of images. Through them hard objects appear as soft images at the edge of a luminous discourse maintained by diodes, plasma, liquid crystal, bit maps and vector values. The technological variability of form between devices has revealed a tectonic shifting between colour and light, space and place, time and event, difference and plasticity. By fracking into the dense but minute aperture between a naturalised image and its supra sensible presence a seismic rift in the nature of temporality is released as a cultural by-product. In it images no longer freeze temporal events or construct an imaginary duration, rather they metabolise time, arriving out of time as a way of designing time for unsustainable consumption, concealing an end of time, hidden beneath a fantastic time beyond time.

This paper will develop an alternative ontology of the image through interlocked notions of time, light, colour, space and presence, by looking at painting, the plastic arts and an uncertain relation to the visual, brought on by digital image making practices. This new relationality stretched across moments of a contemporary ontological horizon creates a visual grammar of time and space that is non-geometric, non-luminous, emergent and dissembling at the same time.

Using the ideas of Martin Heidegger and Catherine Malabou it will be shown that by deconstructing linear and circular time there is a fractal proliferation of temporal modes that releases an explosive plasticity of presence and its attendant images with a hue and density held somewhere between the agency of light and the plastic materiality of the screen.

3:00-3:20 Discussion

2:00-3:20 Session (B): Evolving image. Chaired by Alekander Ćetković

Presentation 1: Anna Nacher <anna.nacher@uj.edu.pl>:

Image as the exchange of energy: ontogenesis of a networked imagery.

ABSTRACT:

It is no doubt that the production of digital imagery invites for the major update of theoretical apparatus: what up until now was perceived solely or primarily as the stable representation of the world gives way to the image understood in terms of "the continuous actualization of networked data" or "networked terminal". However, in my article I would like to argue that analysis of this new visual environment should not be limited to the procedures of data processing. I propose it fully acknowledges the complex procesuality of the visual objects' production and circulation within networked media, switching the focus from the ontology of digital imagery to its ontogenesis. Therefore, I would like to argue that the idea of its alleged atemporality stems from the very framework of representationalism. Instead I propose the processual and relational concept of image as energy exchange, to some extent inspired by the philosophy of Gilbert Simondon - reaching out beyond both the constraints of representationalism and the premises of "new aesthetic".

KEYWORDS: non-representationalist theory, networked media, locative media, cybercartography, participatory mapping, Gilbert Simondon

1: R. Marie, I. Hoelzl, Softimage. Towards a New Theory of the Digital Image, Intellect, Bristol – Chicago 2015, loc. 146 (Kindle version)

2: Ibidem.

3: The recent critique of representationalism stems from at least a few sources, including performative theory and posthumanism, por. S. Kember, J. Zylińska, Life After New Media. Mediation as a Vital Process, MIT Press, Cambridge – London 2012; Ch. Salter, Entangled. Technology and the Transformation of Performance, MIT Press, Cambridge – Londyn 2010. See also: N. Thrift, Non-representational Theory. Space, Politics, Affect, Routledge, London - New York 2008; B. Anderson, P. Harris, The Promise of Non-Representationalist Theories [w:] idem, ed., Taking-Place: Non-Representational Theories and Geography, Ashgate, Farnham – Burlington 2010.

4: D. M. Berry, M. van Dartel, M. Dieter, M. Kasprzak, N. Muller, R. O'Reilly, J.L. De Vincente, New Aesthetic, New Anxieties, V2, Amsterdam 2012, <http://v2.nl/publishing/new-aesthetic-new-anxieties> Retrieved: November 29, 2015; J. Bridle, „#sxaesthetic”, 15. 03. 2012, <http://booktwo.org/notebook/sxaesthetic/> Retrieved: November 20, 2015; J. Bridle, <http://new-aesthetic.tumblr.com/>

Presentation 2: Julia Heurling <julia@heurling.se>:

A Horizon Is Not Flat – Reflections on Rhythm and Articulation of Time.

ABSTRACT:

Avant garde film maker and painter Hans Richter refers to visual rhythm as articulation of time, and film as articulation of time and movement. This article will reflect upon this idea, in relation to the project “A horizon is not flat”, made by the author. Film and pattern seem connected to the same themes, such as continuity, rhythm, time and sequence, but relate to them differently.

The project “A horizon is not flat” developed at a workshop on the island Kefalonia, Greece, in 2012. It started as a reflection and a reaction on what a map is and what makes it a visual representation. The project is an attempt to use photography in pattern compositions to emphasize reality as continuous, pluralistic and diverse rather than actual.

The project aims to explore the limits and extensions of pattern as narrating tool and mediator of experience. Through photography, the project explores pattern as a way to look at time, by emphasizing context, continuity and flow rather than singular episodes or events. The patterns can be “read” as experience of place but also as experience of time. Not as information or measurement of time but in an abstract or a-temporal sense as visualization of continuity.

KEYWORDS: film, pattern, rhythm, time, continuity, sequence

Presentation 3: Charissa N. Terranova<terranova@utdallas.edu>:

The A(Ilo)temporal Postgenomic Image

ABSTRACT:

The mapping of the human genome in 2003 revealed many unforeseen things about the gene. First, it disclosed that humans carry between 20,000 and 25,000 genes, far fewer than the 100,000 genes scientists had predicted. Second, it showed that only 1% - 1.5% of this total number of genes codes for proteins, which is to say, that it only this small portion that is cause for direct phenotypic expression. Third, far from fortifying the idea of “junk DNA,” this small proportion of coding DNA means that the other activities of the gene are necessary and functional in other ways. Fourth, the gene properly understood is imbedded and a product of its cellular and ecological environment. It is always already epigenetic.

All of this concretizes what biophysicist Evelyn Fox Keller has been saying for years, which is that the word “gene” must be redefined according to multi-vectored non-coding properties. The gene understood in the postgenomic era is, far from atemporal, “allo-temporal” – literally a bearer of manifold “other” timings and temporalities. In a similar vein, genetics in the postgenomic era loops back to other past ideas of biofunctionalism in allotemporal fashion, shedding fresh light on Jean-Baptiste Lamarck’s soft inheritance, E.E. Just’s theories of the cortical cytoplasm, and Conrad Waddington’s epigenetic landscape. [Image 1-3 below] This allotemporal zone of postgenomics grants greater importance to epigenetics both in the cellular and ecological sense, making bioart not simply a practice of the fine arts but an expression of a completely new way of thinking in the postgenomic era.

I argue in this essay that the “A(llo)temporal Postgenomic Image” is the image of temporal otherness at work in contemporary postgenomic age. It is “allotemporal” in two ways: in the complex biofunctionalism of the actual gene and across time in its looping back to past epigenetic concepts. The contemporary postgenomic era opens a space of visualization – a new platform for practicing beyond singly the fine arts or biology – that is shared by genetics, evolutionary development, and bioart.

KEYWORDS: allotemporal, epigenetic landscape, gene, postgenomic art, postgenomics, bioart.

Presentation 4: Ryszard W. Kluszczynski <rwk@uni.lodz.pl>:

Visual Revolutions. From the electronic do living imagery.

ABSTRACT:

In my paper I want to analyse five forms of images – electronic, digital, interactive, networked, and living – all of which challenge the traditional descriptions and expectations. I will analyse them from the technical-ontological, phenomenological, and cultural perspective to show different ways they deconstruct and discuss the notion of image and to explain why they fail to meet the demands of traditional definitions. The examination of the manner these new images approach the issue of temporality is one of the most important ways to explore the problem. Finally I will try to propose a new context for understanding the discussed forms of new imagery.

KEYWORDS: image-revolution, image-catastrophe, image-performance, image-execution, transgression.

3:20-3:30 Discussion

3:30 Break

4:00-5:20 Parallel Sessions (A) + (B)

Sessions (A): Timecode. Chaired by John Matthias

Presentation 1: Melentie Pandilovski <melentie@gmail.com>:

Image approaches of McLuhan and Flusser.

ABSTRACT:

McLuhan's pointing out to three technologic innovations (phonetic alphabet, introduction of moveable type, and invention of the telegraph) bears high resembling to Flusser who believes in the pendulum swing that allows for

"linear-text-type culture" to be pushed into the background by the technical image (the photograph), as the logic of the alphabet, which directed thinking i.e. linear numerical form or the historical consciousness, is already overcome by the mathematical logic of the technical image. McLuhan's trinity of Visual space, Acoustic space and the Tetrad certainly imposes itself holistically. The 'tetrad' becomes crucial for the understanding the current cultural shift between visual and acoustic space, as means of focusing awareness of hidden or unobserved qualities in culture and technology. For McLuhan the nature of media determines the nature of society. "Once a new technology comes into the social milieu it cannot cease to permeate that milieu until every institution is saturated". On the other hand "Video related technologies must produce a form of psychological death for all mankind by separating it permanently from the natural order, the book of nature, though narcissus-like self-involvement", a conclusion reached by McLuhan operating on three analytical levels at once: the perceptual, the historical, and the analogic. Flusser's recognition of an Apparatus-Operandi complex being the motivating force behind all contemporary and social change suggests that the structure of the apparatus is never politically and aesthetically neutral, therefore thriving on the socio-political moment and the overlap with the techno-scientific sphere.

KEYWORDS: Apparatus-Operandi, Tetrad, Acoustic-Visual Space, Video-related Technologies

Presentation 2: David Eastwood <d.eastwood@unsw.edu.au>:

The Atemporal Mirror.

ABSTRACT:

As a museological genre proliferating in the late twentieth and early twenty-first centuries, the posthumously reconstructed artist's studio is synonymous with the information age's impulse to store and retrieve data. Accordingly, historic studios presented as museum artefacts might be thought of as symptoms of 'a new breed of temporality whereby nothing ever dies.' This paper examines the coalescence of present and historical contexts operating within the reconstructed studio of Francis Bacon, relocated from its original location at 7 Reece Mews in London to Dublin City Gallery The Hugh Lane. As a contemporary (re)incarnation of the past, Bacon's studio relates to Peter Osborne's definition of contemporaneity as 'a coming together of different but equally "present" temporalities.'

Bacon's blemished, circular mirror is conspicuous amid the detritus in the artist's chaotic studio. Gilles Deleuze identifies mirrors as recurring motifs in Bacon's paintings, describing their role as 'prostheses-instruments' into which bodies dissipate. The mirror's instrumental role in Bacon's paintings corresponds with the prominence and condition of his studio mirror. From a sleek object originating in Bacon's early design career, to its apparent role as a prop in the Reece Mews studio, and its current status as a museum artefact, this mirror has borne witness to the shifting contexts of Bacon's studio. It can be understood as a portal through which spatial, material and temporal phenomena appear reconfigured. As such, Bacon's

studio mirror will be considered in terms of its potential to exert posthumous influence, and provoke contemporary art practice predicated on atemporality.

KEYWORDS: Francis Bacon; studio; studio reconstruction; mirror; atemporality; prostheses-instruments.

Presentation 3: Jamie Allen <ja@jamieallen.com>:

Images of Infrastructure

ABSTRACT:

There are few concepts that have accrued the contemporary integrative capacity of “infrastructures” (Star & Bowker, Dourish, Bratton). Although arising in engineering cultures, studies of infrastructures are taking shape to characterise the broad, complex systems that are accreted by networks, mediated by interfaces, constituted only by relations and practices, and that shape conditions for the possibility of technological, artistic and designerly thought and practice. We image-in infrastructures as rational diagrams involving ‘blocks’, ‘cycles’, ‘trees’, ‘bubbles’ and lines. Likewise, evidential photographic perspectives of infrastructural ‘realities’ purport always an essential ‘revealing’ (e.g.: “Where the internet lives,” Jones, Guardian.com, 4 February 2015).

In different ways, diagrammatic and photographic images of infrastructures betray their obverse — the noisy un-systematicity that negates infrastructural potentials, creativities and failures. Such images elicit particular technological sublimities, mythologies and reifications — at opposing limits reductively simple or pathologically over-descriptive. Comparing the temporal and spatial relations evoked in images of infrastructure reveals this ‘dark infrastructure’, accounting for what cannot be depicted, that which is always metaphorical and never captured diagrammatically or photographically. Images of infrastructure are examples of the epistemological rifts that present themselves whenever images are deployed as systematically rational or realist in a world of materiality that is perfidious, messy (Law) and itinerant. This paper will describe theories of infrastructure and characterise its contemporary import; its presentation will sampling historical and current representations of infrastructures as a comparative analysis of representations of infrastructure and the techno-aesthetics these project.

KEYWORDS: infrastructure, media, diagram, photograph, systems, networks

Presentation 4: Simon Lock <simon.lock@plymouth.ac.uk>:

Atemporal Photography: Image Making Out of Time.

ABSTRACT:

In this age of mass social media consumption and visual information overload, are we compelled to look more fleetingly and so see less? Has the success of digital image making meant that we have lost some of the essential qualities of the captured image? Does the materiality of a photograph effect our perception and appreciation of an image? Is there something in the nature of creative processes that surround an image that imbues it with additional value?

Clearly there are many compelling benefits to digital image making that draw us in. But what elements of photography have been cast aside in our rush to embrace progress?

In this paper, we seek to revitalize digital imagery through the re-appropriation of lost aspects of historic and vintage image production. We do not propose the return to analog photography, but rather the enrichment of digital image making through the rediscovery of vintage photographic practice. By anachronistically blending together modern digital and vintage analog processes and aesthetics, we produce a uniquely idiosyncratic photographic practice - an atemporal approach to image making: inspired by many periods of history, but belonging to none.

To aid us in our work, we explore the character of vintage photographs and photographic process through a series of experimental investigations at live-audience events (ranging from festivals, fairs and rallies to reenactments and balls). These events allow us to workshop our creative practice and pose and answer specific questions regarding the nature of imagery and the image making process.

KEYWORDS: Atemporal Photography, Vintage Image Making, Bellows Camera

Session (B): Vitalist Image. Chaired by Coral Manton.

Presentation 1: Gema Fernández-Blanco <g.fernandezblancomartin@gmail.com>:

Exploring synaesthesia as a way to understand the human species and its relation with the environment.

ABSTRACT:

We construct our personalities considering what we remember of what we think we are: subjective representations of images, sounds or smells among others. Consequently, we act according to these perceptions of us and of the others.

We can smell a memory, experiment the phantom sensation or imagine a foreseeable future, playing with the time the way we understand it; past, present and future, as a mental construal.

Virtuality offers further possibilities to explore imagination- in addition to shaping our virtual identities- and combining perceptions by pushing them towards new boundaries within the act of creation. Moreover, athwart cyberception.

Alternatively, some people experience secondary or associate sensations that take place in a part of the body as a result of a stimulus applied in another one. This is called synaesthesia.

This paper asks if the exploration of synaesthetic associations in a creative field could help as a way to generate art or social relations, using them as creative techniques, as well as ways to understand human unknowns.

Some of these points of view are exposed.

Keywords: synaesthesia, telematics, cybernetics, creativity, cyberception, environments, HCI, mind imagery, AI.

Presentation 2: Seth Riskin <riskin@mit.edu>:

The Jeweled Net: Holography and Holistic Perception.

ABSTRACT:

Holography is a method of recording and reconstructing light waves. In this regard, it is entirely different than photography. While a photograph is a snap in space and time, a hologram incorporates countless two-dimensional images; it's a chunk, instead of a slice, of space-time. Movement (i.e. time) is embodied in the still of the hologram. The experience of a holographic image stimulates the mind beyond localized and linear perceptions to continuum awareness.

This talk investigates the metaphor of the hologram as it reveals productive interplay between physical light and the mind. A hologram records and presents information holistically and prompts us to see that way. It's a window on a new level of understanding, one more akin to light waves than light rays. From this perspective, phenomena such as entanglement and superposition are not distant abstractions, but within the reach of direct human experience. By reflecting a new spatiotemporality of mind, holography sheds light

on the metaphorical significance other light-based technological advances, such as digital imaging and light-speed communication.

Presentation 3: Dane Watkins <dw184673@falmouth.ac.uk>:

The Moment of Unmoving

ABSTRACT

Movies never wait they live in perpetual motion, locked in an illusion that merges a succession of static pictures into a new temporal image. If a movie stops because the projector breaks or the tape is stuck then the illusion is lost and the image collapses into its separate parts (Bazin and Gray, 1967). Movies move in one direction and can't respond to anything but themselves, they are governed by their own internal logic and remain unmoved by their external context.

As more screens become embedded into our physical spaces there is an opportunity for the movie to take pause and through sensors respond to its environment. Yet schedulers are stuffing the big screens with old content, movies designed for tv and cinemas. Adverts tightly cut into 30 second slots are screened repeatedly into a space where they have all day, they could take their time.

This paper will discuss examples of how a movie might pause while it waits for something to happen. Animators have used loops to bridge moments of dramatic action (Barrier, 2003). The onlookers in Popeye the Sailor (1933) quiver with anticipation as they prepare for the action to unfold around them. Roobarb (1974) waits in a shimmering tree, a looping construct that lives in between the edges of its drawings, an approximation of its constituent parts. The animated loop is a fixed temporal object waiting perhaps to cross over into the physical world and interact with the environment and passers by.

KEYWORDS: animation, public screens, interfaces, film theory, sensors, movies

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Bazin, A. and Gray, H. (1967). What is cinema?. Berkeley: University of California Press.
Popeye the Sailor. (1933). [film] New York: Fleischer Studios.
Roobarb and Custard. (1974). [video] United Kingdom: Bob Godfrey.

Presentation 4: Birgitte Aga <baga@plymouth.ac.uk>:

The Artificial Stream of Consciousness: Living backwards

ABSTRACT:

"It's a poor sort of memory that only works backwards", the Queen remarked'.(Carroll, 1871)

We are in the midst of a conflux of sophisticated personal, wearable and interconnected technologies, Big (and small) Data and powerful computational and analytical algorithms (Hof 2013). This tide of artificial augmentation is increasingly influencing and guiding human thought and behaviour (Tucker, 2014). From these hyper-connected environments, new intimate and symbiotic relationships between the 'dry world of virtuality and the wet world of biology' (Ascott 2000: 2) are emerging. Within such 'moist environments' (Ascott 2000: 4) the artificially-enhanced and data-driven mental constructions of past, present and imagined futures emerges as artificially amplified cognition.

Memories are the 'meeting point of our past and our present' which define the way in which we conjure up mental images of an imagined future (Shores, 2010: 209). Whereas every vision is an illusion of a dreamt future, the advent of the artificially augmented mental constructs, of the stream of consciousness itself, brings algorithmic accuracy based on past, present (real-time) and predictive data. With such symbiotic integration of artificial algorithms with human consciousness, the limits of the human body become ambiguous. This triggers "new modalities of human-technology relations" and offers "the physical and

cognitive substance of human body” new temporal dimensions and predictive futures (Uğur, 2013, pp.22-23).

This paper does not attempt to define the enigma of consciousness, but proposes the existence of a ‘stream of consciousness’ as an atemporal data (biological and artificial) reconstruction (continuous); multiple narrative fragments and image experiences of past, present and predictive futures. It will juxtapose the atemporality of artificial algorithms against the temporality of human consciousness, specifically the notion of conjuring up the future. It will propose that artificial algorithms are a construct of such human desires; progression through information and predictions of the future. It will offer a future gaze to contemporary society’s ubiquitous integration and reliance on artificial and ambient intelligence systems. It will look for questions rather than answers in proposing a near future where instead of ‘living’ our future based on our past [memories] we will be living ‘backwards’ based on artificially and accurately predicted futures [memories].

KEYWORDS: stream of consciousness, Moist environment, augmented mental image, mental time travel, artificial algorithms, predictive futures

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5:20-5:40 Discussion

8:30 – 10:30 Conference Dinner.

Sunday 3 July.

9:45: Keynote presentation by Sean Cubitt Sean <s.cubitt@gold.ac.uk>.

Untimely Ripped

ABSTRACT:

Flusser traces the origin of writing to the succession of images, a succession in which the magical properties of the image as an instrument of action are broken down in the dependence of each image on its predecessors and successors for its significance. Writing is the order imposed on this mutual dependence. Photography in some way restores the magical: even today we have justified fears of being identified by but also with our image. Unlike a drawn, painted or etched picture, making a photograph is potentially instantaneous and therefore traumatic. Even if laboriously set up and composed, a photograph rips a moment out of the flux of time. The truth it claims as record comes at the price of no longer sharing the common fate of change. In this sense a still image is true to the extent that it is without meaning (a truth about the world, not about its significance for us). Moving images come from an intuitive attempt to heal the trauma and restore significance by supplementing each image with another, even faster than the production of still images. That the attempt was fruitless is obvious from the fact that we are still making movie after movie and still haven't secured the significance of the world. The granular scan of digital cameras can be understood as an attempt to rewrite this problematic for an era in which machine-to-machine communication is at least as significant as human-to-human. This talk will explore these hypotheses.

10:45: Respondent Mike Phillips

11:00 Break

11:20-12:40: Presence: Chaired by B Aga

Presentation 1: George Legrady <legrady@arts.ucsb.edu>:

Here and There – Time, Place and the Photographic Mnemonic Image

ABSTRACT:

Still inspired, after so many years, by the Esper machine in Ridley Scott's Sci-fi movie "Blade Runner", this presentation will address issues related to the impact of photographic images to convey a sense of place, a cultural anchor of either a "here" or "then", the photograph as narrative, and as an imaginary construct. The discussion will focus on three recent works of the past four years that explore the challenge of how to consider images from a different era when re-situated into a contemporary context, some which I have taken, others which are from family archives. The three projects have all been realized using the lenticular process, multiple images fused onto one surface, their transition taking place through the viewers' movements and positioning in relation to the image.

The three projects consist of "Refraction" (2011), eight panels of three superimposed images each of a formal evening ball which I photographed in 1973; "On The Road" (2013), eleven panels of superimposed images from photographs taken around on a voyage in 1970 of Mediterranean cities (Rome, Athens, Istanbul, Jerusalem) and Montreal where I grew up; and "Day & Night" (2015), 8 panels of a week-end trip to a Transylvanian hunting lodge in 1938 and scenes from Hungary in 1940 prior to WWII juxtaposing family photographs of a past era with photographs I have taken recently.

The three works stand in contrast to the engineering-based multiple autonomous camera swarm behavior research I have been engaged with simultaneously to the development of these three narrative works in the lenticular medium.

The presentation will begin with a review of the paper titled "Image, Language, Belief in Synthesis" published in 1989 which addressed the impact of computation on the photographic paradigm. I will then proceed to address the issues of the lenticular works, and conclude with a description of the autonomous research to contextualize both works, one focused on analysis, the other on poetic expression.

KEYWORDS: Mnemonic image, computation and simulation, time, aura

Presentation 2: Gerard Briscoe <g.briscoe@gsa.ac.uk>, Chris Speed:

Visualising Digital Omnipresence: Ghosts of Futures Past.

ABSTRACT:

As we overcome the fourth discontinuity, the distinction between humans and machines, potential is emerging to 'time travel' through Big Data. The ubiquity of digital technologies continues to increase, including documentation of the past, knowledge of the present, and predictions of the future. So, what will be the nature of our relationship to this omnipresent temporal surveillance, including what forms of interaction would be appropriate. As we have increasingly detailed analytics about how we live and the world around us, and we can increasingly 'pull' together data about the past. So, we offer Charles Dickens 'ghosts of past, present and future', from his 'A Christmas Carol', as a framework for understanding our relationship to emerging digital omni-presence. We consider what forms of visualising atemporality would provide a way to interact with the vast amounts of information that would be required, dwarfing what is currently considered in Big Data. Predictions of the future through digital technologies, such as Google Now and Amazon's proposed preemptive dispatching, are akin to ghosts of future past. These ghost of future past might offer preferable futures or inevitable ones, appropriately representing the potential of seeing the future, while suggesting that there may also be risks, such as self-fulfilling prophecies. The 'ghosts' are not necessarily of a dystopian nature, in the novel they are haunting a character to create a preferable future. However, it does highlight the importance of who controls our relationship to omnipresence, otherwise we may well become haunted by ghosts of future past.

KEYWORDS: discontinuity, digital, omnipresence, ghosts, Dickens

Presentation 3: Alejandro Quinteros <alejandroquinterospr@gmail.com>:

Of Hooded Men and buildings without pants. Negotiating the images of universal desire.

ABSTRACT:

This article explores images and their incipient conflicts in today's global consumer monoculture. Fredric Jameson pointed out that today it would be easier to imagine the end of the world before an alternative to capitalism. As we have moved towards a globalized capitalist economy, text has fallen short as the preferred vehicle for our present global electronic consumer information society. The hegemony of text is being challenged as the bastion of intellect, and the image has become concrete as signs and symbols appear to have become universal. Conflict follows in the representations of universality, as definitions diverge between publicness, imageability, fear, and desire. The global speed of universal representation of the signs and symbols of America---Eurocentric hegemony, power a binary phenomenon: the geographic dislocation of the consumers of our global consumer information society, and the reflexive coloniality of being.

KEYWORDS: consumer monoculture, universal desire, publicness, imageability, geographic dislocation, reflexive coloniality of being.

Presentation 4: Cleomar Rocha <cleomarrocha@gmail.com>, Luisa Paraguai <luisaparaguai@gmail.com>:

Extemporaneous notations: brevities and temporal virtualities.

ABSTRACT:

In a contemporary context wherein space dictates the moment, predicated on notions of places, territories and cyberspace, it is fundamental to think about time and its implications in order to understand the very notion of digital. Orientating ourselves by this central thread, we discuss the conceptions of the temporality of information, identifying the semantic bases of simultaneity, real time, synchronicity, actualization and the temporal functions and marks of the image, and its repercussions in art, science and technology. Postulating that perception is amalgamated by comprehension and by culture, the discussion advances into the cultural dimension of the digital environment, compromising its spatial perspective and assuming, both theoretically and methodologically, that the digital is guided by temporality, even if it doesn't dispense with the spatiality of supports. Citing examples, the text advances towards a discussion on the spatio-temporal dimensions of information behaviour (MOLES, 1993), defining their instances of permanence and its traversals, such as that of the index, presentation, representation and data. Such considerations draw the digital arts closer to the arts of time and of literature, acknowledging them as the enactment of their poetic temporality, which tensions their relation to the materiality of their supports. We arrive at the conclusion that this perspective substantiates the emergence of the temporalities of digital art, ultimately positing them as its true origin and as its ontological condition.

KEYWORDS: space-time, digital culture, virtuality, materiality.

12:40-1:00 Discussion

1:00- 2:00 Lunch

2:00-3:20 Parallel Sessions (A) + (B)

Session (A) Multi-Layered Temporal Image. Chaired Session Edward Colless

Presentation 1: William Card <william.e.card@stu.mmu.ac.uk>:

An investigation into the post-cinematic uncanny and the affective potential of visual effects technologies in art practice.

ABSTRACT:

This paper discusses the author's practice-based artistic research, exploring the post-cinematic uncanny as an intersection of visual arts, moving image, animation, cinema, television and visual effects. It links this practice to theories of affect and post-cinema and questions the nature and qualities of moving image in the 21st century, especially the pervasive and ubiquitous nature of computer-generated imagery (CGI) that supplements and augments digitally captured footage. In doing so it creates, explores and situates the post-cinematic uncanny within contemporary arts practice. The work employs technologies that were, until relatively recently, the preserve of high-end visual effects productions and aims to engender uncanny affect in its audience. It thus falls under the purview of Steven Shaviro's speculations on post-cinematic affect (2010). Shaviro's 'post-cinematic' (ibid) refers to the transformation of moving image practice and culture driven in part by the move to digital acquisition, manipulation, distribution, display and networked consumption. It provides a conceptual framework for this practice in relation to the wider context of cinema and moving image production.

In the practice, visual effects technologies are employed site-specifically to create the impression of unknown yet familiar forms within the screen-space, creating new associations, fantastic implied narratives and extra-dimensional implications in otherwise mundane spaces. Still further removed from the profilmic event, CGI may be 'perceptually realistic but referentially unreal' (Prince, 2002 p124) and yet have no connection to the profilmic beyond an urge towards the 'paradox of perceptual realism' (Rodowick, 2007 p101). In this respect, CGI visual effects imagery may be like Freud's uncanny 'double' (1919, reprinted 2003), but a double for which, paradoxically (and uncannily), there is no original referent.

KEYWORDS: post-cinematic, uncanny, visual effects, visual arts, animation, affect

Presentation 2: Michael Straeubig <michael.straeubig@plymouth.ac.uk>:

How to Perceive the Virtual Image? On the Distinction Between "Virtual" and "Real".

ABSTRACT:

In the footsteps of recent technological progress, Virtual Reality, as it is currently assumed, is finally on a trajectory to become a significant, possibly ubiquitous medium. This potential disruption, I would argue, requires us to re-contextualize and criticize established positions regarding the role of media, perception and meaning.

This paper is an interrogation of the often cited distinction between "virtual" and "real" through the example of the image. At first I am attempting a phenomenological approach by following through the act of perception of a "virtual" image by a "real" human observer. In particular, I am searching for spatial and temporal boundaries between the "virtual" and the "real". The outcome of this endeavor requires refocusing our attention towards a number of different distinctions like the ones between actual and potential, simulation and representation, fictional and real and in particular the distinction between medium and form.

My enquiry is influenced by system-theoretic and (radical) constructivist thinking, based on the works of Heinz von Foerster, Humberto Maturana / Francisco Varela, and Niklas Luhmann.

KEYWORDS: virtual reality, constructivism, perception, medium, simulation, image

Presentation 3: Christopher Hunt <christopher.hunt@plymouth.ac.uk>, Christian Cook, Rebecca Veater: The transmogrifying record and the cultural landscape.

ABSTRACT:

"it started by deconstructing the city, today it explores new codes of assemblage."

(Tschumi, 1996)

This paper discusses the evolution of a strategy for capturing and sharing events, predefined moments in time that map out the cultural landscape of a city. Focused on the development of temporal data structures that underpin Artory, an arts and cultural guide for Plymouth, the paper explores the multifaceted methods of predefining and capturing 'event time' as a new form of data driven architecture. This initiative transposes Tschumi's event architecture to a computational and temporal design problem.

Driven around central access to a calendar of events, gathering feedback and building a picture of the impact of cultural activity, the project needed to design a data structure that takes into account the multiple needs of all the different 'classes' of users (The End User, Arts Organization, Designers, Developers and System Administrators). It quickly becomes apparent that a simple listing (a date, time, location and event detail) does not fit the requirements and introduces problems when trying to compare and design for different types of cultural events, and as our scope increases to a larger region, different cultural landscapes.

We have made use of flexible and manipulable data stores and practical, progressive prototyping to evolve and transform a record of the cultural landscape of Plymouth generated by content submissions from partner arts organizations and interactions and feedback of app users.

This gives us a data set that is transmogrified to fit the project's needs as it grows, but can also be inspected and visualized in multiple temporal dimensions: the record gathered over time, and over structure, and interaction. The development process is archived within the data structure, like details and changes hidden in the fabric of a painting.

This paper will document the development of this event data structure and explore how this impacts on the design and development of techno-ethnographic research, information design, capture and user experience.

KEYWORDS: flexible datastore, structure, cultural impact, cultural archive, multi-dimensional

References: Tschumi, B. Architecture and Disjunction. MIT Press, 1996.

Presentation 4: Troy Innocent <tinnocent@swin.edu.au>:

Playing the networked image of the city: act, augment, actualise.

ABSTRACT:

Being 'in play' evokes another way of being, an alternate reality, a different set of spatial relations. While play exists in time, it is atemporal, having its own rules of time and space. Play can be pervasive, embedded in day-to-day life, blending and bleeding into reality occupying a multitude of micromoments. Images of play present multiple meanings – diagrams of logic and rules, millisecond game state updates, assemblages of iconic game objects, spatial and cartographical information – and are distributed across screens big and small connected by digital networks.

Games express the world through coded abstractions. Pervasive game design situated in urban space generates mixed realities, atemporal instances of media ecologies created through the collective actions of human players and media machines. This paper will build on conceptions of play and cities from Debord and Dekoven, urban space as media ecology (Parikka), the double of abstraction (Wark), and the construct of the actual-virtual (Lévy) to deconstruct its multiplicity of meaning embedded in networked images of the city.

Within the framework of a fictional state—the Micronation of Ludea—a series of public artworks blending street art, formal abstraction, augmented reality, and game design, are explored. These works play with the conventions of behaviour and construction of public space via their augmentation with the code and logic of game worlds. These games generate new images of the city from the combined viewpoints of the individual and the collective, micro and macro, monumental and intimate, transient and permanent, and the personal and public.

KEYWORDS: play, mixed realities, urban space, public art, transimage

Sessions (B): Fata Morgana. Chaired by Simon Lock

Presentation 1: Regina Dürig <regina_duerig@gmx.ch>:

Dust Image Fragment Ghosts.

ABSTRACT:

“Dust Image Fragments Ghosts” is an autoethnographic exploration of the dimension of the fragmental and the space in between writer and reader. The starting point are 3D micrographs of dust samples from mobile and immobile cultural artefacts, which were part of the research project “Atlas of cultural dust – trying to valorise the undescript” at the Berne University of the Arts. It investigates the aesthetic potential of dust and its information content from the perspective of the conservation and restoration. Which information can be found in the dust layers on artefacts? How can it be documented and analysed? How can its semantic quality be described? In an artistic-scientific collaboration I wrote the literary text “À propos to the smallest parts”, inspired by the micrographs. The smallest parts are fragments, excerpts from fictitious books or oeuvres. Dust has the power to make visible the absent, to show what must have been there. Fragments as a literary form show what might be there, in between or around. “Dust Image Fragments Ghosts” follows the traces of seemingly empty space. It is a reflexive literary expedition into the landscapes of dust, a ghostly universe between micro and macro, reader and writer, image and imagination.

KEYWORDS: autoethnography, writing as inquiry, heterotopia, poetics, prose

Presentation 2: Lee Nutbean <lee.nutbean@plymouth.ac.uk>:

Neocartography: Mapping Moments

ABSTRACT:

“In that Empire, the Art of Cartography attained such Perfection that the map of a single Province occupied the entirety of a City, and the map of the Empire, the entirety of a Province. In time, those Unconscionable Maps no longer satisfied, and the Cartographers Guilds struck a Map of the Empire whose size was that of the Empire, and which coincided point for point with it.” (Borges 1658)

The convergences of smart networked technologies and location services have created a fabricated world where dynamic information rich environments may be mapped directly onto the Empire. We are moving beyond the point-to-point “little blue dot”, towards a hyper-local landscape that aims “to build a virtual mirror of the world at all times” (Mayer 2010).

For centuries the map has been an imaginative rendition of a worldview, a beautiful encyclopedia of distant lands, their peoples, myths and natural history held within a framework of exploration and speculation (Harvey 2010). Satellite imaging technologies allowed us to capture the world at unprecedented resolutions and have replaced speculation with certainty, creating an Earth we can browse (Hanke 2005).

Through a series of provocative map-mashups this paper will discuss the evolution of Neocartography. How it can be torn, redrawn, reversed and adapted to montages of every kind, taken in hand personally, in a social group or political formation. Neocartography can be ephemeral, responsive and personal but is never perfect. Contrary to the tracing practice of early cartography which always returns to the same state, digital mapping is a dynamic layered continuum with multiple entrances.

KEYWORDS: neocartography, hyper-local, ephemeral gaze, efficiency cult, spatial / temporal personalisation algorithms, fluid API.

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Presentation 3: Clarissa Ribeiro <almeida.clarissa@gmail.com>:

The Kiss.

ABSTRACT:

In the interactive video installation 'The Kiss' (2014), entangled by what the artist defined as semi-material apparatuses, couples are invited to perform a 'non-local kiss'. Each one of the participants wears a hidden webcam onto his or her shoulder capturing images of their faces (lips) that will be interlaced via Arduino and Processing platforms integration. The couple is invited to stand, face to face from a distance of 2 meters, on the top of two different silicone platforms where 12 piezoelectric films are installed. Despite the performers are actually not kissing, the kiss is performed in the projection. The sensors installed in the silicone platforms are located in the acupressure reflex points of the planar region of the feet related to body organs associated to the experience of being in love – the eyes, in the region close to the fingers; heart, liver, stomach, and lung, in the region related to the solar plexus; and the lower pelvic organs. To observe the astonishment and the involvement of the performing couples from the audience when they 'virtually kiss each other in the projection' is itself an instigating experience of reflection on the complexity of human perception and the emotional aspects of seeing. Conceived as a poetic exploration of the very nature of mediated haptic experience, and, on the other hand, as a reference to the idea of non-local connectedness in quantum mechanics, the captured micro vibrations of the bodies, controls the transparency of the superposed videos. As more similar the vibrational values of each one of the performers, as more strong his or her lastingness in the projection making possible the emergence of a cinematographic kiss. The installation is a result of one of the author's most recent project that is focused on the conception of a series she named 'Subtle Apparatuses for Extrasensory Affectiveness', some of those were in her solo exhibition at the Art|Sci Gallery, Los Angeles, in 2014.

KEYWORDS: subtle apparatuses for extrasensory affectiveness, complex affective systems (CAFFS), non-locality.

3:00-3:20 Discussion

3:20 Break

4:00-5:00: Invisible Visible. LT2. Chaired by Paul Thomas

Presentation 1: Coral Manton <coral.manton@plymouth.ac.uk>:

The Immersive Virtual Museum Theatre

ABSTRACT:

A museum is a virtual space conceived in the Enlightenment when the phenomenon of encyclopaedic collecting emerged and it was realized that certain architectonic spaces could be used to construct the foundations for a systematic approach to the management of knowledge. (Kuwakino, K. 2013)

In 1565 Samuel von Quiccheberg wrote the first theoretical text in museology, *Inscriptiones vel tituli theatri amplissimi*, a manual defining the ideal museum – envisioned as an amphitheatre – the extended title for which is:

The inscriptions or titles of a vast theatre, containing the individual subjects and excellent images of the things of the universe, such that one may with reason also call this a repository of artificial and extraordinary things, of every rare treasure and precious furnishing, of buildings and pictures, that are examined and collected together here in this theatre, in order that through the repeated inspection and study of them, one may obtain in rapid, easy and certain fashion singular knowledge and a marvellous practical experience of all things.

A Planetarium is a virtual amphitheatre directly connected to earlier representational techniques such as 'magic lantern' shows, panoramas, dioramas and other non-natural forms of visual display experienced at museums. (Toon, R. 2005)

I will argue that the Planetarium, or Immersive Vision Theatre, can be repurposed from a vehicle for the diffusion of scientific knowledge (Marche, J. D. 2005) to a space in which to realise the original mission of the universal museum (Sloan, K. 2003) and thereby consider the nature of museum representation itself. A space not only to study and display extraordinary objects, but to map and explore human systems for understanding objects.

References:

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- Beth Lord. *Representing Enlightenment Space*. In *Reshaping Museum Space: architecture, design, space*. S. Macleod. London, Routledge, 2005, p. 146 – 157.

Presentation 2: Eftychia Zoumpouli <feliciacyaniris@gmail.com>:

Is Everybody a Curator? Decontextualization as Atemporality in Visual Postmedia and Museum 2.0

ABSTRACT:

The absolute decontextualization to which today's digitally distributed images are being subjected through the mediation of various new media is an established reality. In this paper, the context collapse is considered a crucial aspect of the atemporal nature of images within the contemporary visual culture. Image-Based Microblogging Platforms, online services for hosting and networked dissemination of images (e.g. Tumblr, Pinterest, and Instagram) are progressively assimilated to our lives. The present paper's objectives are manifold, relating to the modification of visual perception in our age and the novel understanding of museum under these conditions. The paper is divided into three main parts. At first, we present our central research questions: what is the kind of modification that these technical factors impose upon potential museum visitors and what implications does this have for the future and purpose of museums and curators? Secondly, we reflect on media theory and related literature on museology, criticizing unrealistic assumptions regarding possibilities for museum experiences mediated through virtual environments. Thirdly, we emphasize on the impact that pictorial postmedia have upon their users' visual perception as these users might constitute a potential museum audience, and offer examples of museums

that have successfully incorporated the dynamics of new visual media in diverse aspects of their communication strategies. We thus, conclude on the significant influence of the atemporality inherent within images circulating via Image-Based Microblogging Platforms upon the appreciation of visual stimuli and the importance of enrolling their utilization in the museological context.

KEYWORDS: visual postmedia, microblogging platforms, museum studies, curation, visual perception, Museum 2.0

Presentation 3: Jane Grant <J.Grant-1@plymouth.ac.uk>:

Simultaneous time: loops, doppelgangers and the infinite universe.

ABSTRACT:

In 1997 the physicist Lee Smolin wrote in *The Life of the Cosmos* that black holes, the implosion of dead stars, may generate new universes and that matter pulled in to many black holes is reformed into other worlds, beings and things. In his 2016 paper, physicist Stephen Hawking et al continues these themes; that information sucked into black holes form 'minute deformities in space-time' (otherwise known as 'hair') on the event horizon. Hawking believes that these hairs or deformities are caused by charged particles passing over the event horizon where they imprint information stored in a holographic form. Whilst this information is partial it contains a blueprint of the things that it had been, the worlds it had come from. There is no negation of information in quantum mechanics, no ending of data, of things, of worlds. The event horizon of the black hole becomes many worlds, multiple time scales being continuously played out, of looping, miniscule events, eternally repeating until it eventually evaporates and radiates outward into the universe. Like Smolin and others, Hawking believes that information can escape the event horizon and can form other universes from within the black hole. These other worlds, born from the fragments of information of what was ingested are doppelgangers, worlds that are parallel but not exact, synthesised from the partial information of many worlds gone before.

References:

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- 2: *Soft Hair on Black Holes*, Stephen W. Hawking, Malcolm J. Perry and Andrew Strominger, DAMTP, Centre for Mathematical Sciences, University of Cambridge, Cambridge, Center for the Fundamental Laws of Nature, Harvard University, Cambridge, 2016.
- 3: Michael Byrne, *The 'Soft Hair' on Stephen Hawking's Black Holes*, 2016.
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5:00-5:20 Discussion

5:20-6:00: Plenary session

The Fourth International Conference on Transdisciplinary Imaging at the Intersections of Art,

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