



Transdisciplinary Research

at the Intersections between Art, Science and Culture.

SECOND INTERNATIONAL CONFERENCE ON TRANSDISCIPLINARY IMAGING AT THE INTERSECTION BETWEEN ART, SCIENCE AND CULTURE

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Keynote Speaker: Oliver Grau

IMAGES (R)-EVOLUTION: Media Arts Challenge for our Societies

Never before has the world of images around us changed so fast, never before have we been exposed to so many different image worlds. Images' historical development between innovation, reflection and iconoclasm reaches in the techno-cultural societies of the 21st century a new level of global complexity. The Media Art image revolution is interlinked more and more with the myriads of images on Facebook, Flikr, Youtube etc., which offer never existing co-inspiration and co-revolution – interferences – in global image exchange.

Within this rapid development, Media Art has evolved over the last 50 years into a vivid contemporary force. Even though Media Art with its multifarious potential of expression and visualization is dominating many art schools; creating "thinking spaces" and became "the art of our time"; thematizing complex challenges like genetic engineering and the rise of post human bodies, knowledge explosion, finance market domination & globalization, the explosion of artistic and scientific visualisation, ecological crises etc., it still has not arrived into the core collecting institutions of our societies.

Through ever new interface developments and inventions our relationship with images experiences a never existing transformation too and makes us part of "living images". These artworks, from net-art to bio-art, from interactive installations to database supported art, both represent and reflect the revolutionary development that the image has undergone over the past years and deal with the key questions regarding the current image revolution.

Comparable with natural sciences, digital media and networked research can now catapult the humanities within reach of new and essential research, like documentation and preservation of media art, or even better, an entire history of visual media and their human reception with means of thousands of sources. These goals express in regard to the image revolution, current key questions. Imagery in the 21st Century should lead us to complex and big pictures, helping us to understand our time better than any traditional art media (painting, sculpture etc.) can do. The faster this essential modification to our cultural heritage record can be carried out, the smaller the gap in the cultural memory; shedding light on the dark years, which started about 1960 and lasts until now.

Keynote Speaker: Anna Munster

Transversal interference: nonvisual patterns of indexicality and aesthetic counter-strategies.

Increasingly, the images we regard as authoritative – those with a seemingly direct relation to the 'truth' of our brains, the profiling of our identities and the mapping of our universe – are generated nonvisually. They are composed out of other media, notably sonic and electromagnetic materialities, and other processes, primarily algebraic and statistical transforms. FMRI, facial recognition and radio telescopic imaging, for example, are all fundamentally nonvisually generated. In actuality, they are *transmaterial* assemblages. Yet such heterogeneous image entities continue to share the epistemological privilege of indexicality that light-based images previously claimed.

If the scientific, authoritative image is already 'transgenic', what implication does this have for interference as a viable aesthetic strategy? To what extent can artists and cultural producers visually interfere with the politics and ethics of such imaging practices? This talk suggests that we should abandon the strategy of interference as *intervention* in favour of a better understanding of interference as the pattern, and hence fabric, subtending many contemporary nonvisual imaging practices. I argue for a transversal *diagrammatic* approach to an aesthetics of the nonvisual image. Here the diagram refers not to the mapping of truth, indices or physical realities but rather to the ways in which force relations between different materialities and processes both hold together *and* dynamically deform into new assemblages. In turn, such diagrammatic aesthetics and art practices remind us that what we take to be fixed and authoritative images – the emotionally 'lit up' brain, the identikit photo, the expanded observable universe – are processual, virtual and speculative modes of 'viewing' and engaging life.

Patricia Adams: Re-Mediations in the Bio-Digital

Connections between imaging techniques in the biomedical and ecological sciences and those of contemporary artistic practice are discussed in relation to Adams' research and in the wider context of media art histories. Through three examples from her transdisiplinary art/science projects – extending through the biomedical sciences to neuroscientific research on the European honey bee - Adams explores practical models for interference and alternative discourses for media art. The selected projects have repositioned scientific image data within an expanded field of artistic critique and audience experience. Adams begins by describing her reinterpretations and recontextualisations of digital videomicrograph adult stem cell experimental image data in the immersive, interactive art installation: machina carnis; where her creative "interference" with the habitual scientific reading of the image data engendered a viewer/ artwork relationship that fostered an intimate, personalised interpretive dynamic. Adams' continued to question contemporary representations of "humanness" when she carried out experimental research in the largest indoor facility for honeybee research in Australia. The video: HOST responded to the permeable membrane of interspecies proximity the artist experienced in this environment and the role of the high-end digital imaging technologies that recorded the honeybee behaviours. Finally, the mixed reality interactive artwork: mellifera poetically re-interpreted artistic observations of honeybees through the creation of a virtual environment in Second Life and real-time interactive gallery terminals. Adams demonstrates that the overall focus of these projects is on open-ended, transdisciplinary methodologies that disrupt and intervene with scientific construction of the "self" and fully explore the creative potentials of hybrid media art.

Su Ballard: The (new) Accident of Art

Most accidents (as long as they do not harm or threaten life) can be forgiven, and new things often emerge from the chaos. In fact, fluctuations between the chaotic and the accidental are recognised as core to much experimental practice in media arts. In this paper I will examine the place of the accident in the art gallery. Accidental encounters in the art gallery occupy a critical space that moves visitors beyond established behaviours and expectations. I explore how accidents are crucial to everyday encounters with art objects (especially those that engage digital media). These misunderstood moments offer up shared and transformative experiences, and like any form of machinic encounter they set things in motion. An artwork whether networked, expanded, or simply present within a room anticipates certain feedback from a viewer. But what happens when viewers interfere? Is this kind of misbehaviour disrespectful, or does it suggest new methods for engaging with media art? If, as has been argued by both Aristotle and Virilio, each machine contains a concept of accident, encounters that recognize the creative potential of failure and instability will introduce new affective productions within the gallery space. Habits will be broken. In addressing these moments where things go wrong, I want to suggest it is the accidental encounter that marks the vibrancy of the space, time, bodies, machines and architectures that make up the art gallery.

Andrew Brodyk: Transposon Painting

This paper is founded on an important emergent conceptual premise within contemporary painting discourses. This is the idea that painting is not a fixed or traditionally circumscribed form of visual philosophy but rather is an incessantly transposable genre. What is significant about this paper is that it presents a unique critique on the contemporary transposable position of painting through an innovative interdisciplinary frame of reference known as 'Bioart'. This involves a novel interpretation of Bioart and painting as Bioart, specifically mediated in practice through new biotechnologies as agency of extended painting.

This paper develops this argument using a specific new example from Bio-art called *Transposon painting*. This novel idea of extended painting first proposed in September 2011 is currently being realised as painting as extended practice by the author and Bio-artist. Brodyk argues how and why he considers particular ambulant biological properties as extended painting, using an *actual* living transposal molecule called a 'transposon' currently being engaged with by the artist.

So this interpretation develops innovative new thinking and methodological approaches to painting at a molecular biological level as a transposable discipline by considering biotechnology as integral to extended ideas of painting.

In advancing new notions of painting away from media specificity towards the 'idea' of painting in this case through the agency of Bio-art using the example of *Transposon painting*, such an interpretation is ostensibly divergent to any extant notion of painting. What this translates into in terms of altered (biological) painting, is a transposable effect, one aesthetically, conceptually and practically determined rather than being autonomously itinerant.

Bettina Bruder: Interferences through Interferences

In physics, interferences are created by the *diffraction* method. Diffractions describe the bending of waves (e.g. Light-, water-, electromagnetic-, x-ray-, radio waves), which pass through small objects such as slits. Haraway (1997) and Barad (2007) employ this approach metaphorically in their thinking as a kind of critical consciousness. Reading and writing diffractively creates differences, offers new perspectives and various points of entry for interpretation and sense making. Interference on a material level i.e. technically as well as conceptually is a key tactic for the encoding and decoding of imagery and representations. Bending or the *flexibilisation* of visual (and ultimately conceptual) information occurs in this process on several levels: Firstly through the technical production of imagery (e.g. Shot, rendered, manufactured). Secondly by the technical transmission and mediation of information. The usage of filters and algorithms constitutes an additional level of

transformation in this process and lastly the practice of reading, decoding and making sense, negotiating and evaluating the information by situating it in related contexts. Technology allows for layers of diffraction, which can be exploited for interpretation, therefore for the production of meaning at a greater extend and for the discovery of underlying patterns, which are not obvious at the first glance. In this sense, *elastic interference* is a tactic that leads to new inferences through differences and possible references to radically disparate things. In my practice, I am applying this tactic as a new representational practice to remediated, expanded, networked imagery. My investigations in the flexibility of systems pertains both content and form of imagery. The notion of diffraction shifts fixed congruencies and opens up a constructive trajectory, which demands divergent practices and encounters to translate the ideas into action.

Brogan Bunt: Multiplexing

Interference represents a characteristic aesthetic strategy – supporting the self-image of art as a force running counter to the dominant signal flow, opposing, disrupting and defamiliarising ordinary signals. But, of course, art also contributes to the overall flow. It is as complicit in the field of signal excess (pollution) as any other force. Furthermore, it can scarcely claim interference as an exclusively aesthetic strategy. The French philosopher, Michel Serres, argues, for instance, that interference is a condition of any medium (Serres, 2007). He draws attention to a constitutive and productive play of noise within any signal. Regarded in these terms, art itself becomes subject to a dimension of interference. All efforts to simply harness interference as a means of critically undermining mainstream signal flows end up assuming an over-simplified distinction between the pure contours of a signal and dimensions of interference, as well as disregarding the integral space of interference that affects all communication. This paper examines these issues and posits an alternative conception of art's relation to the broader field of media and lived events. It argues that innovative strands of contemporary art, specifically social-practice based art, discover means of interleaving art within the texture of other activities. To maintain the signal flow metaphor, they engage in a process of multiplexing rather than of interference. Activities that may not ordinarily be thought in terms of art come to carry an aspect of art, but without the latter appearing as a crudely oppositional force. In this manner both art and non-art activities, through their mutual imbrication, gain new energy and critically-reflective capacity.

Edward Colless: The Corpse Bride and the Human Centipede

As a noisy unstable montage of found objects, the splendid monster of Mary Shelley's *Frankenstein* demonstrates an enduring aesthetic as well as scientific romance. By the reanimated and remediated (and remedial) conjoining of its corpse parts we could construe this phallic creature – with the erotic pataphysical and alchemical recipe of Duchamp – as a "bachelor machine": an allegorical image as well as working diagram of art as a "chemical

wedding" even if, like the bride of Frankenstein, Duchamp's famous bride stripped bare remains – isolated in the upper storey of *The Large Glass* – a virgin muse. This is the masturbatory discipline of an art dedicated to her.

I propose a new image of art that interferes with this erotic chemistry: necromantic rather than romantic and thus a catastrophic undoing of the bachelor machine. The muse in this case is the notorious "corpse bride": the instrument of a legendary mode of execution in which a putrescent cadaver is tightly bound in actual intercourse with the victim. Consider the notorious scatological exploitation movie by Tom Six, The Human Centipede 2 (2011) in which a demonic pervert kidnaps and crudely attaches with sculptural surgery, mouth to anus, a dozen victims in a phantasmic image inspired by Six's first film, The Human Centipede 1. While the first movie typifies the camp style of the "mad science" horror genre derived from Frankenstein, the brutally explicit sequel is a metafictional if not metaphysical disquisition on the camp sexual diagram of the first film. With the second human centipede, eros is transfigured into an appalling aesthetic rage - yet in a manner suggesting more affinity with the stage kitchen of Master Chef than with the Marquis de Sade's chateau, the orgiastic assemblage of bodies is transposed into a singular extrusion of the alimentary canal. I propose - in a gesture that is transdisciplinary rather than transgressive - that we make use of The Human Centipede 2 as a caustic satire on contemporary art – in particular debasing contemporary art's diagrammatic, relational and participatory practices – and use it as an unpleasant antidote to the new doxa of Deleuzian aesthetics.

Mark Cypher: The case of Biophilia: a collective composition of goals and distributed action

Rather than follow the machinations of a singular artist in the production and exhibition of an interactive artwork. This paper uses an actor-network approach to collectively hold to account a whole host of actors that literally make a difference in the production of an interactive artwork, Biophilia (2004-2007). My main argument is that in order for any action to take place, both humans and nonhumans must on some level collectively work together, or, in actor-network terms translate one another. This has implications for reconceptualising practice not only in terms of who is actually involved, why they are involved but problimatizes our assumptions about how 'production' happens at all.

Translation is important for rethinking production because it usually involves the introduction of a new actor to help solve a problem. However, such new relations are predicated and indeed just as dependent on and what these new actors are willing to give up as it is to do with what they can offer. Needless to say that when the negotiations are momentarily over, actors give up individual goals and compel others to collectively form new definitions, new intentions and new goals with each interaction. In other words, the 'work' represents neither the beginning nor the end of a particular event, but is described more as a continually shifting and cumulative series of distributed actions. When production is reconfigured in actor-network terms, the interactive artwork resembles something more akin to a temporary collective along a vast timeline. Where with each translation a new level of competency emerges and whose distributed actions will cumulatively engineer the artwork over time.

Glenn D'Cruz and Dirk de Bruyn: Click if You Like This, or OCCUPY as Spectacle: Situationism and a Technological Derive.

The spectacle is not a collection of images; it is a social relation between people that is mediated by images (The Society of the Spectacle, Thesis 4)

Guy Debord

This performative, multi-media lecture re-reads Guy Debord's book, The Society of the Spectacle (1967) with reference to the global Occupy movement, and the role social media and the Internet play in the facilitation and hindrance of this recent form of political activism. Debord claims that all 'having' — that is, all forms of accumulating capital — 'derives its immediate prestige and its ultimate purpose from appearances', and that individual reality, which is shaped by social forces, can 'appear only if it is not actually real (Debord, thesis 18).' Using the multiple functions and staggering proliferation of various image making technologies used to record and represent OCCUPY actions as a starting point, we respond to Debord's proposition by examining the ways his analysis of the spectacle both enables and impedes a thorough critique of social media as a spectacular technology par excellence. Part reflective essay, part critical analysis, and part performance, 'Click if You Like This' connects various situationist strategies of 'artistic interference' — such as the dérive and détournement — with expanded cinema in order to generate a series of questions and provocations about the politics of place, the degradation of social space, networked images and the ubiquity of contemporary 'spectacular' technologies, which have colonized all forms of everyday life. This presentation questions whether contemporary forms and strategies of interference are the same as their historical precedents.

David Eastwood: Contaminated immersion: art and the space between

Oliver Grau has stated that immersion "is characterized by diminishing critical distance to what is shown and increasing emotional involvement in what is happening" [Grau, *Virtual Art*, 2003, p13]. In that sense, any artwork might be thought of as a potentially immersive experience, inviting a level of engagement best described as a kind of absorption, engrossment or "immersion". Does a large-scale installation or virtual reality environment offer greater "immersion" than the experience of being transfixed by a small painting on a wall? Arguably, immersion is a condition that exists between the viewer and the work, rather than an inherent quality of the work alone. And if the wall-space between two paintings becomes valuable contemplative terrain in competition with the adjacent art [Stephen Little,

'Painting in Transit'], it is apparent that no space is neutral, just as no space is inherently immersive.

Various contemporary installation practices and the repurposing of non-galleries for site-specific exhibitions evince a shift away from the "white cube" museum space. Thomas Demand's exhibition 'The Dailies' (CTA building, Sydney, 2012), offers a kind of "contaminated immersion". Demand has spoken about discovering "constellations" [in conversation with Sylvia Lavin, AGNSW, 23/3/12], which expand the image beyond the frame and blur distinctions between art and "non-art", emphasising the viewer's agency to locate hidden or unanticipated connections in the surrounding environment. This paper considers Demand's project as a point of reflection on strategic interferences that could be revealed via the contamination of immersion, exposing new meaning and value in the space between.

Donal Fitzpatrick: Everyday, everywhere and the erasure of measure

Since the 'readymade', contemporary art practice has claimed for itself a space belonging to both art and the everyday and yet belonging completely to neither. It exists as a set that belongs only to itself. Barbara Formis (1) has characterised this incoherent doubling as the 'intervallic' nature of the readymade when considered in relation to Alain Badiou's concept of the 'event'. This intervallic or undecidable element of contemporary art practice in the 21stC encourages the emergence of new forms within the engorged image field of contemporary global culture. This indiscernible state offered by the collapse of difference between the everyday and art creates a new context and the opportunity to open a portal of equivalence and the potential to influence both the everyday and art.

This paper will examine the 'intervallic' nature of contemporary art and its capacity to interfere with global culture. The paper will examine the digital photo-image artworks of New Zealand /Korean artist Jae Hoon Lee as a proposition which simultaneously addresses and then undermines our sense of conviction of what dimensionality represents, or indeed how it is represented at all. His work offers a critique of the utopian and idealised confections of global culture presented as a type of positive 'nomadism' and represents this state as an exemplar of the means by which we suppress the local in order to fabricate the global and erect a circumstance that facilitates exploitation within the instability of the space between art and the everyday.

Michael Goldberg: Unknown Unknowns: things we do not know we do not know

In her book, 'A Voyage on the North Sea: Art in the Age of the Postmedium Condition', Rosalind Krauss, commenting on the omnipresence of digital imagery in the visual arts, proposes the notion of a 'postmedium' environment where no one mode of artistic expression takes precedence over another. In this milieu, photographic and video images are to be found manifest in a range of contemporary work, usually under the rubric of socalled 'new media'. Referencing Frederic Jameson, Krauss suggests that the image, whether produced by advertising, communications or cyber media, saturates cultural space and problematizes every aspect of the aesthetic experience, including the very nature of the individual work of art. My paper, including references to my own art practice, will address lens-based imagery not only as the product of the discrete photographic apparatus, but also in terms of what Lev Manovich has referred to as the digital 'synthetic photograph'. Baudrillard has as much as suggested that digital multimediatizing constitutes an 'opening up to the infinite', and that this deregulation literally constitutes 'the death of photography by its elevation to the stage of performance'. My paper will explore this deregulation in terms of the democratization of the networked image, which has been achieved through popular intervention in its structural, social and political substrates – from the '9/11' era of the handy cam to more recent camera phone reportage; and from 24-hour CNN image bombardment to the immersive world of computer simulation games.

Mark Guglielmetti: The Art of Decoding: *n*-folded, *n*-visioned, *n*-cultured

Scientific modeling requires us to suspend disbelief, nowhere is this more palpable than in artificial life, an area of computational research investigating the principles that constitute a living system "without making reference to the *materials* that constitute it" (Adami); in other words the emergence of life irrespective of material form: biology/code, carbon/silicon.

This paper investigates artificial life visualisation as both a scientific concern and in relation to media arts. Of interest in this examination is the normative protocol of looking at an artificial life simulation or 'world'. Analogous to looking through a telescope or microscope, the view into the artificial life world is monocular and often fixed; in this regime we look at "organisms". This strategy of looking through the scientific lens to observe a 'natural world' enfolds other forms of cultural tactics that require decoding including but not exclusive to Bazin's ontology of the photographic image, Disney nature films and other "apparatus-based universes which robotize the human being and society" (Flusser).

Subsequent to identifying these protocols in artificial life visualisation I draw on a European account of *media ecology* as an approach to intervene in these arbitrary standards by conjoining disparate regimes, modes of deportment and systems of transduction (in this case artificial life, "VR"- stereoscopic perspectival simulation, and data profiling) to bring these media(ted) systems into cultural relief. I describe a number of work which exploit normative computational procedures to align artificial life image making into *optical consistency* with other forms of contemporary culture and to celebrate the *ocular madness* found in art forms such as neo-baroque image making and Islamic art.

Christopher Handran: Looking into the Light: Examining the Apparatus in Contemporary Art

Sensory and immersive experiences are of primary importance in much contemporary art, and often these experiences are produced by or mediated through the use of a technical apparatus. This paper will explore this dynamic, drawing on the model of the apparatus outlined by media theorist Vilem Flusser.

While developed specifically in relation to "technical images", such as photography and film, I suggest that Flusser's conception of the apparatus offers insights into contemporary immersive and experiential installation art, in which the viewer's experience is mediated or generated by an apparatus.

Discussions of such practices, exemplified by those of Carsten Holler and Olafur Eliasson, are often framed in terms of phenomenal experience, spectacle culture and relational art. I argue that it is the logic of the apparatus that subtends the machine aesthetics employed by these artists. The work of both Holler and Eliasson comprises an 'apparatus-audience complex' that displaces the viewing subject. Through a consideration of the apparatus and its histories in relation to specific works by both artists, light can be shed on these specific models of subjectivity. In particular, the destabilising impulse at play in the work of these artists emerges as a form of interference, aimed precisely at disrupting the conventions of perception and sensation.

Beverley Hood: Glitching

'glitching' is a digital installation and performance project that attempts to re-describe the movement derived from characters in contemporary sports and action computer games.

As the gaming world grows ever more sophisticated and ubiquitous, the movements of characters become more and more 'realistic' and convincing, thanks to constant improvements in software and hardware. Often derived from the real (using motion capture and body scanning of professional sports players for example), gaming characters of the 21st century have an extraordinary embodiment, fluidity of movement and naturalness. However, there are always imperfections and glitches, whether through unexpected programming errors or the users' inability to control the characters in seamless game-play, there is still the potential for awkwardness between spells of perfection.

I have focused on the artificial nature of these glitches by employing highly trained real bodies to re-stage them i.e. Tony Mills, a professional Breakdancer with an extraordinary ability to interpret and create awkward and extreme movements. I am interested in how real bodies cope with, and interpret into sequences of choreography, the limits of such foreign and unnatural movement. By taking the digital and transplanting it, re-interpreting it, embodying it within the physical body – literally re-enacting it – does it disintegrate, transform, and become something new?

'glitching' explores how this physically re-enacted choreography can be embedded and re-imaged within a 'live' digital environment, for an audience to interact with. Using the premise of home entertainment dance and training games (such as Just Dance and Your Shape:Fitness Evolved), it employs the motion-sensor controller, Microsoft Kinect, and large-screen display to create a digital installation for the public to interact with. The exhibition visitor is invited to step into the digital shoes of the 'lead dancer', and attempt to follow the awkward and intricate, glitch choreography performed by the dancing troupe on screen.

Alongside the interactive installation there are a series of 'glitching' live performances featuring the digital installation, dancers Tony Mills, Hannah Seignior, Felicity Beveridge, and a performance soundtrack devised by Martin Parker.

Jondi Keane: Enactive research: transversal possibilities for expanding the imaging of science

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the distinguishing characteristic of transdisciplinarity (versus inter-, multi, etc.) is "to deal with disciplinary fractures by deploying the logic of one theory/practice (approach) to work in the elaboration of another without reducing one to the other" (Nicolescu 1997, 2008) ...

then

it would be productive to consider systems such as the "person" (a sub-set of human organism's behaviours), artefacts such as images (art) and built-environments (architecture) as forms that result from the interference patterns between systems (organisms, objects and physical, social, cultural and historical environments).

Therefore

in this paper, I will propose a notion of an expanded image as emergent forms arising from the interaction-*interference* of organisms and environments. This notion will impact upon the imaging of science by drawing connections between enactive theories of cognition (Stewart et al; Di Paolo; Thompson; and Varela) and imaging practices which purposefully working across disciplinary vantages.

Because

theories of "enaction" foreground co-selective processes by emphasising the precariousness cultivated by self-organising systems, they serve as a useful corollary to experimental art practices that build upon affective experimentation (e.g. Deleuze and Guattari's philosophical-aesthetic 'clinic'). In support of my proposition for an expanded image, I will discuss two projects: *Chalkdrummers bimanual drawing* (Keane and Tosaki) and *Bioscleave house* (Arakawa and Gins). The aim is to outline a more inclusive notion of research in the arts that consciously re-enacts the interactions at work within the myriad scales of living in search of self–organising possibilities that traverse habituated modes of engagement.

The ad-vantage

of working across disciplinary vantage points is to find ways in which the arts may contribute to and inflect the trajectory of interference patterns (for example, the of plasticity of "person" or the prompting power of the environment) through an experimental ethos and inclusive knowledge practices that might be called enactive research.

Daniel Mafe and Andrew Brown: Abstraction as Noise: Enhancing the Poetic

Abstraction in its resistance to evident meaning has the capacity to interrupt or at least provide tools with which to question an overly compliant reception of the information to which we are subject. It does so by highlighting a latency or potentiality inherent in materiality that points to the possibility of a critical resistance to this ceaseless flow of sound/image/data. This resistance has been remarked on in differing ways by a number of commentators such as Lyotard, in his exploration of the avant-garde and the sublime for example.

This joint paper will initially map the collaborative project by Daniel Mafe and Andrew Brown, *Affecting Interference* which conjoins painting with digital sound and animations into a single, large scale, immersive exhibition/installation. The work acts as an interstitial point between contrasting approaches to abstraction: the visual and aural, the digital and analogue. The paper will then explore the ramifications of this through the examination of abstraction as 'noise', that is as that raw inassimilable materiality, within which lays the creative possibility to forge and embrace the as-yet-unthought and almost-forgotten. It does so by establishing a space for a more poetic and slower paced critical engagement for the viewing and receiving information or data. This slowing of perception through the suspension of easy recognition runs counter to our current 'high performance' culture, and it's requisite demand for speedy assimilation of content, representing instead the poetic encounter with a potentiality or latency inherent in the nameless particularity of that which is.

Leon Marvell: Headless and Unborn: Interfering with Bataille and Masson's Image of the *Acephale*

Abstract: This presentation proposes that George Bataille and Andre Masson's hieratic figure of the Acephale functions as an autocritique of the production of images. If one remembers Fredric Jameson's despair at the "pornography" of images which surround us, then the Acephale envisions a cure for the clap. After exploring and establishing the functioning of the figure of the Acephale, this presentation then proposes that there is a hitherto unexplored likely connexion between George Bataille and Andre Masson's hieratic figure and a specific ritual text found in the collection of Greco—Egyptian magical texts known as the *Papyri Graecae Magicae*. Thus the talisman—machinic function of the figure will be established, drawing on connexions between numismatics and the emblematic and talismanic book tradition. This disinterring of prophylactic functions not only reveals the clockwork of the Acephale—machine, but also instigates the generation of a chain of figures from within the guts of the Acephale: forest, skull, labyrinth, and an absurd *deificatio*. These figures combined provide the programme for the Acephale's desolation of images.

Adam Nash: Interference Wave: Data and Art.

In the era of data visualisation and simulation, there is often a tendency to consider digital data as external to human life, ontologically endowed with its own special qualities. In fact, digital data is purely a product of human endeavour, and yet it exists in a plastic, formless state until it is interpreted. Thus, the interpretation of digital data can be seen as a formalised process of interference. This paper attempts to tease out some of the practical and theoretical considerations artists face when working in realtime 3D audiovisual environments composed entirely of digital data. This is done through an examination of the author's collaborative, networked immersive audiovisual artwork Reproduction, an artificially evolving performative digital ecology that collaborates and improvises with humans via networks using various forms of motion, sound and vision capture. Attempts are made at identifying the qualities and practice of the symbiotic relationship that is established between humans and digital entities in an affective feedback loop between the digital and material spheres. Some recent theories in algorithmic information theory are compared with the empirical results of the artists and other users interacting and improvising with Reproduction, to test the status of digital data and its remediated relationship with the material world via audiovisual display systems.

James Oliver and Robert Walton: Disrupting The Gaze: Transdisciplinary Reflections On Mobile Media And Theatre Production, Through *Alma Mater (2011)*

Alma Mater, by UK/Australian Theatre Company Fish & Game, was created in 2011 and continues to be performed in arts festivals around the world. Alma Mater – described as 'filmic tour for one' – fuses mobile high-definition video with high-fidelity original music to create a piece that sits between theatre, film and installation. Individual audience members enter a specially constructed, full-scale child's bedroom to immerse themselves- via iPad- in the world of a little girl in this handheld, 21st century fairytale.

Theatre is a performed and visual practice, generating images through and with the body. Using 'new media', *Alma Mater* is a transdisicplinary performance and experience that generates an enhanced mobility (and disruption) of theatre practice and experience, interfering with 'the gaze' on multiple levels. Whereby, the participant and medium are in perpetual negotiation. Reflecting on this, the paper will demonstrate and discuss the processes of 'transdisciplinary imaging' through the lens of 'broad-spectrum' Performance Studies (and the 'blurring of genres'), and spatial theory. A key consideration is that of embodied experience as an agent in the use of new media and in the making of theatre.

Daniel Palmer: Redundancy in Photography

In his text, 'Information Strategies', written at the cusp of the emergence of digital photography in 1985, German artist and photography critic Andreas Müller-Pohle predicted that soon "it will be possible to generate and regenerate literally *every* conceivable – or inconceivable – picture through a computer terminal." This realization coincided with Müller-Pohle's critique of conventional photography, which he dubbed 'photographism' drawing on the philosopher Vilém Flusser's work. For Flusser, photographers are functionaries of an apparatus based on automation, programmed to produce of pictures which correspond to certain general conventions and reconstructing the world as technical information. According to Flusser, the bulk of photography is 'redundant', exhausting itself stylistically and enslaved to apparatuses and programs.

This paper revisits the ideas of Flusser and Müller-Pohle in light of developments in digital photography that throw new light on the idea of image saturation and redundant photography. In particular, I address cultures of online photosharing (such as Flickr,

Photosynth and Woophy) and stock imagery in light of the actions enabled by the metadata contained within common digital file formats. I propose that the very excess of digital photographic images coincides with the reinvention of the embattled authorial image into an evolving collaboration that aggregates a multiplicity of perspectives. I argue that this shift from individual views to aggregations has potentially important consequences for how we understand acts of resistance, or 'interference'.

Kirsten Perry: Looking at Drawing: A Discourse on Vision in Drawing Practice

Contemporary image making operates within a profoundly visual culture; the increasing proliferation of images and computer vision technology offer opportunities to re-examine notions of looking. Historically, drawing has contributed to a discourse on vision, functioning as a form of visual thinking that allows us to challenge established ways of doing and imagine new possibilities. Digital technology has implications for traditional drawing processes and how we comprehend physicality, raising questions about the body in the act of making and our encounter with the Other. Throughout the twentieth century avant-garde artists developed strategies to expand the field of drawing practice, often working with procedures that isolate vision to articulate broader psychological and philosophical issues. Discourse on vision supports an understanding of Self and Other in drawing practice; looking while drawing, looking at drawings, and looking at the Other through drawing. As such this research acknowledges and extends a history of drawing practice which uses vision to deconstruct notions of representation and perception.

This paper examines the theme of 'interference' as a methodology of making. It will discuss a series of portraits produced with eye tracking software, constructed entirely from the recorded gaze path of the viewer. This strategy actively removes the 'artist's hand' from the eye/brain/hand loop in order to resituate the role of vision and that of the spectator in drawing practice.

Pamela Salen: Photograms, Memory and Touch

Vital to identity, narrative and cultural memory, touch, denigration and transformation due to human contamination expose the aging process. A direct encounter with material helps to frame our physical relationship with and knowledge of the world. Without touch, we lose substance and the ability to perceive space. In the 1920s, László Moholy-Nagy challenged modern representations of perception through his experimental creation of images. His cameraless photographs or photograms expressed new methods of depicting objects, space and movement. The unique capability of the photogram is its reliance on light to record the surface of an object. These impressions can serve as a surrogate to our tactile memory of

space. Of particular interest is how these images can then be reconstructed as three-dimensional objects which can be interacted with and viewed from various points of contact which redirect the narrative of memory as a physical occurence. A simple change in perception allows an awareness of things we know, but did not know we knew. Under the premise that multi-sensory engagement is what constitutes our remembered happenings, how is the haptic experience necessary to image-making and meaning? The current mass of digitally-born and stored images remove us from contact with aging and touch. This paper explores how the photogram as an image and a sculptural form is a remediation of our notions between touch and memory and how this representation calls for an interference in the governing ageless snapshots which occupy virtual space.

Tom Schofield: Machine Autobiographies for Art Making

The terms 'interference' and 'noise' are often used interchangeably. 'Interference' however, assumes a subject — object relationship into which another can intrude and it is this relationship itself which differentiates it from 'noise'. In a system of transmission from one entity to another, any data outside the *intended* message is noise. It is data without *meaning* but only *to* the users of the system. Noise, read differently is the data given by the machines about themselves. In other words the difference between interference and noise is a question of meta-physical *stance*. This is particularly significant in its relation to histories of media and technology. Friedrich Kittler describes a parallel written media history authored by machines themselves.

The cut of the stylus to the wax cylinder, the colour of celluloid crystals. This mark making forms a corpus of written history which exists alongside the human "commentary" on such history. It is this inscription that forms an alternative to media history as a mere eulogy of technology. This inscription is also an incantation which brings forth worlds, which *gives* (das gibt).

These other histories, inscribed as they are into ancient and contemporary media are gradually losing their voices to decay in the same way that the European climate once silenced papyrus.

This paper will consider the implications of producing artworks which adopt these dying histories. By taking machine noise as a source material, this paper will ask how visual artworks (and in particular data visualisation combined with analytical CV techniques) can articulate their alternate version of the past.

Matthew Shannon: Non-photography

"Non-photography" is a term proposed recently by French philosopher François Laruelle in the book of that name, published in 2011, to describe his innovative method of thinking about photography, a method alien to and disruptive of all prior discussions on the photographic. The "non" in this term is the stranger in the room; it is the one we don't know.

Throughout his career Laruelle has developed a fractal, axiomatic "non-philosophy" which he has now extended to the aesthetics of photography. Non-photography forces us to think interns of a photographic-in-itself: a non-relational, non-photographer centred method of thinking the existence of the photographic in parallel to the world – rather than as a reflection of it.

Thinking non-photographically is not easy. Can non-photography be used practically? Or does it, as one critic has said, 'leave us strafed on a bleak moon in a distant galaxy, with odd-looking creatures?'

This paper will give an outline of Laruelle's concept of non-photography and propose one way in which this thinking can be activated: with an examination of what we might call "accidental photography".

Josephine Starrs and Leon Cmielewski

In the visual arts, re-rendering the familiar in new ways is a strategy that encourages audiences to reconsider cultural assumptions. In their recent work Starrs and Cmielewski manipulated NASA satellite images of the Ganges Delta in Bangladesh to embed the words 'days like these' into the winding paths of the delta's multiple tributaries. By changing and animating the seemingly trustworthy satellite imagery, the artists encouraged viewers to reconsider their assumptions about the environment. How 'natural' is nature? How 'manmade'?

Days like these is part of a larger installation, *Incompatible Elements*, which can be seen as an interference of the omniscient Google world view that we have embraced as we increasingly defer to that oracle in our various networked gadgets. The installation creates an immersive audiovisual environment, that fosters engagement and contemplation about the impact of climate change on landscapes and waterways.

After the work was first exhibited as a gallery installation, a still image from the animation was featured on the cover of the new academic science text book *The Future of the World's Climate*, edited by Ann Henderson-Sellers, published by Elsevier in December 2012. While the book is brimming with all manner of graphs and scientific visualisations, the artists' image was chosen for the cover as it managed to succinctly project the editor's vision for this scientific text book.

Is art still regarded as a means of simply 'illustrating' the final outputs of scientific experiments? This paper reflects on Starrs and Cmielewski's artworks in relation to scientific processes and products.

Grant Stevens: Cutting on action: Interference strategies in contemporary art practice

The domestication of creative software and hardware has been a significant factor in the recent proliferation of still and moving image creation. Booming numbers of amateur image-makers have the resources, skills and ambitions to create and distribute their work on a mass scale. At the same time, contemporary art seems increasingly dominated by 'post-medium' practices that adopt and adapt the representational techniques of mass culture, rather than overtly reject or oppose them. As a consequence of this network of forces, the field of image and video production is no longer the exclusive specialty of art and the mass media, and art may no longer be the most prominent watchdog of mass image culture.

Intuitively and intentionally, contemporary artists are responding to these shifting conditions. From the position of a creative practitioner and researcher, this paper examines the strategies that contemporary artists use to engage with the changing relationships between image culture, lived experience and artistic practice. By examining the intersections between W.J.T. Mitchell's detailed understanding of visual literacy and Jacques Derrida's philosophical models of reading and writing, I identify 'editing' as a broad methodology that describes how practitioners creatively and critically engage with the field of still and moving images. My contention is that by emphasising the intersections of looking and making, 'reading' and 'writing', artists provide crucial jump cuts, pauses and distortions in the medley of our mediated experiences.

Mark Titmarsh: The Autopoiesis of Colour in the Age of Machinic Shine

This paper will argue that the enduring mystery of colour has led to a scientific muddle, a linguistic aporia and an unspoken prejudice against chromatic excessiveness. Just in case it should be overwhelming in its elemental effusiveness colour is restricted by good taste that equates cultural maturity with a limited palette. Yet colour continues to break free of its constraints, it bursts out of the earth and sky in an audacious display of autopoiesis, tempting artists to reveal its power. The science of colour based on image, mimesis, physiology of the eye and individual subjectivity has somehow missed the phenomenon of colour altogether. Colour rather than being seen and calculated, shines out, shimmers and reveals a world in much the same way that thinking does. This new understanding of what colour 'is' is exemplified by shifts in emphasis from the colour wheel in its rationality, to the colour chart in its availability, to the LED pixel in its machinic shimmering intensity.

The ontology of colour and the phenomenon of shine stand apart and are incommensurate with the science of light, the psychology of seeing and the subject of vision. Understood phenomenologically colour makes things manifest by revealing them in their unique

presence rather than merely facilitating communication, representation or spectacle. Before colour is seen, before colour can be looked at, colour looks at the painter, the media artist, the web browser in such a way that looking and seeing are provoked. In its ordinariness colour is captured and quantified by the grasp of scientific technical rationality. In its extraordinariness colour demands a certain attentiveness, a responsive lingering on the edge of the visible and invisible.

Using Thierry de Duve, David Batchelor and Martin Heidegger it will be shown that these ways of being with colour are enabled by a formal evolution in painting whereby expanded painting addresses everything in the everyday world that carries colour from data screens to plastic utensils and even paint. Expanded Painting, unlike painting, no longer addresses an audience directly, instead it addresses a non-human respondent, the medium of painting itself. By analogy, the medium of painting however deconstructed or expanded, has become the entity to 'whom' the work of colour is addressed.

Darren Tofts and Lisa Gye: Hangin' on the Telephone

Images, we learned from structuralism, are codified, wired and skeined with a fabric of arbitrarily grafted meanings, inflections and contracts. What if the semiotic DNA of an image could be recoded, interfered with, to irresistibly alter that contract, to supplant the arbitrary with the fixity of "the only possible meaning"? In this paper we propose that juxtaposition of text and image can narrow the morphology of what and how an image means. We will discuss this process of semiotic rewiring in terms of an ongoing remix project, *The Secret Gestural Prehistory of Mobile Devices* (http://www.secretprehistory.net/). In critical remix, the found object is not enough. The juxtaposition of text and image is a kind of Virilio-like logic bomb that, when detonated, interferes with the mind as much as the image.