I argue in this paper that the word ‘art’ is a homonym. Primarily, it names the category of **memetic innovation**, illustrations of which are encountered in every cultural domain. Thus, art may be—but is not necessarily—encountered in the artworld, where the makers of works of art use a different word (with the same spelling) to name a class of artefacts. I explain memetic innovation and the potency of variant memes in terms of a theory of cultural evolution that precisely parallels the Darwinian account of biological evolution.

The term ‘experimental art’ is elucidated as a tautology. That is to say, experimental art is not a sort of art but **the only** sort of art. If art is encountered in a work of art this is a matter of accident: such encounters are not, and cannot be, a predictable consequence of the purposeful deployment of familiar memes by the maker of the work.

A few implications of these extremely fundamental points are briefly sketched; notably the attraction that has been felt by ambitious artists toward the cultural domains of science and technology.

**BIOGRAPHY**

**Donald Brook** is Emeritus Professor of Visual Arts at Flinders University. His academic career overlaps his related careers as a practicing sculptor and as an art critic. He is a former art critic of The Sydney Morning Herald and Nation Review, and was a founder of the Tin Sheds Workshop in Sydney and the Experimental Art Foundation in Adelaide. His new book *The awful truth about what art is* is published by Artlink Australia.

**FORMATIVE TECHNOLOGIES**

**Douglas Kahn**

*Militarism and the Arts, Technology and Science in the United States c. 1970*

Resistance to the Vietnam War and military-industrialism in the United States had a direct impact on the development of the arts as they intersected with technology and science. A common case in point is the controversy surrounding
the Art & Technology program at the Los Angeles County Museum of Art. Instead of drawing broad historical representation from a high-profile institution in the visual arts, the present paper will pair it with another case, the low-key collaboration between the theoretical physicist Edmond Dewan and the experimental music composer Alvin Lucier, where resistance against the Vietnam War also had discernible effect. The perspective will be from the side of the scientist.

BIOGRAPHY

Douglas Kahn is Professor of Media and Innovation at the National Institute of Experimental Arts (NIEA), the University of New South Wales. Until recently, he was Professor in Science and Technology Studies, and Founding Director of Technocultural Studies at the University of California, Davis. He is a historian and theorist of the media arts with concentrations in sound, electromagnetism, and natural media. He is author of Noise, Water, Meat: A History of Sound in the Arts (MIT Press); editor of Wireless Imagination: Sound, Radio and the Avant-garde (MIT Press); and Source: Music of the Avant-garde, 1966-1973 (University of California Press). Current projects include a book edited with the art historian Hannah Higgins of essays and documents on the arts and early computing, Mainframe Experimentalism; and a book on the historical trade between acoustics and electromagnetic spectrum in science and the arts from the late-19th Century to the present, Earth Sound Earth Signal, both for University of California Press.

JOYCE HINTERDING

Loops and Fields: An experimental approach to energy and objects

The physical experience of sound provides a language that can be used for understanding objects, form and energy through the phenomena of frequency. This presentation will focus on the process of working with interpretations of some of the experimental devices and approaches that have emerged from the world of DIY and the culture of amateur radio and astronomy. The emphasis will be on what an Artist is capable of making in the studio, and how an ongoing dialogue between the imagination and phenomena has formed the basis of insights that have produced a body of art works concerned with energy observation, translation and reinvention.

BIOGRAPHY

Joyce Hinterding is a lecturer at the Sydney College of Arts, University of Sydney and an artist who exhibits both nationally and internationally, recognised for her work across a range of discipline areas, including sculpture, object arts, sound art and digital arts. Hinterding’s practice and research opens up the world of objects and materials through physical and virtual dynamics. Her interest in energy and resonance has been a platform for investigating and extending notions of form and function to explore both analogue and digital modes of expression. Working specifically with custom-built field recording and monitoring
technologies, her explorations into acoustic and electromagnetic phenomena have produced large sculptural antenna works, video and sound-producing installations and experimental audio works for performance. Her interest in the VLF (Very Low Frequency) part of the radio spectrum is ongoing, and has continued to open up new relationships as spectrum politics and concern for the environment have changed. Her recent investigations into drawings and stencilling have opened up an expanded investigation into graphic antenna, fractal mathematics, and energy scavenging. The art and science axis in her work has placed her in productive dialogue with various scientists and communities from disciplines such as solar research, antenna design and high-energy physics. Her collaborations with artist and SCA Photomedia Lecturer David Haines have produced large-scale immersive video and sound works that explore the tension between the fictive and the phenomenal. These collaborative works have gained international recognition and are continuing to explore the possibilities for 3D visualisation, animation and real-time technologies in the art context.

DENNIS DEL FAVERO & MAURICE PAGNUCCO
Artificially Intelligent aesthetics: recent experimental studies

This paper describes the Australian Research Council funded Discovery project Scenario, selected for the Sydney Film Festival 2011. Realized through interdisciplinary research, involving the domains of machine learning, interactive narrative and media art, Scenario creates a mixed reality (MR) environment, surrounding the user within a 360-degree stereoscopic space, in which the user can interact with digital characters that have a level of autonomy. Through its discussion of the aesthetics and symbolic AI architecture of Scenario the paper enters into an explanation of what is termed ‘co-evolutionary’ narrative, a function of the interactive relationship formed between a human user and an autonomous digital character. Understanding interaction as co-evolution, the Scenario project proposes interaction as a dynamic two-way process. The paper begins to unpack the theoretical and experimental framework for understanding this type of interaction.

BIOGRAPHIES
Dennis Del Favero is an ARC Australian Professional Fellow at the College of Fine Arts and the Faculty of Engineering, Director of the iCinema Research Centre and Deputy-Director of the National Institute for Experimental Arts at UNSW, Visiting Professorial Fellow at ZKM, Germany, Visiting Professor at University IUAV of Venice, Italy and Visiting Senior Fellow at City University Hong Kong. He has held numerous solo exhibitions including at the Sprengel Museum Hannover, ViaFarini, Milan and Neue Galerie, Graz, and participated in major group exhibitions including Battle of the Nations War Memorial, Leipzig (joint project with Jenny Holzer), Biennial of Seville, and the International Film Festival Amsterdam. He is editor of the Digital Arts Edition published by Hatje Cantz, Germany and is currently a member of the Australian Research Council ERA panel for the Humanities and the Creative Arts and of the Australia Council Visual Arts Board.
He is currently engaged in interdisciplinary art and science research projects that aesthetically explore the dynamic relationship between human and non-human systems through the experimental reformulation of animal, atmospheric and landscape imaging using digital media, undertaken in collaboration with UNSW Centre for Autonomous Systems, Centre of Excellence in Climate System Science, SBS Online Television, Museum Victoria, ZKM Centre for Art and Media Germany, City University Hong Kong and the University of Pittsburgh.

Maurice Pagunucco is Head, School of Computer Science and Engineering, UNSW and Co-Director of iCinema Centre. His areas of research include artificial intelligence, knowledge representation, belief revision, cognitive robotics

TIM BARKER
Experiments with Time: Technology, Art and Temporality

This paper discusses artworks that experiment with digital technologies, using them in ways beyond their conventional application. In particular, I focus on the way these works might tell us something unique about the relationship between digital technology and time. Based on Michel Serres' view of history as a drawing together of multiple temporalities, I explore Mathias Gommel's Delayed, Masaki Fujihata's Field Works @ Alsace and the iCinema project T_Visionarium as examples of experimental artworks that use technology to experiment with time, outside of its representation as a directional line or arrow.

Serres provides me with a concept of time in which each moment of the present has multiple scales of the past nested within itself, similar to Russian Dolls. For Serres in order to understand time we need to abandon concepts of linearity and "the old logic of causality", instead adopting a turbulent model of history, which combines and integrates different times together. Rather than developing according to a line, Serres' time is more like an accumulation or a storm front. This paper examines how a set of artistic experiments with digital technology - using delays, databases and the simultaneous projection of moving images - extends Serres' concepts of time, providing new opportunities to aesthetically experience multi-temporality.

In the 1980's Michel Serres' work took a decidedly experimental turn, marked by lightness, caprice and associativeness. This makes him an ideal philosopher to be encountered with the experimental art described in this paper, with its emphasis on pushing technologies beyond their usual function. There is thus a freeness of associations emergent in both Serres' experiments in philosophy and experimental art, which might provide a new way to understand time, both philosophically and aesthetically.

BIOGRAPHY
Dr Tim Barker is a Post-Doctoral Research Fellow working in the area of new media theory at the iCinema Research Centre, The University of New South Wales. His research binds together aesthetics, new media theory and
contemporary process philosophy to explore the aesthetic and cultural implications of digital technology. He is the author of the forthcoming book, *Time and the Digital*, published by the University Press of New England, which uses the thought of A.N Whitehead, Gilles Deleuze and Michel Serres to explore the relationship between temporality and digital technology. Major outcomes of Tim’s research have also been included in journals such as *Time and Society*, *Leonardo*, *Digital Creativity*, and the inaugural edition of *Contemporaneity: Historical Presence in Visual Culture*.

**POLITICS/HISTORY**

**KATHY TEMIN**

Experimentation and Provocation: Personal and collective dialogues with the Holocaust in Contemporary Art practice

Experimentation is the result of artwork pushing the boundaries of expectations. My paper focuses on contemporary art works that employ experimental and inter-disciplinary approaches surrounding remembrance and the memorial, and the different ways that audiences engage with memory and history in relation to the Holocaust. The artists addressed in my paper do not engage with science directly, however the outcome of both psychological and scientific experiments performed on humans during the Second World War has influenced the way that artists have responded to the subject of life, redemption, remembrance and loss. As a contemporary artist I have been influenced by the way in which Frank Stella and Sol Le-Witt have made direct references to the Holocaust through Abstraction. In my own practice, the recent My Monument projects address this history combining the unconventional material of synthetic fur in a dialogue with remembrance.

Peter Eisenman’s Memorial for the Murdered Jews of Europe, 2005 in Berlin is a prominent example of relational public sculpture that references a cultural history and engages with the body and tourism. The artist Simone Mangos questions the function of Eisenman’s memorial through a dual slide display with the excavation of the original site and the function of the memorial today. Giftgas Giftset, 1998 by the American artist Tom Sachs, combines extermination and play that aims to provoke questions about how remembrance and grief is represented in the museum and in contemporary culture. A cardboard sculpture of the Zyklon B gas container is combined with the logos of luxury labels such as Chanel and Tiffany and Co. Jane Korman’s video, Dancing Auschwitz, 2009 combines oppositional dialogues, featuring her father, a survivor of the camp, herself with her children dancing to a version of the song I will Survive on the grounds of Auschwitz. Korman posted this video on YouTube as an experiment that generated unexpected layers to the reading of history and remembrance in a cyber age.
I explore the ways that artists respond to the extermination that took place in Eastern Europe during World War Two and how incongruous combinations of ideas, technologies and contexts can generate surprising results, generate new meanings and alter the way that audiences engage with memory and history.

BIOGRAPHY

**Dr Kathy Temin** is a contemporary artist and Senior Lecturer at Monash University in the Faculty of Art and Design, Melbourne. She completed a Master of Fine Arts at the Victorian College of the Arts in 1992-1993, PhD in Fine Arts at the Victorian College of the Arts/The University of Melbourne in 2007.

She is currently completing a major sculpture *My Monument: Black Garden* for the Level 2 Project space at the Art Gallery of New South Wales that will be exhibited from September 1 - November 20, 2011. During 2010 she curated the *Aftermath: Art, Memory, History* exhibition at the Monash Faculty Gallery as part of the Aftermath conference and organized the symposium, hosted by the Australian Center for Jewish Civilization.


Since 2008 she has been the recipient of an Australia Council Fellowship and in 2009 received an Arts Victoria Presentation and Arts Victoria Creation grant. Her work is represented by Roslyn Oxley9 Gallery in Sydney and by Anna Schwartz Gallery in Melbourne.

IAN HOWARD

**Physical Barriers, Virtual Freedoms- protection vs creativity amidst a global crisis**

**Presentation working title:**

*Physical Barriers, Virtual Freedoms- protection vs creativity amidst a global crisis.*

Through performative ‘at site’ art practice- interactive participation experiences, observations, documentation, and subsequent studio analysis and speculation combine to produce new images of, and insights into, a range of border issues.

This art practice engagement with topics typically dealt with via the political
sciences has been embraced by leading border studies research centres in North America and Europe. (Raoul Dandurand Chair of Strategic and Diplomatic Studies UQAM, Montreal and L’Institut d’études politiques de Grenoble, Université de Grenoble)

The presentation will explore the following themes:
The concept of a ‘quixotic gesture’, of arts practice within a military milieu
The ‘freedom reality’ inherent in landscape
The ‘civilizing influence’ of a civilian presence at locations of conflict
An ‘intuitive resistance’ (individual and cultural) to barriers and borders
The ‘symbolic impact’ of restraining walls
And ‘border security vis-à-vis economic productivity’

These themes emerge from works undertaken on the Berlin Wall, the demilitarised zone between South and North Korea, the Israeli West Bank Barrier, the Pakistan and India border at the Wagah gate, Lahore and the Mexican \U.S. border at Tijuana.

BIOGRAPHY

Professor Ian Howard is Dean of the College of Fine Arts, UNSW. His artwork focuses on bringing together the disparate, sometimes conflicting, interests of civilian and military cultures. This has lead Howard to undertake works on, for example- the Berlin Wall (1974) the Great Wall of China (2000) the Israeli Barrier (2009) and the Indian/Pakistan border (2011). Although recognized as a ‘quixotic gesture’, the research, production (physical and bureaucratic) and resulting artworks demonstrate that new insights can emerge from this cross-disciplinary activity.

He exhibits work nationally and internationally, including recent shows:

ZANNY BEGG
Art and Revolution

I wish to present a paper that explores some recent experiments that have linked art and revolution. Gerald Raunig articulates four ways in which the “and” has linked art and revolution; sequentially, such as the transition of Courbet from artist
to revolutionary to artist in the aftermath of the events of the 1870s; hierarchically such as the incorporation of art into revolution in the Prolekult movement of the 1920s; through a juxtaposition of art and revolution as in the experiments of the Viennese Actionists in 1968; or though what Reuben Fowkes calls the tantalizing possibility of transversal concatenation, which he “identifies with the overlap between contemporary art and protest politics in the anti-globalisation struggle since the mid-1990s”. [1]

I will draw on Raunig’s notion of transversal concatenation of art and revolution as I think it describes the murky potentiality each offers the other: he proposes a way of conceptualizing the two as a series of productive and temporary overlaps without elevating or distorting one or the other. I share with Raunig his interest in the space between art and activism where art momentarily crosses over into the sphere of revolution and revolution momentarily loops back into art. But I hope to merge with Raunig’s analysis my own materialist interest: I see the transversal concatenation of art and revolution as a possibility which has existed alongside the evolution of revolutionary practice and artistic experimentation and which has been affected and transformed by lived experiences in both these realms.


BIOGRAPHY
Zanny Begg is the Director of Tin Sheds Gallery, The Faculty of Architecture, Design and Planning and works as a curator, artist and writer. She works in a cross disciplinary manner and her work revolves around an investigation of the politics of space, both in the broader globalised context and a more specific local one: she is interested in both the architecture of space and the social relationships which construct it. Zanny was invited to Hong Kong for an Australia-China Council Residency (May 2007), Indonesia for an Asia-Link Residency (June 2008), for a Performance Space Residency in Redfern, Australia (Oct 2008) and Australia Council Residency in Chicago (2010). Her recent exhibitions include Emeraldtown at Artspace, Istanbul Biennale, Taipei Biennal, There Goes The Neighbourhood, Performance Space Sydney and Self Education – Self organization, National Centre for Contemporary Art, Moscow, Russia.

MICHAEL GOLDBERG
Cracking the “Black Box”:Experiments in Financial Capitalism

In Pandora’s Hope: Essays on the Reality of Science Studies (1999), Bruno Latour writes: “When a machine runs efficiently, when a matter of fact is settled, one need focus only on its inputs and outputs and not on its internal complexity. Thus
paradoxically, the more science and technology succeed, the more opaque and obscure they become.”¹

In discussing this opacity, Latour applies to the sociology of science the notion of the “black box” whereby a set of ideas, or a system, performs so efficiently that it comes to be acknowledged as representing veracity, eclipsing any need to question its purpose or intentions. Originating in engineering jargon, the term “black box” is used to describe a homogeneous mechanism that one has no necessity to peer into, simply accepting rather its role in the overall schema.

This analogy can appropriately be applied to financial capitalism and its global markets. During the boom years of the 1980s, economist Milton Friedman and the neoclassicist Chicago School of Economics reprised the “efficient market hypothesis”, which even today underlies the abuses of financial speculation. The theory promotes a free market economy, unfettered by regulation, upholding financial speculation as the means to stimulate capital flows and the momentum to maintain the “ultimate market” driven purely by the forces of supply and demand.

Leading up to the GFC, the economic importance of capital flows superseded that of flows of trade in goods and services. Digital technology bred the hyper-mobilization of money and a dematerialized financial market featuring sophisticated but arcane financial derivatives, purpose-designed for speculation. The financial crisis arguably evolved out of the “black box” mentality of neoliberal economics with its unshakeable faith in the veracity of an “efficient” market. This paper will discuss my experimentation with the language and gestures of financial capitalism in my performances and installations— which aimed to expose and critique the market’s inner workings, so to arrive at a better understanding of its complexities and profound societal impacts.

**BIOGRAPHY**

**Michael Goldberg** is an artist, curator as well as Senior Lecturer and Chair of the Sculpture, Performance and Installation studio at The University of Sydney, Sydney College of the Arts.

Earlier projects (1995-2000) examined Australia’s colonial era with installations produced for Sydney heritage sites such as Elizabeth Bay House, the Royal Botanic Gardens and Tusculum (Royal Australian Institute of Architects).

From 2001, projects considered global financial markets and speculation as contemporary manifestations of colonialism. In 2003 the performance/installation catchingafallingknife.com at Artspace wagered $50,000, raised over the Internet from market players turned art patrons, to buy and sell shares in global media

The psychic divination of the stock market was attempted in Remote Predictive Viewing (2008), a performance staged at the Banff Centre, Canada.

Installation projects have dealt with social anxieties stemming from the proliferation of media images of the ‘war on terror’. The video installation Avatar (2005) used an off-the-shelf Microsoft flight simulation computer program to depict a ‘9/11’ scenario for downtown Sydney. Restrictions on air travel in the era of global terrorism were addressed in STRONG LANGUAGE, SOME VIOLENCE, ADULT THEMES (2008).

Curatorial projects are also of prime interest. Artists in the House! (1997), produced for the Historic Houses Trust of NSW, and Swelter (1999/2000) in the Royal Botanic Gardens featured installations by a number of prominent Australian artists. The Butterfly Effect (2005) introduced artists’ installations to the country’s oldest museum of natural history, the Australian Museum. Public art and community projects were curated for the City of Sydney in 2006 and 2010.

Financial markets were again in focus with The Force of Desire/The Force of Necessity, a project for the 2009 Havana Biennial. The performance/installation, incorporating the work of two Havana artists, dealt with the isolation of Cuba and its economy from Western speculative capital.

The forthcoming, apocalyptic Toward a New World Order opens at Artspace on 31 August.

Michael Goldberg is a Senior Lecturer and Chair of the Sculpture, Performance and Installation studio at The University of Sydney’s, Sydney College of the Arts.

For further information see: www.michaelgoldberg.info

OPEN SESSION

KERRY THOMAS & KAREN PROFILIO
Smoke and mirrors: beyond a naturalistic explanation of experimentation in art education

‘Experimentation’ in primary and secondary schools has historically been linked to a modernist view of creativity, informed by the highly influential mid 20th century art educator, Viktor Lowenfeld. His theory of self-expression and associated concepts of play, using materials in new ways, the aesthetic and the imagination now underscore popular wisdom about the role that the visual arts, and the arts more generally, are believed to serve in education.

This paper examines how Lowenfeld’s groundbreaking theory has been sabotaged in the name of equity, and a fair go for students, in the deadly dialogue that structures the representation of the Arts in the proposed Australian
Curriculum. The paper goes on to reframe experimentation as a critical agency in creative practice in artmaking in art classrooms. Drawing on Pierre Bourdieu’s theory of practice and associated concepts of the habitus, symbolic capital and field, the possibility of students’ experimentation is revealed to be socially and contextually dependent and requires mutual obligation on the part of teachers and students for creative ends to be realised.

An exemplary case of collaboration between an expert art teacher and her students is highlighted. In the program ‘Smoke and Mirrors’, designed by the teacher in association with her staff for Year 9 students, Surrealist experiments that make a virtue of the unpredictability of technological adjustments are adapted. The program incorporates the students’ art study, stop motion animation, soundtracks, the looping of video sequences and their reshooting in an eerie atmosphere that reverberates with chance encounters and the unexpected. This case not only shows that experimentation is far from natural for students but that it requires a history of relations and considerable ‘strategic know how’ from a seductive art teacher expert that on the one hand promotes a regressive dependency while on the other a precocious responsibility.

**BIOGRAPHIES**

**Dr Kerry Thomas** is a Senior Lecturer in the School of Art History and Art Education at the College of Fine Arts (COFA), University of New South Wales (UNSW) and a founding member with Professor Janet Chan of the Creativity Research Group at NIEA, COFA, UNSW. Kerry has lectured in the areas of creativity, curriculum, teacher development, design issues and research practices in art, design and education. Her research and publications are concerned with the study of creative practice as a function of misrecognition, and as a form of practical and social reasoning. Her investigations are culturally situated in the social, political and institutional realities of art and design classrooms in secondary schools and university studios. In 2010, Kerry was a Visiting Professor at the University of Illinois Urbana-Champaign where she conducted fieldwork in senior art classrooms in Illinois schools. Prior to her current position, she was Inspector, Creative Arts at the NSW Board of Studies. Her responsibilities included statewide syllabus development in the Visual Arts and Arts K-12, and the registration and accreditation of non-government schools. She is currently the Co-President State and National issues of the Visual Arts and Design Educators’ Association NSW (VADEA), Chief Examiner for the HSC Visual Arts Examination, and a leading advocate of the value of the Visual Arts in education.

**Karen Profilio** has a distinguished record as a Visual Arts teacher and teaches at North Sydney Girls High School, where she is Head Teacher Creative Arts. She has been teaching since 1977 and has had experience in a wide variety of schools. Karen has been involved in many aspects of art teaching practice beyond the classroom including her roles as HSC Visual Arts Supervisor of Marking, member of the HSC Examination Committee, and Critical Friend at the AGNSW. She has been an ongoing mentor and cooperating teacher for practicum students from COFA, UNSW and other universities over many years. Karen is currently Co-President Advocacy, Support and Membership of the Visual Arts and Design
Educator’s Association, NSW (VADEA). She continues to advocate against the Australian Curriculum and Assessment Authority’s (ACARA) proposals for the Arts identifying how they diminish expectations for learning and teaching in the Visual Arts and other artforms.

LOUISE FOWLER-SMITH
Changing Perceptions –the new Land/Eco Art, ILIRI and the Creative Laboratory

What is Experimental Art and how does it relate to the most pressing issues of the 21st century? Many would consider the most important global issue of our time to revolve around the problems caused by Climate Change. My paper explores what artists are contributing to the debate that searches for possible solutions, and asks if the artist can change the way society perceives in order to change how we live on the planet? My talk will look at the new (and experimental) Environmental Art Movement that is occurring globally, with some specific examples in the USA, Europe and Asia.

As Director of ILIRI I will also talk about collaboration with Engineers to explore my initiative of building with water retaining walls (The water tank house) or junk bricks, the establishment of the Creative Laboratory for experimental Land/Art projects at the UNSW Fowlers Gap Research Station and the Art, Environment and Sustainability Hub proposed for Broken Hill.

BIOGRAPHY

Louise Fowler Smith is Senior Lecturer at the College of Fine Arts UNSW and Director of ILIRI which aims to promote new ways of perceiving the land in the 21st century. She has established the ILIRI ‘Creative Laboratory’ – a large area of land at Fowlers Gap where artists, architects, scientists - people concerned with the environment – can collaborate on projects that explore new ways of perceiving, interacting and living in a land starved of water.

Her work focuses on notions of perception and in the belief that how we perceive and contemplate the land affects how we treat the land, and ultimately how we live within it. She believes that we are less likely to honour and respect the land if we see it as separate from ourselves. This perception remains pertinent irrespective of how the land is ideologically managed across cultural divides.

As an environmentally concerned artist, the most recent work of Louise Fowler-Smith focuses on the veneration of trees, a subject she was drawn to not only for the magnitude of its environmental significance, but its universal and pan-religious symbolic importance.
Improvisation in the visual arts

This paper explores graphic improvisation upon the calligraphic character signifying longevity to establish how aspects of Taoist philosophical maxims and cultural practices have synthesised into experimental Western art forms such as Modernism, Abstract Expressionism, Minimalism and installation art.

Until the C19th Western artists produced commissioned art of specific genres and subjects, in representational styles. Creative exploration was limited to the artist’s individual interpretation of traditional subjects, the embellishment of existing styles, or at most, the development of new genres derived from existing forms, such as still life and landscape painting.

Improvisation in Western visual arts could be said to begin in the late C19th when artists became aware of Far Eastern cultural practices that embodied the non-humanist, non-absolute philosophical precepts of Taoism. With the translation of key texts such as the Tao Te Ching,1 these precepts were valued as gateways away from Western culture’s perceived deficiencies.

Calligraphy models an exploratory, fluid approach to art making. As such it may be likened to traditional African music that developed into Jazz. Both forms were powerfully influential in loosening the West’s adherence to prescriptive modalities in the Arts, liberating the individual artist’s imagination and intellect to invent their own iconography and conceptual constructs. Exposure to the spontaneity of Chinese and Japanese reductive, subjective gesture, spatiality as subject that coalesce in calligraphy, inspired many Western artists to begin experimenting with the cultural practices of China’s indigenous belief system, Taoism.

The word improvisation is constructed from the word ‘proviso’, a stipulation. With the prefix ‘im’ it is opposite to the formulaic. Karl E. Weick defines improvisation as “the unpredictable; it works without prior conditions, it produces the unexpected. … The artist … makes entirely new creations from the imagination and the properties of the medium, which may also have no precedent in convention.”2

Arguably, improvisation and experimentation integrate as methodologies in studio practice towards producing outcomes aligned to Peter Dallow’s definition of studio research as developing innovative “conceptual and effective forms”, new knowledge.3 During the twentieth century this experimental, improvisational mode became the norm.

---

1 Authorship attributed to Taoist sage, Lao Tzu, circa C4th BCE. First translated into English in the C19th.
2 A definition from Karl E. Weick’s Introductory Essay, Improvisation as a Mindset for Organizational Analysis, for the Special Issue: Jazz Improvisation and Organizing. Organisation Science, Vol. 9, No. 5 (Sept. – Oct.). Pp 543 – 555.
BIOGRAPHY
Dr Bonita Ely is a founding member of the Environmental Research Institute of Art (ERIA) at UNSW, funded by an Australian Research Council Linkage research grant. She is Co-ordinator of the Sculpture, Performance and Installation Studies Area at the College of Fine Arts, (COFA, UNSW), Co-ordinator of the School of Art PhD Program, and consultant to the School of Art, Hue University, Vietnam on teaching and learning contemporary art.

She is one of the pioneers of Australian environmental art and has been exhibiting sculpture, photography, performance, painting, video and drawing since 1969. For example, Reverb (2011), her installation for the exhibition Buffer Zone, displaced sounds from Sydney Olympic Park’s wildlife sanctuary into an adjacent armory tunnel, a reverberation adding to the matrix of displacement - history, war, nature, culture, sport, the Silverwater prison – at Sydney Olympic Park. Her site specific sculpture, Thunderbolt, (2010) for the celebrations of the 10th Anniversary of the Sydney Olympic Games at Sydney Olympic Park, signals to the community the level of power they consume in the evening, an aide memoire to conserve energy. Recent artworks revisit her Murray River series of the 1970s and 1980s, with confronting images of our impact on the river today shown nationally in Adelaide (EAF, 2011), the Museum of Contemporary Art (MCA, 2010), the Art Gallery of New South Wales (2010), Brisbane, Queensland (2009), and later this year at the Monash University Museum of Art, Melbourne. Ely’s artwork is in national and international collections and has been selected for prestigious international events, such as the 4th International Sculpture Symposium, Hue, Vietnam (2006). In 2010 she was commissioned by the Cambelltown Arts Centre, Cambelltown, NSW, to respond to the impact of long wall mining on the catchment area of the Georges River. This year she is represented the MCA’s Tell Me Tell Me: Australian and Korean Art 1976-2011, a collaboration between the MCA in Sydney and the National Museum of Contemporary Art in Seoul (NMOCA).

JOHN CONOMOS
Outside the Canon: Experimental Arts, the Academy and Transdisciplinarity

How do we as artists, educators and technologists come to terms, aesthetically, culturally, socially and pedagogically, with how our post-Cartesian traditions of creativity, invention, experimentation and research are sadly emblematic of a cliche-ridden spirit of criticism that is, to quote Bruno Latour in his challenging 2004 clarion call, ‘running out of steam.’?

If we accept as a basic premise that the new spirit of capitalism, technological instrumentalism and scientism, has in effect negated the artistic critique of modernity that was once mooted to question it then how do we engender a transdisciplinarity that problematises the foundation concepts, tenets and methodologies of the humanities as well as the sciences? In other words, if we wish to produce new ethico-scientific-aesthetic experiments that essentially address the mutating real-world issues of our psychic and social lives by what
means do we articulate such critico-aesthetic ideas and methodologies and do we go down the road as defined by Latour for a new realism and empiricism that emanates from William James, and is evident in more recent times, with scientific realism as in contemporary science studies?

Thus, it is a self-reflective empirical critique that is called for that effectively aligns matters of concern with matters of fact. An experimental transdisciplinary critique of multiplication and not subtraction, that seeks to go beyond the frayed conceptual and methodological architectures of iconoclasm, discourse analysis, postmodernism and postology and does not seek to get far away from facts but to get closer to them as an integral part of our everyday life.

And where in this proposed scheme of things for a new experimental era of creating, teaching and researching do we place (if at all) certain poststructuralists thinkers like Michel Serres and Italo Calivino with their protean ideas and methods of transdisciplinarity? And, finally, is there also a place for Siegfried Zielinski’s post-Foucauldian variantology of deep time and layers of media research in Latour’s multifaceted dynamic empirically based way of thinking of the arts and sciences?

**BIOGRAPHY**

**John Conomos** is an artist, critic, and writer and Associate Professor at the Sydney College of the Arts, University of Sydney. Conomos has extensively exhibited both locally and internationally across a variety of different media – video art, new media, photo-performance, installations and radiophonic art – and is a prolific contributor to art, film and media journals and a frequent keynote speaker and participant in conferences, forums and seminars.

In 2008 Conomos published “Mutant Media” (Artspace/Power Publications) and in 2009 he co-edited with Brad Buckley “Rethinking the Contemporary Art School: The Artist, the PhD and the Academy” (The University Press of Nova Scotia Art and Design College). He is currently working on another anthology with Buckley on the culture of erasure based on two recent CAA conference sessions (that he co-edited with Buckley) in New York City in February of this year and has a mixed media installation “Shipwreck” forthcoming at the Queensland University Art Museum in July. He is a New Media Fellow and a Global Greek Award fellow (Greek Ministry for Art and Culture). In early 2009 Conomos’s most recent video “Lake George (After Mark Rothko)” was screened at the Tate Modern where he spoke about his video work.

He is currently working on an alphabetical essay memoir “Milkbar”, a study of the Belgian surreal filmmaker Henri Storck and also a single-channel video on Alfred Hitchcock’s cameo appearances in his own films.

**AGENCY/MATERIALITY**
PETRA GEMEINBOECK
Thinking Machines or Why Matter Matters

In this paper I will discuss experimental forms of material entanglements to examine the interplay between human and non-human agencies and its performative potential. The aim of this investigation is two-fold: to establish a transdisciplinary dialogue or, better, pluralogue that looks at performativity through the lens of machine agency and explores the potential of machine agency through the lens of performativity; and to frame this pluralogue as a practice of material thinking and the artworks involved as ‘thinking machines’ that enable the dynamic collision of transmaterial forces, and in the process become multiple, not only transforming into something else but also changing the quality of the process.

Building on the concepts of agential realism (Karen Barad), vital materiality (Jane Bennett), machinic assemblage (D&G), and transmateriality (Mitchell Whitelaw), I am interested in shifting the focus from representational issues to questions of agency and materiality. In this practice, agency, human and non-human, is seen as thoroughly material, always distributed and enacted. A machinic assemblage then evolves its agencies in the interplay between the materialities that constitute it, all of which are granted an agential capacity or vitality. Material thinking here happens where the materialities dynamically constitute and transversal relations emerge, creating—or more accurately ‘letting happen’—a performative micro-ecology of materials and relations.

The investigation will involve three of my collaborative research projects: One work couples a dynamically responsive space with the participants’ body (Uzume by Petra Gemeinboeck, Roland Blach, Nicolaj Kirisits, 2003), the other two installations couple autonomously performing robots with our built environment (Zwischenräume by Petra Gemeinboeck & Rob Saunders, 2010, and Complicit by Petra Gemeinboeck & Rob Saunders, Liz Williamson, 2011). They open up spaces for Barad’s ‘congealing of agency’ (2003), where the different agential forces not only co-evolve but potentially conspire and perform together.

BIOGRAPHY
Petra Gemeinboeck is a Senior Lecturer in Interactive Media Arts at the College of Fine Arts, University of NSW. Petra’s practice in machine performance, interactive installation, and virtual environments explores the ambiguities and vulnerabilities in our relationships with machines, making tangible the desires and politics involved. Her works engage participants in scenarios of encounter, in which they are provoked to negotiate, conspire with or even solicit a machine-generated co-performer. Petra’s works have been exhibited internationally, including at the Ars Electronica, Archilab, Thessaloniki Biennale, MCA Chicago, ICC Tokyo, OK Center for Contemporary Art, and the Centre des Arts Enghien at Paris. She has also published widely on issues of interactivity and machine agency.
MARI VELONAKI
Multi-Objective Evaluation of Cross-Disciplinary Experimental Research

Cross-disciplinary research involving experimental demonstration of an artwork poses many questions as to how the research should be viewed, measured and finally evaluated. Any evaluation necessarily imposes, to some extent, the framework of the evaluator, whether from the art world, from academia or from a funding agency. In this paper, Mari Velonaki will draw on her eight years' experience working as a researcher and artist at the Australian Centre for Field Robotics to highlight different views of validation of experimental research. Pragmatically, cross-disciplinary experimental research demands multi-objective evaluation. It is argued that projects of this nature can easily have multiple modes of success, multiple modes of failure, or an interesting mixture of successes and failures, when measured from different viewpoints. These projects are referred to as ‘multi-component’ in the sense that they are composed from elements that work together to create a unity and yet, when separated, each component should still function independently—these projects are therefore amenable to deconstruction.

The thread of collaboration between media artists and roboticists will be used to highlight the importance of developing a shared understanding and shared goals in multidisciplinary experimental research. When artists and roboticists work together from a research base that allows for experimentation they will commonly expand each other's research boundaries leading to the creation of new knowledge. Mari will argue that this new knowledge—amalgamated from different disciplines—is robust and equally situated between the disciplines.

BIOGRAPHY
Mari Velonaki is a researcher and media artist who has worked in the field of interactive installation art since 1995. Her practice engages the spectator/participant with digital and robotic “characters” in interplays stimulated by sensory triggered interfaces. Her innovative human-machine interfaces promote intimate and immersive relationships between participants and interactive artworks.

Mari was awarded a PhD in Media Arts at the College of Fine Arts, University of New South Wales in 2003. She was awarded an ARC Linkage grant at the Australian Centre for Field Robotics (ACFR) at the University of Sydney 2003, and has worked as a senior researcher at ACFR since that time. In 2006 Mari co-founded with David Rye the Centre for Social Robotics within the Australian Centre for Field Robotics at the University of Sydney. In 2007 Mari was awarded an Australia Council for the Arts Visual Arts Fellowship in recognition of her body of work. In 2009 she was awarded a prestigious Australian Research Council Queen Elizabeth II Fellowship (2009-2013) for the creation of a new interactive
robot. This research project investigates human-robot interactions in order to develop an understanding of the physicality that is possible and acceptable between a human and a robot.

Velonaki’s installations have been exhibited widely, including: Gyeonggi Museum of Modern Art, Korea; ZENDAI Museum of Modern Art, Shanghai; Aros Aarhus Museum of Modern Art, Denmark; Wood Street Galleries, Pittsburgh; Millennium Museum - Beijing Biennale of Electronic Arts; Ars Electronica, Linz; Biennale of Electronic Arts, Perth; Adelaide Biennial of Australian Art; Conde Duque Museum, Madrid; European Media Arts Festival, Osnabrück; Te Papa Tongarewa Museum of New Zealand; Arco, Madrid; Museum of Contemporary Art, Sydney; Queensland Art Gallery/GOMA; Art Gallery of New South Wales; Ton-Build-Spektakel, Zurich.

ELLEN BALKA
Artistic Experimentation and Tacit Knowledge: Applying Insights from Visual Art Practices to the Study of Large Scale Computer Infrastructures

In this presentation, I will explore how artistic experimentation can be used as a means through which to develop insight about the materiality of technology, and how these insights, in turn, can be used to enhance our understanding of the experimental nature of large scale computer infrastructures.

Increasingly, large scale computer infrastructures (also known as e-science platforms or cyber-infrastructures) fill significant roles in constructing the experimental space we inhabit. Cyber-infrastructures lay the foundation for the collection, integration and analysis of data which we increasingly rely on in making sense of our contemporary world. For example, in the health sector, cyber-infrastructures lay the foundation for the collection and analysis of health data, which contribute significantly and often invisibly to our understanding of health, illness, disease and wellness. Classification systems embedded in cyber-infrastructures, and the influence which the hardware and software of cyber-infrastructures exert on our understanding of the worlds we all inhabit often remain invisible from our view, leaving us vulnerable as we increasingly rely on the outputs and data that the collective experimentation of cyber-infrastructures yield (for example, about causality of health issues, appropriate treatment strategies, etc.). Literature from the business world suggests that failure rates of large scale computer projects including cyber-infrastructures are astonishingly high, and, arguably, experimental.

In this presentation, I will explore promising avenues for collaboration between visual artists and scientists by drawing on visual artists’ often tacit insights about materials they use in their visual arts practices, as a source for the development of insights about the properties of cyber-infrastructures. Making visual artists’ tacit knowledge of the material properties they work with in their artistic practices visible offers a means through which the often invisible yet very material properties of cyber-infrastructures can be understood. Linking
the properties of artistic experimentation to the study of cyber-infrastructures also invites us to see cyber-infrastructures not as fixed entities, but rather as experimental structures which produce at times unpredictable and messy results. In exploring this topic, I highlight the value of aesthetic experiments, and suggest that there are roles which scientists can fill in the sciences. Throughout the presentation, ambiguity about the differences between experiments and inventions; experiments and failures; experiment and innovation are highlighted.

BIOGRAPHY
Throughout her career, Ellen Balka has conducted interdisciplinary research about human interaction with technology. Initially concerned with alternative energy technologies, after working as a researcher in an engineering firm which conducted research about energy conservation, she returned to school to pursue studies concerned with computerization and women’s work. This focus eventually led her into the health sector, where, for nearly 15 years, she has conducted numerous ethnographic studies concerned with computerization of all aspects of health sector work. For the last decade, she has increasingly focused on her artistic practices. Using photography as a starting point, with an interest in collage she has subsequently explored mixed-media work based in painting, and, more recently, printmaking. She holds a Michael Smith Foundation for Health Research fellowship to conduct research on varied aspects of health sector computerization, and recently obtained a grant to explore the materiality of a focus on tacit knowledge of visual artists’ interactions with materials in their practices. She is a professor in Simon Fraser University’s School of Communication.

EXPERIMENTAL HUMANITIES

STEPHEN MUECKE
What Drives the Experiment?

In Cogitamus: Six Lettres sur les Humanités Scientifiques (2010) Bruno Latour defines his scientific humanities as ‘learning how to consider the whole play, and not just one of its acts’. The whole play, for us, is the creative work as it is sustained in its being in and among the Artists, the Materials, the Institutions and the Publics. The ‘output’ is a mere final act in a series of purifying gestures which have eliminated the contingent and the experimental. An analysis that traces the compositional pathways towards the creation of public thoughts and public feelings is a zig-zag of detours in a heterogeneous environment where a dance sequence, for example, is shown to be much more than human movement. This ‘much more’ emerges thorough a ‘compositionist’ analysis which reveals what was interesting about each experimental detour. So what drives experiments in the creative arts in a post-critical context? Reality, as a naked truth, is not about to be revealed by lifting the veil of illusion.
BIOGRAPHY
Dr Stephen Muecke is Professor of Writing at the University of New South Wales, Sydney. His latest book, Joe in the Andamans and Other Fictocritical Stories, (Local Consumption Publications, 2008) was shortlisted for the 2010 Adelaide Festival Awards for Literature in the Innovation Category.

ERIN BRANNIGAN
Yvonne Rainer’s Trio A: The Anatomy of a Work of Art

Contemporary dance is both produced through, and performed as, experimental composition. My current research is located amongst the interdisciplinary-disciplinary tension in dance that shapes both its political and aesthetic terrain. Whether in dialogue with other forms, or sourced in an individual’s mind-body exchange, choreography is a process of experimentation which is always, as French dance theorist Laurence Louppe asserts, partnered with experience. Yvonne Rainer’s Trio A focuses on the manipulation of one compositional element; tone. I will be tracing tonality back to its corporeal source and then out to its global effect to chart Trio A as experience/experiment.

BIOGRAPHY
Dr. Erin Brannigan is a Lecturer in Dance at the University of New South Wales and works in the fields of dance and film as an academic and curator. She was the founding Director of ReelDance (since 1999), writes on dance for the Australian arts newspaper, RealTime, and has two recent publications: a Platform Paper, Moving Across Disciplines: Dance in the Twenty-First Century (Sydney: Currency House, 2010) and her first monograph, Dancefilm: Choreography and the Moving Image (New York: Oxford University Press, 201). She has published articles in Senses of Cinema, Writings on Dance and International Journal of Performance Arts and Digital Media and is co-editing the forthcoming publication 12 Australian Choreographers (Adelaide: Wakefield, 2012) with Virginia Baxter.

EDWARD SCHEER
Scenario: A Posthuman Fairy Tale

In this paper I provide a reading of the Scenario project in terms of its construction (whether unforeseen and therefore ‘experimental’ or not) of a kind of performative media. I will look at its development of a posthuman aesthetic and attempt to understand its significance as an interactive artwork.

BIOGRAPHY
Dr Edward Scheer is Associate Professor in Theatre and Performance Studies at the University of New South Wales. He has published articles on performance art and aesthetics in TDR, PAJ, Parkett and Performance Research and has written numerous catalogue essays for the AGNSW, Documenta, the Biennale of Sydney and the Auckland Triennial as well as pieces on arts and culture in The Sydney
Morning Herald and The Monthly. Author of Scenario, a study of new work from the iCinema Project (UNSW Press and ZKM, 2011), his study of Mike Parr's performance art, The Infinity Machine (Schwartz City Press, 2010) is the first comprehensive account of this aspect of the artist’s practice.

BIO ART/SENSE PERCEPTION

ANDRE BRODYK

Experimentation as attitude and the idea of the lab

This paper elucidates recent tendencies in experimentation explicitly involving innovation and risk taking for creative purposes exemplified within new media Biotech art.

Biotech art’s experimental mission may be understood in terms of practice-led & theoretically informed creative undertakings via fundamentally uninhibited circumstances involving biotechnology mediated life-based systems. By virtue of their creative mandate such artistic inquiries necessarily cannot assume a controlled experimental guise in the sense that thinking about scientific enterprise does. However, control may indeed be part of those explorations.

Biotech art entails adaption and use of unconventional living, semi-living or synthetic biology materials specifically as experimental art materials and biotech protocols as novel experimental art processes.

Characteristically, Biotech art engages in creative emancipation from the limitations and assumptions of an experimental aporia. It achieves this by experimentation with life science models especially the idea and experience of the lab, to determine the efficacy of something previously untried or explored. This is within experimental amalgams ostensibly both scientific and artistic. The materialization of creative intention as experimental attitude and argument are the agencies and the embodiment of biotech art experimental validations rather than attempting any proven factual veracity. Thus any inquiry into the questions of a fugitive disposition that is experimentation is arguably best apprehended by recourse to such materiality and attitude.

The exhibition and the individual works in Visceral: The Living Art Experiment, recently held at the Science Gallery in Dublin represents a fecund example of experimental attitude in Biotech art at both the macro and micro levels. This paper will discuss this innovative arts project itself as a model of creative experimentation representing the materialization of SymbioticA’s ongoing experimental trans-disciplinary attitude over its first ten years. Several examples from the show will provide further effectuation in the debate. This paper will help address core conference questions evident in new media Biotech art creativity and the idea of the lab.

1 Visceral: The Living Art Experiment Science Gallery Trinity College Dublin, 28.01.11- 25.02.11 was curated by Oron Catts and Ionat Zurr
**BIOGRAPHY**

Andre Brodyk is a Biotech (Genetic) artist with a PhD in Fine art from UNSW (2009) and a MFA from UNSW (1995). He was the first Australian artist to make and exhibit transgenic art (July 2002 BEAP). Andre Brodyk was one of the earliest artists in residence at SymbioticA (2001&2002). Dr Brodyk has held an invitational artist-in-residency position within various molecular or microbiology labs in Australia since 2001 until the present.


---

**JOHN TONKIN**

**Thinking about Thinking and Making**

This paper will examine some different approaches to thinking about thinking and thinking about art making, with specific references to my own practice-based research.

First I will present an early project *inhabit the meat of your body* (Tonkin 1995). This work prefigured by some 15 years my current interests in embodied cognition and in the use of un-encumbered user interfaces. This artwork was developed during a residency through, what was for me, an unusually spontaneous and intuitive process. In revisiting this work and thinking about its relationship to my current research it has been useful to remember that ideas and processes can develop with varying degrees of consciousness through a slow unfolding over time. As a PhD candidate I am engaging more rigorously than usual with a broad range of ideas and theory. Almost in reaction to this, I find I have again adopted a very intuitive approach to my practice. I certainly don't want to suggest that theory is only an epiphenomenon to the actual making of art or to present a kind of theory / praxis dualism, but I am interested in ideas of thinking through the body via a physical engagement with the world. How might ideas of embodied cognition and extended mind be relevant to thinking about practice-based research?

I will present my recent project *Closer: experiments in proximity* (Tonkin 2010, 2011). This work is a video installation that responds to the user’s distance from the screen to form a series of different sensori-motor feedback loops. These
create a dynamic structural coupling between the movement of the user’s body through space and the real-time manipulation of the video and sound they are experiencing. In these experiments I am trying to think through some issues in relation to embodied cognition and the nature of visual perception. My hope is that the audience might also think about some of these things through their physical engagement with the work.

BIOGRAPHY
John Tonkin is a Sydney based media artist who has been working with new media since 1985. In 1999-2000 he received a fellowship from the Australia Council’s New Media Arts Board. His work explores interactivity as a site for physical and mental play. Recent projects have used real-time 3d animation, visualisation and data-mapping technologies and custom built and programmed electronics. His works have often involved building frameworks / tools / toys within which the artwork is formed through the accumulated interactions of its users. John currently lectures within the Digital Cultures Program, at the University of Sydney and is undertaking a practice based PhD at COFA, UNSW. His current research is around cybernetics, embodied cognition and situated perception. He is building a number of nervous robots that embody computational models of mind and responsive video environments that explore situated models of perception.

JONDI KEANE
The Science of Our Own Fiction: Affective experiments enacted through creative research

The impulse driving my arts practice has been to develop art as a mode of self-invention or self-modification by way of an ongoing experiment to inflect the plasticity of the body-environment relationship. This creative inquiry focuses on the relationship of the biology of self-organization to the affective system and the lived-experience. For example, the gap and overlaps between body image which “consists of a system of perceptions, attitudes, and beliefs pertaining to one’s own body” and body schema which is a “system of sensory-motor capacities that function without awareness or the necessity of perceptual monitoring” (Gallagher 2005: 24) highlights the artificial separation between sensing and perceiving which artists are eager to rigorously explore as ‘the science of our own fiction.’ Art, in this context, offers processes that reconfigure the way we perceive, feel and think. This has far-reaching implications for the way in which our daily activities shapes our physiology and allow us to ‘enacts’ our communal space and therefore, it is the certainty we award these malleable and ‘fictive’ constructions / connections that must be examined. To this end, I will discuss how affect is observed in scientific experiments such as the ‘rubber hand experiment’ or the ‘mirror-box experiment’ and contrast these with affective experiments in The Mechanism of Meaning by artists-turned-architects, Arakawa and Gins and my collaborative project, the READING ROOM - Experiments in posture, movement and comprehension. Throughout the paper I will argue that cognitive processes such as attention, selection, decision and judgment are ripe
for re-entry and experimentation through an embodied approach to acquiring knowledge that is particular to the Arts.

References:

**BIOGRAPHY**

**Dr Jondi Keane** is an arts practitioner, critical thinker and senior lecturer at Deakin University. Over the last 25 years he has exhibited and performed in the USA, UK, Europe and Australia. His research interests include embodiment & embodied cognition, the philosophy of perception, experimental architecture, research design & practice-led research. Recent creative projects include the *READING ROOM* exhibition (2008), collaborative installation-performances *Tuning Fork: Shopfront* (2008), *Tuning Fork: Drill Hall* (Critical Path, Sydney 2009) and will be in residence at the Senselab (dir. Erin Manning, University of Concordia) during June-July 2011. He has published in range of journals including *Interfaces, Ecological Psychology,* and *Janus Head,* with book chapters in Holland, Smith and Stivale (eds) (2009) *Gilles Deleuze: Image and Text* (Continuum), Lecercle and Kral (eds) (2010) *Architecture and Philosophy- New Perspectives on the Work of Arakawa & Madeline Gins* (Rodopi) and Barrett and Bolt (eds) *Carnal Knowledge: New Materialism and the Arts* (forthcoming from I. B. Tauris). In 2010, he co-organised an international online conference on the work of Arakawa and Gins and is co-editing a special issue of *Inflexions* journal on Arakawa and Gins (forthcoming 2012).

**EXPERIMENTS IN COLLECTIVE EXPERIENCE**

**ADRIAN MACKENZIE**

**Populations, data and probabilistic processes in experimental knowing**

The form of experimental knowing we take most seriously is based on observing and counting how often things occur. This paper will describe some largely subterranean shifts in empirical sensibility that have been occurring in statistical thought over the last two decades. They are largely associated with the so-called ‘Bayesian revolution’, a shift away from counting the frequencies of events to updating prior beliefs or credibilities through the injection of controlled computationally intensive bursts of randomness. In this setting, things are still counting, but that counting is used to update beliefs. This transformation of statistical architecture and inference is having wide-ranging effects on everything from epidemiology, forensic science, clinical drug trials, business analytics and quantitative finance, to name a few. In the paper I will illustrate via case studies such as Microsoft’s *TrueSkill* Xbox player matching engine. The implications of these shifts for empirical sensibilities more generally are not well understood. I would suggest that they highlight the need for a re-engagement with notions of population, event, belief and number. We may be witnessing a shift in the faultlines that separate belief and things/events. Through this re-engagement, we might also reconsider the contemporary making of experience,
subjectivity and knowing in an altered light.

**BIOGRAPHY**

**Dr. Adrian Mackenzie** is a reader and co-director of the Centre for Science Studies, University of Lancaster, UK. He is the author of three books: *Wirelessness: Radical Network Empiricism*. MIT Press, 2010; *Cutting Code: Software and Sociality*, Peter Lang, 2006; *Transductions: Bodies and Machines at Speed*, Continuum, 2002. His current research interests include: the lives of data, especially databases but also data analysis, modelling and ‘analytics.’ He is currently focusing on data as a way of thinking about ‘BioIT convergences’ across biological engineering, DNA synthesis and sequencing, clinical and research databases and visualization technologies. Currently funded research projects include ‘Technolife: A transdisciplinary approach to the emerging challenges of novel technologies. Lifeworld and Imaginaries in Foresight and Ethics’ (EU Framework Programme 7 – Science in Society). He has published articles in *The Fibreculture Journal, Theory and Event, Space and Society* among others. He is a guest editor for a forthcoming issue of *Theory, Culture and Society* on ‘Code and Conduct’.

**ANNA MUNSTER**

“Hahaha” – 186,775,728 views. Emerging collectivities of publics, emerging experiences of affect across viral media

Latour has suggested that ‘we’ have all become part of broader collective experiments. But Latour’s work on the relations between humans and nonhumans suggests, more profoundly, that collectivity, relationality and aggregation have themselves become experiments. One such emerging collectivity can be found in ‘viral media’, which amorphously sweeps, audiences, performances and data up in its march. This paper looks at the phenomenon emerging through networks, social and mobile media of ‘going viral’. In particular, I focus upon YouTube videos that, in the past 5 years, have been downloaded, remixed and transmitted at monumental rates, producing statistics such as ‘186,775,728 views’. Many of these clips tend to be of laughing babies, cats and everyday moments. These clips are infectious affectively rather than via analogy with disease. I argue that ‘the viral’ in networked media, although connected with biopower, should not be reduced to an analogy with ‘the biological’ spread of viruses. In both biological and media viruses, new notions of communicability have arisen that require us to revisit Gabriel Tarde’s conceptions of societies and sociality, which function across multiple natural and non-natural entities.

The communicability at stake in the ‘going viral’ of everydayness, as witnessed in such YouTube videos, works fundamentally at the level of affect. Here I take up aspects of Daniel Stern’s vitality affects and Felix Guattari’s conception of the refrain to understand the relational movements and intensities of ‘going viral’.
This places viral media in direct relation with biologies but not as we have been hitherto formulating these under a biopolitical aegis. Going viral also encompasses a formative relation to the statistical and the mass but also insofar as these latter need to be understood, especially via contemporary networked media, as elasticities rather than quantities. Viral media is an experimental engendering and combining of both bio- and statistical elements and masses that can, sometimes surprisingly, open out onto the completely novel.

BIOGRAPHY

Dr Anna Munster, Associate Professor at the College of Fine Arts UNSW is affiliated with the Centre for Contemporary Art and Politics, one of NIEA’s research centres. She is the author of Materializing New Media, Dartmouth College Press, 2006. She has contributed articles to the journals CTheory, The Fibreculture Journal, Convergence among others. She is currently working on a new book for MIT Press, due to be published in 2012, titled An Aesthesia of Networks. This explores new expressions of networks beyond the ‘link-node’ image and new understandings of experience that account for the complexity of contemporary assemblages between humans and nonhuman technics. Together with A/Prof Andrew Murphie (EMPA, UNSW) she was funded for the ARC project: ‘Dynamic Media: Innovative social and artistic uses of dynamic media in Australia, Britain, Canada and Scandinavia since 1990’. She regularly collaborates artistically with Michele Barker (SOMA, COFA). They are working on a large-scale multi-channel interactive work, HocusPocus, exploring the relations between perception, magic and the brain, funded by a New Work Grant, 2010, the Australia Council for the Arts.

PIA EDNIE-BROWN

Architecture on Wire: Vitality and Experimental Life

This paper explores how creative experimentation can be considered in terms of (mostly) non-biological life. In expanding experimentation beyond the act of designing and creating, it slips from the hands of the experimenter-as-creator into the experimental life of an artefact. This argument is pursued specifically through architecture, and understandings of life and vitality as collective phenomena, informed by process philosophy and the work of Brian Massumi in particular. In these terms, the paper remodels the temporal notion of the Augenblick – the experience of a fleeting but momentous event, such as an instance of the 'A-Ha!' or eureka moment of invention and discovery – in terms of the slowness of an experimental, architectural life. I explore these ideas through events in the life of the World Trade Centre towers, in New York. Predominantly, the paper works with the part these towers played in Phillip Petit’s 1974 tightrope performance experiment, as documented in the recent film Man on Wire. The aim is to sketch out ways in which these towers can be understood as an experimental life across the moments and momentum of their existence, leading toward ways of approaching architecture in terms of the vitality it contributes to the world.
BIOGRAPHY
Dr Pia Ednie-Brown is an Associate Professor in the Architecture program and a research leader at the Spatial Information Architecture Lab (SIAL), RMIT, Melbourne. She has a research practice, Onomatopoeia, involving art-architecture installations, animation, sculpture, creative writing and theoretical analysis. She is working on an Australian Research Council project with Oron Catts of SymbioticA, Professor Mark Burry, and Dr Andrew Burrow. This project aims to develop a qualitative model of innovation, thorough an exploratory and generative case study on the intersections between digital architecture, biological arts and related spatial practices. She produced a book, Plastic Green (RMIT Press, 2009), about a research project that investigated alternative ways of constructing relationships with our environments, proposing an idea of ‘transformability’ rather than ‘sustainability’. Her papers have been published in journals such as the Architectural Design Academy Editions, The Fibreculture Journal, and 306090 books, among others.

AFFECTIVE EXPERIMENTS

JENNIFER BIDDLE
A politics of proximity: Tjanpi and other experimental Western Desert art
This paper is about new and experimental Western Desert Australian Aboriginal art. It identifies affective intensification as the primary modality by which culturally specific object relationality is developing in emergent Indigenous art forms. Pace Deleuze, the aesthetic encounter is valuable above all else because it incites sensation and participatory somatic transformation. This paper develops an analysis of Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women’s Tjanpi art as instigatory in a sentient reiteration of potent political exigency. While Tjanpi may appear, at one level, as innocuous works of traditional handcraft - baskets, bowls, figurative soft sculptures - at another level, these works re- incite a certain ‘nuclear script’ (Tomkins) of country, place and practice: a conjointly female specific way of being with one another, and of being in country. Imbrications of habit, affect and encounter take shape through co-oriented bodies in ‘concernful absorption’ by which country becomes a place of feeling as much as practice. Incarnate forms index country directly – figures of animals, birds, snakes, people; everyday secular forms. The use of grasses, rushes, camel hair, human hair; collected, cut, dried; spindle spun, spat on even; caressed, fondled, held – the viscera of country, person, and above all else, an enduring, intimate relation between hand, technique and object. Texture is critical; touching/feeling reversibility (Sedgwick). This paper explores the radical ontological politics as hand-made Tjanpi becoming hand-held by the consumer.

BIOGRAPHY
Dr. Jennifer Biddle is Senior Research Fellow in the Centre for Contemporary Art and Politics and founding Coordinator of the PhD program in Visual Anthropology at the College of Fine Arts, a leading national program specializing
in Indigenous and Asia Pacific research. She is a visual anthropologist of Aboriginal art, language, and culture. Her interdisciplinary research and writing spans the fields of linguistics, ethnology, art theory, philosophy and ficto-criticism. She has conducted fieldwork with Warlpiri in Central Australia for over twenty years and facilitated Workshops and Artists in Residencies programs at COFA and Sydney Grammar School.

Her research tracks the movement of art from remote area production to global markets and contexts of consumption in Sydney, Paris and New York. Focusing on intimate proximities and sensate encounters, her monograph *Breasts, Bodies, Canvas: Central Desert Art as Experience* (University of New South Wales Press 2007) provides a groundbreaking analysis of the vital role that women artists have played in the Papunya Tula art movement, and the ‘feminisation of the Dreaming’ currently taking shape in contemporary art. Her research is published in international forums such as Society, Space and Emotion and Visual Communication and in seminal edited collections including *Emotions: A Cultural Studies Reader* (Routledge 2009), *How Aborigines Invented the Idea of Contemporary Art* (Power Publications, Forthcoming) and *Thinking Through the Skin* (Routledge 2001).

**KIRSTEN HUDSON**

**Taste My Sorrow – A material exploration of elegy and empathy**

Starting from the premise that there is a distinct difference between the pregnant and maternal body, as not every pregnant body becomes a maternal body, this paper investigates the affective quandary faced when so-called maternal “norms” and “expectations” are monstrously ruptured. Using my experience of being a pregnant body that “botched” maternal success, this paper explores how *Taste My Sorrow* – an ongoing series of art works I am creating from sugar -, materially renders literal my gross failure to approximate corporeal norms. Positioned as a body of radical indecidability – a contaminating body alive but infected with death; pregnant but containing the forever unbreathing – I use the material of sugar in *Taste My Sorrow* as a sensory metaphor of insatiable desire to smack against explicit bodily renderings of loss. Interested in the ethics and aesthetics of perceiving bodily/embodied trauma, *Taste My Sorrow* stages a “material elegiac”, not as a substitution of grief, its containment or closure, but instead is an “intolerable elegiac” that offers up for consideration the oscillating struggle between the numbness of melancholy and the excess of mourning. As a simultaneously intellectual, emotional and material activity, *Taste My Sorrow*’s tacit exploration of “material elegy” as a methodology for performing the experience of unspeakable loss, evokes an empathic yet critical textual horizon that opens up possibilities for art to contribute to discussions regarding bodily/embodied experiences of “empathic unsettlement” (LaCapra 2001). Penetrating the barrier which puts space between self and the “Other” when faced with instances of trauma, *Taste My Sorrow*’s literal collapsing of symbolic space into material form acts as an “encountered sign” (Deleuze 1964). Evoking a pre-discursive, pre-cognitive, pre-
language affect, the works in Taste My Sorrow provoke a fleeting yet empathic contingency that signifies a way of being momentarily amidst rather than standing before the “otherness” of trauma.

BIOGRAPHY
Dr Kirsten Hudson is a practicing artist and academic based in Western Australia. She is currently employed as a lecturer in the School of Design and Art and the School of Media, Cultural and Creative Arts at Curtin University where she can be found speaking her mind on trandisciplinarity across all manner of things design, fashion, art and cultural representation. Her current research interests include: the creation of affective spaces/objects and humanistic ideas and assumptions concerning body materiality and morphology.

JENNIFER DEGER
Borrowed rites and the gift of grief: a Yolngu experiment with video art

For the Aboriginal people of Gapuwiyak, Christmas has become a time to remember—and make palpably present—lost loved ones. Ritual preparations begin in mid-October when the first thunderclouds of the season herald the coming of Christmas and trigger tears for the dead.

This presentation will preview Christmas Birrimbirr (Christmas Spirit), a major work by Miyarrka Media, a collective of indigenous and non-indigenous filmmakers and performers based in Gapuwiyak in north Australia. Under the guidance of Yolngu directors, Fiona Yangathu and her husband Paul Gurrumuruwuy, this work explores the potential of new media to produce the connective and transformative work of ceremony in art gallery and museum settings. The result is a multi-channel installation structured by the performative aesthetics of Yolngu ritual and charged with the luminosities of Christmas lights, tinsel, and video itself.

Motivated by a sense that the brittle satiations of Balanda (non-Aboriginal) consumer Christmas rites lack both force and meaning, Yolngu offer Christmas Birrimbirr explicitly as a means of turning away from distraction and dullness, and to stimulate a dynamic openness to oneself and others via the work of feeling. The result is a work that challenges conventional understandings of the efficacies of Aboriginal art and media. Rather than positioning non-local viewers as witnesses to contemporary indigenous trauma, or as spectators to a hybridizing exotic, Yolngu invite audiences to engage as subjects whose own lives and relationships can be enriched and empowered by the dense and sometimes difficult feelings that the work evokes. In the face of increasingly assimilationist government policies and enduringly deep, institutionalised forms of racism, rather than expecting recognition on the basis of ancestral legacies and sacred knowledge, Yolngu offer their “gift of grief” in the hope that the shared pain of human existence might provide new grounds for reconciliation.

BIOGRAPHY
Dr Jennifer Deger is a Research Scholar at the Center for Religion and Media, New York University and a Visiting Fellow at the National Institute of Experimental Art. She is the author of *Shimmering Screens: Making Media in an Aboriginal Community* (University of Minnesota Press, 2006) and numerous articles on visual anthropology, experimental ethnographic media, and Yolngu aesthetics. She has worked as producer, director and editor on films including *Christmas with Wawa* and *Bo’lingu Shooting Star* (co-directed with Susan Marrawakamirr), and collaborative art projects including the bark-video installation *Djalkari #1* and #2. In 2009, Deger curated the exhibition *interventions: experiments between art and ethnography* as part of the Australian Anthropology Conference at the Macquarie University Art Gallery. Along with Paul Gurrumuruwuy, Fiona Yangathu and David Mackenzie, she is a founding member of Miyarrka Media, a group of Yolngu and Balanda (non-Aboriginal) arts and media practitioners based in Gapuwiyak in northeast Arnhem Land.

**SOUNDSCAPE, FILMSCAPE, LANDSCAPE**

This panel proposes three different approaches to the ‘scape’ in relation to experimentation and materiality. It works across disciplines while maintaining a level of formal coherence in each paper’s address. Through interconnections in these presentations, both overt and covert, we ask questions regarding the value and meaning of ‘the experiment’; the politics and values of materiality; the changing meanings of ‘laboratory practice’; and the ways in which these manifest through a kind of ‘expanded scape’. The presentations look at the notion of the ‘scape’ from different angles – film scholarship and practice; acoustic ecology and music criticism; and landscape architectural practice and theory.

**JON DALE**

Microphonies & Material(ism): Landscape, Sound and Socio-Politics

“When taking up the position of musician, I am compelled to ask questions along the lines of cultural criticism, political contingency and material effects. Likewise, at those moments of activist intervention (whether it be civil disobedience or community organizing), I wonder about the sounds around to what extent they contribute or hinder our work.” – Ultra-Red, *OnASoundBody*

Landscape offers potent ground for sound artists and noise-explorers to navigate questions around the socio-political function of sound/noise in the agrarian and urban field. And yet most sound artists obfuscate these questions, calling on transcendent poetics or Romantic notions of ‘traversing the land’ to frame their creative practice. From the acoustic ecology and soundscape studies parented by figures such as R Murray Schafer, Hildegard Westerkamp, and Barry Truax, through the romanticized-pastoral landscape composition and writing of Richard Skelton, and the digital-age field recording manipulations of artists like Lawrence English or Francisco Lopez, we encounter work that either romanticizes the
landscape or renounces the impact of urban environmental sound on the human corpus. These practices are also caught up within a notion of ‘experimental’ music/sound art which relates more to industrial channels of production and distribution than robust critique and hypothesis-based interrogation.

This paper asserts rather that ‘experimentation’ within landscape resides in a politicized notion of ‘site-reading / -listening’ that could perhaps exist in parallel to a Rendellian notion of ‘site-writing’. The ‘situatedness’ of the electroacoustic compositions of sound art collective Ultra-Red, and the queer readings of sonics of their comrade Terre Thaemlitz, also helps open up ways for reading landscapes as ‘enunciative of social relations’ in a manner which does not neglect spatiality, or the ocular and aural experience. In this way, we can shift discussions of materiality to an approach to ‘sounding the landscape’ embedded in historical materialism. A political mode of ‘dwelling’ that abjures the transcendent.

**BIOGRAPHY**

**Jon Dale** currently works in research coordination and management at the Victorian College of the Arts. He writes on music and culture for Uncut (UK), Signal To Noise (US), Dusted (US), and has recently contributed essays to the ACCA New 11 exhibition catalogue, and Un Magazine. He has also taught at the University of Adelaide and University of South Australia across critical theory, media, experimental film, literature, music, and visual arts, and is currently undertaking a PhD via the University of Adelaide on the politics of the body and marginality in British post-punk and industrial music of the late ’70s / early ’80s. He also runs the record label and publishing imprint Tristes Tropiques, and performs music.

**JO RUSSELL-CLARKE**

The Legacy of LandscapeUrbanism: experience over experiment

Landscape Urbanism’s claim to the experimental foreground of landscape architecture is now about a decade old. While the energetic critique of professional - or institutionalised - landscape practice which it encouraged has been a valuable goad to greater self-reflection in general, the movement has garnered criticism in its turn for both a failure to reflect on its own claims and, crucially, for a lack of projects that can be said to have successfully reflected those claims. LU’s interest in (ongoing) process and (evolving) system over (static) product demanded graphic experimentation that aligned with political concern for environmental flexibility and a theoretical exploration of ecological adaptability. It embraced new technologies and digital representation, producing images that seduced and stimulated young designers as well as student demands for new skills.

LU criticised the continuation of an outdated, romanticised vision of landscape characterised as ‘picturesque’ and sometimes ‘pastoral’, pursued by a romanticised vision of landscape architectural practice that was either
arrogantly heroic or insipidly servile. Yet it can be argued to have produced an equally romanticised vision of green-credentialed heroism and digitally-rendered beauty transposed effortlessly to an urban and post-industrial milieu; a vision, if not a radical politics, close to the original experiments of the picturesque in its concern for positioning and movement, and also to the early claims of Modernism, but stripped of the possibility of legitimate contestation. If ecology is the new opium of the masses, as Slavoj Žižek suggests, Landscape Urbanism is the preferred drug delivery mechanism for landscape architecture. Under its influence landscape design provides documentation of exciting explorations and proliferates enviable experiences. It no longer pursues experiments in material thinking.

**BIOGRAPHY**

Dr Jo Russell-Clarke is a registered landscape architect of the AILA. Following study at RMIT University she worked initially in a small Melbourne practice on award-winning projects and subsequently for a multinational firm with a focus on landscape infrastructure and suburban subdivision. She writes for professional and academic journals contributing regularly to Landscape Architecture Australia. Jo has lectured and taught at RMIT and the University of Melbourne. Her appointment with the University of Adelaide follows earlier guest lectures and other involvement with landscape architecture in the city. Her PhD interrogated the utopianism of suburban design and contemporary landscape architectural endeavour using a variety of frameworks to suggest an ongoing value - if not an urgent corrective need - for utopian thought and desire.

**DANNI ZUVELLA**

**A Different Kind of Red Light District: DIY film laboratories in the digital age**

For generations of artists, ‘the truth to materials’ was a powerful incentive to explore the unique and specific qualities of art media. Today, notions of revealing the ‘true nature’ of materials are regarded as a modernist idée fixe of little relevance to the concerns and aims of contemporary artists. Contemporaneous with the shift to postmodernity, amidst near-constant obituarising, film materials – celluloid (polyester) film stock, projectors and cameras - were routinely culled and jettisoned. Over the last two decades, experimental artists and filmmakers have gathered up this detritus, devising workshops and setting up ateliers and laboratories utilising the very equipment industry abandoned. These grassroots collectives continue to shoot, process, print, screen and distribute photochemical film formats.

My talk will address the experimental network that encompasses London, New York, Rotterdam, Oslo, Brussels, Berlin, Paris, Zagreb, Seoul, Daylesford, Bogota and Montevideo, against the immediate background of commercial laboratory closures and film stock discontinuation by manufacturers. The strength of the ‘laboratoires cinématographique artisanal’, especially in France, has
engendered much discussion, in which there seems to be broad consensus as to the symptomatic meaning of film in the digital age. Indeed, amongst the groups themselves it is commonplace to hear the analogy made between the use of film today and the place of engraving and printmaking at the end of the nineteenth century; that is, a shift from the industrial to the artisanal. Through a discussion of the work of these groups, I plan to explore how experiment figures in a contemporary practice grounded so readily in the past.

BIOGRAPHY

Dr Danni Zuvela is a Brisbane-based academic, writer, curator and artist who is hopelessly bound up in experimental film and video. She currently teaches Screen History and Research and New Communications Technologies at Griffith University, and has been involved with experimental and avant-garde cinema for a decade.

Her PhD research explored the history of “expanded cinema” and she has investigated the intersection of film, sound, art and performance through her work with the artists’ collective OtherFilm since 2004. Together with Sally Golding and Joel Stern, as OtherFilm she has been responsible for key re-stagings of historic expanded cinema performances and stacks of screenings, performance events, workshops and festivals (locations include the Australian Centre for the Moving Image; the Sydney Opera House; San Francisco Cinematheque; no.where.lab London; Tokyo Metropolitan Museum of Photography; and a former blue movie house in Perth). With OtherFilm she has been programming challenging and provocative moving image work for the Institute of Modern Art, Brisbane, since 2007. She has worked with projected light performances at numerous OtherFilm gigs including PsychoSubtropics, a version of which was held at Gertrude contemporary art space last year.

Independently she has curated work on landscape and film which showed at the Tate Britain and various other locations; has worked as a programmer and general film nerd at the Brisbane International Film Festival since 2000; and continues to somewhat obsessively track the work of numerous historical and contemporary film and video artists whose work she admires.

KEYNOTE LECTURE

JAMES CRUTCHFIELD & DAVID DUNN

Pattern Discovery: Insects, Sound & Climate

We explore two themes: science + art and art + science.

The first, science-driven theme considers the accumulating observational evidence that suggests an intimate connection between rapidly expanding insect populations, deforestation, and global climate change. We review the evidence, emphasizing the vulnerability of key planetary carbon pools, especially the Earth’s forests that link the micro-ecology of insect infestation to
climate. We survey current research regimes and insect control strategies, concluding that at present they are insufficient to cope with the problem’s present regional scale and its likely future global scale. We propose novel bioacoustic interactions between insects and trees as key drivers of infestation population dynamics and the resulting wide-scale deforestation. The bioacoustic mechanisms suggest new, nontoxic control interventions and detection strategies.

In the second theme, we recast the science-driven project as a collaboration between an artist and a scientist, discussing a number of the ancillary issues, concerns, and difficulties when bridging the two cultures.

BIOGRAPHIES

Professor James Crutchfield teaches nonlinear physics at the University of California, Davis, directs its Complexity Sciences Center, and promotes science interventions in nonscientific settings. He is mostly concerned with what patterns are, how they are created, and how intelligent agents discover them. He is also Vice-President and Co-Founder of the Art and Science Laboratory in Sante Fe, New Mexico where he collaborates closely with composer and artist David Dunn.

Until 2004 he was Research Professor at the Santa Fe Institute. Before SFI, he was a Research Physicist in the Physics Department at UC, Berkeley. Crutchfield has worked in the fields of nonlinear dynamics, solid-state physics, astrophysics, fluid mechanics, critical phenomena and phase transitions, chaos, and pattern formation. Current research interests center on computational mechanics, physics of complexity, statistical inference for nonlinear processes, genetic algorithms, evolutionary theory, machine learning, distributed intelligence, and quantum computation. He has published over 140 papers in these areas. http://cse.ucdavis.edu/~chaos/

Composer David Dunn has worked in a wide variety of audio media inclusive of traditional and experimental music, installations for public exhibitions, video and film soundtracks, radio broadcasts, and bioacoustic research. He rarely presents concerts or installations, preferring to lecture and engage in site-specific interactions or research-oriented activities. Much of his current work focuses on the development of strategies and technologies for environmental sound monitoring in both aesthetic and scientific contexts.

Dunn is President, Co-Founder and Program Director of the Art and Science Laboratory and President of the Acoustic Ecology Institute, both in Santa Fe, New Mexico. His compositions and wildlife sound recordings have appeared in hundreds of international forums, concerts, broadcasts, and exhibitions. Besides his multiple books, recordings and soundtracks, he has been anthologized in over 50 journals and books. Dunn was the recipient of the prestigious Alpert Award for Music in 2005. http://daviddunn.com/~david/
DAY TWO: SATURDAY 20 AUGUST

PLENARY

AMY BALKIN
Public Smog and Other Place-Based Projects

California-based artist Amy Balkin will discuss her work Public Smog, an atmospheric park, and other spatial projects. These include attempts to construct counterfactual spaces, and remap existing ones.

Public Smog (2004+) is a series of attempts to open a public clean-air park in the sky through economic and political activities. These include purchasing and withholding emission credits in regulated carbon trading schemes, and an attempt to add the Earth's atmosphere to the UNESCO World Heritage List. In the context of Australia's upcoming carbon tax and future carbon floor price, Public Smog is a consideration of the commodified atmosphere and how financial logic plays out in the sky.

The landscape as property, political participation and disenfranchisement, and environmental justice, connect Public Smog to her other counter-cartographic efforts. These include This is the Public Domain, an ongoing attempt to initiate a permanent global commons in rural Kern County, California; and Invisible-5, a self-guided critical audio tour of the I-5, California's main transport corridor.

Together, her projects are concerned with how landscape is produced, and the problems involved with producing other, politically dormant landscapes instead. They also run up against the discontented relationship between art and activism, and the stakes over the ongoing commodification of the landscape and just access to the world's common-pool resources.

BIOGRAPHY

Amy Balkin is an artist whose work involves land and the geopolitical relationships that frame it. Her projects include This is the Public Domain, an ongoing effort to create a permanent international commons, free to all in perpetuity, through the legal transfer of 2.64 acres of land near Tehachapi, California to the global public. Public Smog (2004-present) is an atmospheric park, opened through economic and political activities and gestures, such as purchasing and withholding pollution rights (NOx/CO2) in regulated emissions markets, and an attempt to add the Earth's atmosphere to the UNESCO World Heritage List. She was a collaborator on Invisible-5 (2006), an environmental justice audio tour along California's Interstate-5 freeway between San Francisco and Los Angeles. Her recent projects include a three-day participatory public reading in Manchester, UK, and a billboard project in Douala, Cameroon. She lives in San
Francisco and is a visiting lecturer at California College of the Arts and Stanford University.

MISCHA KUBALL  
Urban Lab - Site Specific Interventions in Public Spaces

Since the mid 1990’ Mischa Kuball states:  
Everything that moves in the city is ‘public’  
Everyone who moves in the city is ‘public’  
Every gesture made in the city is political!

Our responses to the dynamic construct we know as ‘public space’ are characterized by intervention, change, and acts of appearing and disappearing. Artists have responded to the changing character of public space, and the public has developed a new attitude towards the art it encounters in public places. It would be outlined the methodological and artistic aspects of the ‘city as a laboratory’ with a reference of selected, exemplary public-space projects. The thoughts mediate between projects, concepts and public perceptions and are thus an indispensable part of the public process involved in each intervention.

BIOGRAPHY

Mischa Kuball is a permanent lecturer and professor at KHM, Cologne, and associated professor at HFG/ZKM, Karlsruhe where he founded the Experimental Laboratories Minus One. The Dusseldorf-based artist has worked extensively in both gallery/museum and public space contexts for over two decades. He utilizes the medium of light to explore architectural space and its capacity to shape social and political discourse.

His works have been widely exhibited at venues that include the NTT Intercommunication Center in Tokyo (2008), Hamburger Kunsthalle (2007), the Jewish Museum, New York (2002), and the Bauhaus Dessau (1992). Temporary installations of his work have been installed at the entrances of the Museum K20K21 in Düsseldorf (2005), the National Gallery in Berlin (1999), and most recently at the Centre Pompidou-Metz (2010). He has also positioned site-specific installations on bridges in Berlin and Geneva, and in/on a 23-story office building in Düsseldorf. His recent solo exhibitions include Platon’s Mirror at ZKM Karlsruhe in 2011, City Portrait at the Contemporary Art Museum in Toyota, Japan (2008), and Re: Mix / Broca II (Letters / Numbers) at the Experimental Art Foundation, Adelaide, Australia. Kuball also contributed two site-specific installation for détournerment 2009, a collateral exhibition at the Venice Biennial 2009.  

CHRIS BOSSE
MORE WITH LESS: Digital cathedrals and the eco-city of the 21st century

Chris Bosse will speak on architectural innovation, invention, experiment and failure. His architecture firm LAVA was founded in 2007 as a network of creative minds with a research and design focus and with offices in Sydney, Shanghai, Stuttgart and Abu Dhabi.

LAVA explores frontiers that merge future technologies with the patterns of organization found in nature and believes this will result in a smarter, friendlier, more socially and environmentally responsible future. The potential for naturally evolving systems such as snowflakes, spider webs and soap bubbles for new building typologies and structures has continued to fascinate LAVA – the geometries in nature create both efficiency and beauty. But above all the human is the centre of their investigations. Structure, material and building skin are three areas LAVA believes that architecture can learn so much from nature. Projects incorporate intelligent systems and skins that can react to external influences such as air pressure, temperature, humidity, solar-radiation and pollution.

LAVA has designed everything from pop up installations to master plans and urban centres, from homes made out of PET bottles to retrofitting aging 60s icons, from furniture to hotels, houses and airports of the future.

BIOGRAPHY

Chris Bosse is an architect and an Adjunct Professor of Architecture and Research Innovation fellow at the University of Technology Sydney (UTS) in Australia. His architectural practice is based on the computational study of organic structures and resulting spatial conceptions. Bosse’s research lies in the exploration of unusual structures pushing the boundaries of the traditional understanding of structure and architecture with digital and experimental formfinding. Bosse was an associate at PTW architects in Sydney, where he was fundamental in developing the Watercube, National Aquatics Centre in Beijing among several other international project and later co-founded L.A.V.A., the laboratory for visionary architecture.

Bosse won an award for speculative design in the ZEROprize Re-Skinning Award at the World Urban Forum in Rio de Janeiro in 2010 with a plan to transform the University of Technology’s tower in Ultimo from into a sustainable, glowing white building. Led by Bosse, L.A.V.A. recently won the bid to design the city center for the sustainable eco-city Masdar in the United Arab Emirates (UAE). LAVA imagined an outdoor city-center based on traditional European public plazas that would encourage social interaction.

URBAN CONSTRUCTION

RICHARD GOODWIN
Denatured Contingency: The New Engine of Sustainability

Definitions:
Denatured
To deprive (something) of its particular nature.
To render unfit for drinking or eating by adding a poisonous substance without altering the usefulness for other purposes.
To treat by chemical or physical means, such as by adding acid or heating.
Contingency
A contingent event: a chance, accident, or possibility, conditional on something uncertain. Something incidental to a thing.
Sustainability (development)
Economic development designed to meet the present needs while also taking into account future costs, including costs to the environment and depletion of natural resources.
Hypothesis:
By depriving “contingency” (the “shit happens” syndrome) of its external status in relation to sustainable art production and in relation to the idea, it will follow that the incidental, with all its latent energy, becomes the fuel and substance of sustainability. This shift will also lead to a revolution in aesthetics.
Action:
To prove the hypothesis beyond the virtual world.
Relinquish modes of design and art practice which conform to the ideal and philosophy of control (Modernism), both aesthetically and functionally. In other words, embrace the contingency or lack of total control associated with art and design production, as an alternative aesthetic and functional ideal.
Similarly we might relinquish our need of any aesthetic judgements based on classical ideals such as that of Euclidean geometry. This does not mean the elimination of aesthetics but rather a new aesthetic for a new age, yet to be defined. The roots of this new aesthetics will be the more complex geometries afforded us by the computer combined with a better understanding of the science of Quantum Mechanics.
Territory:
Art, the city and its suburbs, and the global networking or communication systems.
Disciplines:
Art
Architecture
Agriculture
The three “A's”.

BIOGRAPHY
Dr Richard Goodwin is Professor at the College of Fine Arts, UNSW, Chair of The Porosity Studio COFA, UNSW and Visiting Professor Donghua University, Shanghai, China.

Over 30 years of practice as an internationally exhibiting artist and architect, Goodwin has sustained a prolific and award winning practice provoking
boundaries between art and architecture. In 1996 Goodwin established the Porosity Studio at the College of Fine Arts within the University of New South Wales where he currently holds the position of Professor of Design. He teaches via intensive, international and multi-disciplinary studios providing a unique context for the renegotiation of delineations between art, architecture and urbanism. A United Kingdom based series of Porosity studios have recently been fully sponsored by the British Council.

In 2002 Goodwin was awarded the prestigious Discovery Grant from the Australian Research Council to fund the development of his ideas on Porosity. This research continues today under a second Australian Research Council Linkage grant in collaboration with architecture academic Russell Lowe entitled, Real-Time Porosity: Using Computer Gaming Technology to Map and Analyse Pedestrian Movement in Public and Private Space. Major prizes include: The National Sculpture Award 1985, The Sculpture by the Sea Water Prize 2003, Helen Lempriere Award 2004 and the Blacket Award 2004. His work is held in major collections including the Art Gallery of NSW, the National Gallery of Victoria and the Nuremburg Museum. Goodwin continues a practice of provocation and risk.

HEIKE KLUSSMANN & THORSTEN KLOOSTER
BlingCrete

BlingCrete is a new material development. BlingCrete is the prototype of a process of transdisciplinary research. The development of BlingCrete is understood as an exchange process in which the specific knowledge and working methods of the artistic and scientific disciplines are used in order to place them in new contexts, apply them, and create productive friction between them. In an investigative and imaginative process, a variety of fields are opened up in dialog with other disciplines. Our common research interest is the initiation and use of mutual impetuses for working out specific results, as well as the investigation of work processes (procedures and production) in art, science and technology, and their inherent similarities, parallel developments, and differences. We are curious whether new relationships can be developed, solutions and processes found, and questions viewed from another perspective.

The relation between material and process is like that between the presented side and the backstage situation. The presented side is the “bling”: the work, the application, the architecture, the exhibition, the presentation, what radiates. Backstage is the “crete”: the work process, the wrestling for a solution, the matrix.

BlingCrete is being developed in a transdisciplinary research project at the University of Kassel. The project combines expertise from the fields of visual art, architecture, interaction and product design, experimental physics, and materials research and development; and it places itself in the area of current
developments that can be termed “intelligent surfaces”. The design theoretician Ramia Mazé describes these developments as a shift of attention from the appearance of a material to the performance of surfaces: "As structural, chemical and computational properties are integrated at nano-, micro- and macro-scales, even the most traditional material might become more dynamic."

If the project’s focus was initially on the topic of the surface was the subject at the beginning of the project, in the course of the process it has shifted to a dialog level. The concept of the surface is equally important in technical research, in the arts, and in the humanities, and it explores disparate content. In our view, this many-layered quality is suitable to bring together an important spectrum of current developments in a variety of disciplines. In our everyday experience, the things surrounding us are built up of material. At first glance, surfaces define their limits and seem to close off the interior life of things. But the natural philosophers of Antiquity were already aware of the enigmatic, ambiguous quality of this perception. They speculated that material was not a continuum at all, but consisted of tiny, ultimate building blocks that were “átomos”, or indivisible.

The strength of artistic activity lies in the tension between autonomous procedure and interaction, on the one hand, with the real conditions of our world, on the other. We see a special quality of our work precisely in this interstice: not being exhausted in the factual, but also not being the vanishing point of another, imagined world. Specific intervention in very specific contexts determines our acting and questions the self-evidence of patterns of perception that are tied to terms like invention, experiment, art, and technology. Their meaning and purpose are first posited in processes of negotiation, which involve changing directions, overlaps, and distinctions from a context. The point is to open up other possibilities of perception, to play with positions, and to give fluidity to systems.

BIOGRAPHIES
Heike Klussmann is an artist and Professor of Art and Architecture at the University of Kassel, Germany. She is a graduate of the University of Arts Berlin and previously studied at the Art Academy Düsseldorf. Her work was recently shown at Berlin’s Museum of Modern Art, Photography, and Architecture and is part of its collection. She has had recent exhibitions at the Temporäre Kunsthalle Berlin, Zeche Zollverein Essen, and KW Institute of Contemporary Art. Her current work is on display at the Architecture Forum Aedes Berlin. She has won many awards, including First Prize in the International Architecture and Art Competition of the State Capital Düsseldorf for the new subway line Wehrhahnlinie Düsseldorf; the Villa Aurora Artist Grant, Los Angeles; the Goslar Kaiserring Grant; and a work stipend and a foreign residency stipend from Berlin’s Senate for Science, Research, and Culture. Klussmann has given numerous workshops and public lectures, including at the Bauhaus College Dessau, Academy Solitude Palace Stuttgart, and Bau Munich. Since 2009, Klussmann has headed the transdisciplinary working group “BlingCrete”, which is devoted to the
experimental development of new materials concepts in the context of art, architecture, and science.

www.klussmann.org

Thorsten Kloosterm is an architect in Berlin and the editor of the book “Smart Surfaces – Intelligente Oberflächen in der Architektur und im Design” (intelligent surfaces in architecture and design). From 2002 to 2007, he taught design at the Brandenburg Technical University Cottbus. One of his research areas is New Materials, with an emphasis on functional surfaces. Since 2009, together with the artist Heike Klussmann, he has headed the working group “BlingCrete” at the University of Kassel, which is devoted to the development of new materials concepts. One emphasis is on the functional design of concrete surfaces. Along with architecture and art, “BlingCrete” unites expertise from the areas of product design, materials technology, and nanotechnology.

www.task-architekten.de

Research Partner
Prof. Dr. Arno Ehresmann / Institute for Physics / Experimental Physics IV
www.physik.uni-kassel.de/ehresmann.html

TIM SCHORK
Engaging Material (In)formation

This paper will explore Medium and Materiality, and specifically the notion that new mediums open up entirely new material, tectonic and spatial possibilities for architecture. Historically, an important limitation to what has been regarded as being possible in architectural design have been the tools, techniques and media employed by designers to represent 3-dimensional form. The fundamental nature of this relationship is captured in the idea that architects tend to draw what they can build, and build what they can draw. Inventions such as the compass, perspective drawing, projective geometry and the computer have led to shifts in the design of buildings and to new theoretical and perceptual ideas and value systems employed to generate and evaluate designs. So any new tool, technique and medium can add to the range of ways in which we conceptualise and perceive space and form and the way architecture can be done.

PROCESSES OF FORMATION
Architecture is now increasing its understanding of the underlying make-up of complex organisational structures, particularly in the area of materiality, an important source of innovation. An accompanying adjustment of the tools,

methods, models, and media employed by designers to develop appropriate design strategies is underway; these digital tools are better able to describe the complex and novel underlying organisational structures that are required. This approach is characterised by the design of low level (local) processes within systems that lead to high-level (global) configurations.

For a digital model to facilitate a persistence of materiality it needs to move beyond the precise description of explicit geometry to deploy, in some way, the behaviour of matter within processes of formation. Rather than manipulating geometric entities like lines, surfaces and solids, the possibility is to work with material logics: relational topologies that connect the shape of matter directly with the influence of fundamental physical forces upon it. The idea that we might work with material logics emerges from the capacity for digital representations to encode and deploy relationships, tendencies and capacities at a local level over time, and thereby solve (co-evolve geometry with materiality) rather than simply impose form.

**PRICKING**
The work *Pricking* will be exhibited in International Lace Award ‘LoveLace’ at the Powerhouse Museum in 2011. It is a real-time, interactive behavioural drawing machine developed with the open source programming framework Processing. *Pricking* explores this new connection between medium and materiality through force directed algorithms, which transcend traditional means of paper and open up a rich fertile ground for innovative design. Embedding a material intelligence within a process of emergent phenomena through the use of behavioural-based computational models, the work invite visitors to influence and participate in the ongoing generative process.

The purpose of *Pricking* is to share and engage further with notions of complexity, ephemerality and indeterminacy, as well as material presence within architecture. It aims towards new conceptualisations of the connection between the ideal and the actual, medium and materiality.

**BIOGRAPHY**
Tim was born in Mannheim, Germany 1976, lives and works in Melbourne. Tim is an architect, lecturer, design critic and author. In 2005 he co-founded the interdisciplinary design firm Mesne Design Studio and he is currently a lecturer in the Department of Architecture at Monash University. Internationally renowned for his design excellence and explorative, creative and innovative research, his work combines a sophisticated design philosophy with advanced technology in order to create novel design solutions that address contemporary social and cultural agendas.

Tim’s research explores the development of integral design strategies at the Nexus of architecture and information technology through the use of computational design strategies and craft-based as well as computer-aided means of making. He has taught and lectured at the Architectural Association in London, Graduate School of Design at Harvard University, Royal College of Arts in London, the University of Arts in Berlin and RMIT University in Melbourne.
His work has been part of a range of international and national exhibitions including: NEXUS, featured in the education program parallel to the exhibition NETWORKS (cells & silos) at Monash University Museum of Art Melbourne, 2011; Nascent Present, State of Design Festival, Melbourne, 2009; Abundant, Object Gallery, Sydney, 2009; Abundant: Australian Exhibition at the 11th International Venice Architecture Exhibition la Biennale di Venezia, Venice, Italy, 2008; Generatorx_2.0: Beyond the Screen, DAM Gallery in Berlin, Germany, 2008; Emerging Talent, Emerging Technologies, 2nd Architecture Biennale Beijing, Beijing, China, 2006; (Im)Material Processes: New Digital Techniques for Architecture, 3rd Architecture Biennial Beijing, Beijing, China, 2008; Homo Faber: Modelling Ideas, Melbourne, Australia, 2007; Homo Faber: Modelling, Identity and the Post Digital, Melbourne, Australia, 2008; ScriptedByPurpose, F.U.E.L Collection Gallery in Philadelphia, USA, 2007; State of Design: ScreenResolution, Melbourne, Australia, 2007; Responsive Architecture: 9th Annual Subtle Technologies, Toronto, Canada, 2006; Skins of Intimate Distance, State Library of Victoria, Melbourne, 2003

Pricking, his latest interactive work, in collaboration with supermanoeuvre and Indae Hwang has been shortlisted for the International Lace Award ‘LoveLace’ and is part of the collection of the Powerhouse Museum in Sydney.

NEW MATERIALITIES

VICTORIA VESNA
Vibration Matters: Collective Blue Morph Effect

“Before I sink
Into the big sleep
I want to hear
I want to hear
The scream of the butterfly”
(Jim Morrison, “When the Music is Over”, 1969)

Once an artist takes on the challenge of making the invisible visible, or the inaudible audible, s/he is almost immediately thrown into the realm of energy at the edge of art and science. The established art world based on visual culture finds it difficult to place this kind of work. The scientific community, used to
working in this realm in a reductionist way, finds it hard to comprehend. Yet the
public seems to be drawn to artwork residing “in between”, and there seems to
be a universal need for a connection to the spiritual realm beyond what
established religions offer. As many speculative ideas in the West circulate
around ideas of energetic approach to matter in general, particularly the body
and mind, alternative medicine and other Eastern philosophies are thriving.
Nanotechnology mixing with the quantum fields, inexplicable to the rational
reductionist minds, opens up new territories of vibration matters that brings us
back to poetic expressions.

The Ancient Greek word for “butterfly" is ψυχή (psychē), primarily means “soul"
and/or “mind” and the sensation of feeling “butterflies in the stomach” is most
often experienced prior to important events, related to nervousness and can be
experienced in situations of impending danger. It is possible that the condition,
frequently felt by an oncoming new experience or relationship, is caused by a
surge of adrenaline. One could look at the current condition of humanity as a
collective state of nervousness, especially in relation to the current economic
ecological crisis that is global. The “butterfly effect" has been very much in the
public imagination in the last two decades with numerous movies, Sci-Fi novels
and even games, center plots around the idea that one butterfly could have a
far-reaching ripple effect in the subsequent historic events.

**BIOGRAPHY**

**Victoria Vesna** is a media artist, Professor at the Department of Design | Media
Arts at the UCLA School of the Arts and director of the UCLA Art | Sci center.
Currently she is Visiting Professor at Art, Media + Technology, Parsons the New
School for Design in New York. Her work can be defined as experimental creative
research that resides between disciplines and technologies. She explores how
communication technologies affect collective behavior and how perceptions of
identity shift in relation to scientific innovation. Her most recent experiential
installations -- Blue Morph, Mood Swings and Water Bowls, all aim to raise
consciousness around the issues of our relationship to natural systems. Other
notable works are Bodies INCorporated, Datamining Bodies, n0time and Cellular
Trans_Actions. She has long-term collaborations with a nanoscientist, a
neuroscientist and Buddhist monks.

Victoria has exhibited her work in 20+ solo exhibitions, 70+ group shows, published
20+ papers and gave a 100+ invited talks in the last decade. She is recipient of
many grants, commissions and awards, including the Shanghai International Art
Science exhibition award for best art work in 2008, the Oscar Signorini award for
best net artwork in 1998 and the Cine Golden Eagle for best scientific
documentary in 1986. Vesna's work has received notice in numerous publications
such as Art in America, National Geographic, the Los Angeles Times, Spiegel
(Germany), The Irish Times (Ireland), Tema Celeste (Italy), and Veredas (Brazil)
and appears in a number of book chapters on media arts. She holds a PhD from
the University of Wales and is the North American editor of AI & Society journal
and author of Database Aesthetics: Art in the Age of Information Overflow
edited volume (Minnesota Press, 2007), and recently published Context Providers:
PAULA DAWSON

Holographic Materiality

This talk will explore types of hypotheses, which can arise from viewing holographic imagery. Holographic images exist through the diffraction of light from various types of nanoscale structures which are optically or mechanically formed. Optical formation of the hologram by the direct exposure of objects to laser light results in a virtual image of extreme spatial verisimilitude. The experimental nature and evolution of holographic imaging will be demonstrated by highlighting three of my works. There’s No Place Like Home (1980) which engages the viewer with the simultaneous existence and non-existence of a familiar place, a lounge room, by moving between sides of the holographic picture plane. Extending Baudrillard’s prediction “you bend over the hologram like God over his creation: only God has this power of passing through walls, through people, and finding Himself immaterially in the beyond” viewers of Shrine of the Sacred Heart 1997 at St Brigid’s church Coogee, could test the intangibility of a flame like form by placing their hands into the space of the virtual image. Luminous Presence 2007 made from thousands of holographic pixels, each a single frame of a computer graphic environment of translucent raster scanned figures illuminated by rays of light, animates light and darkness. By evidencing the ontology of holographic characters in film, this work takes its place as material evidence, a ‘real’ hologram.

BIOGRAPHY

Paula Dawson is Associate Professor at the College of Fine Arts, UNSW. Her art works simulate and/or evoke complex states of being. Dawson has held residencies at the Laboratoire de Physique et Optique Besancon, France, RMIT applied Physics Dpt. Melbourne Australia, the Holocentre, New York and the Centre for Advanced Visual Studies Massachusetts Institute of Technology, Cambridge Mass. Her first major holographic work, There’s No Place Like Home, 1980 is in the collection of the National Gallery of Australia, Canberra http://nga.gov.au/exhibitions/Dawson/index.htm and her best know installation To Absent Friends, a bar room in which holograms replace all reflective surfaces, was awarded the Grand Prix of the First High Tec Art Biennale in Nagoya, Japan 1989. Many of her holographic works were shown at Virtual Encounters her retrospective exhibitions at Macquarie University Galley, Sydney and Newcastle Region Gallery, Newcastle 2010 http://pauladawson.com/. Dawson’s PhD of 1999 dealing with the spatial and temporal properties of the concrete holographic image led on to major ARC funded research projects investigating the pictorial agents of darkness http://www.shaodwyfigures.com ,light and currently modelling light. Dawson’s bronze hologram mirror portrait projects which combine aspects of early caryatid mirrors (Egyptian, Greek Roman) with...
Chinese magic mirrors, are ongoing
http://www.portrait.gov.au/site/collection_info.php?searchtype=basic&searchstring=general&irn=995 Currently Dawson is an Associate Professor in the department of Painting and Drawing at the College of Fine Arts, University of New South Wales, Sydney.

PAUL THOMAS
New Material Agency

The presentation will focus on the Atomic Force Microscope and the role that is having in redirecting the way we sense the material world. The focus on how art is rethinking its ocularcentrality and the agency of its material constructs. The privileged position that art has held is being challenged by nanotechnology; confronting the very core of its relationship with the material world. The talk will examine and highlight shifts that need to occur in our conscious understanding of material boundaries, territories and dimensions. Nanotechnology research forces us to reflect and reconfigure our perception of self as matter in relationship to all other material and immaterial things, including thought.

BIOGRAPHY
Dr Paul Thomas, has a joint position as Head of Painting at the College of Fine Art, University of New South Wales and Head of Creative Technologies at the Centre for Culture and Technology, Curtin University. Paul has chaired numerous international conferences and is co-curating a show of Australian artists for ISEA2011. In 2000 Paul instigated and was the founding Director of the Biennale of Electronic Arts Perth.

Paul is an artist, curator, academic and writer who has been working in the area of electronic arts since 1981 when he co-founded the group Media-Space. Media-Space was part of the first global link up with artists connected to ARTEX. From 1981-1986 the group was involved in a number of collaborative exhibitions and was instrumental in the establishment a substantial body of research. Paul’s research project ‘Nanoessence’ explored the space between life and death at a nano level. The project was part of an ongoing collaboration with the Nanochemistry Research Institute, Curtin University of Technology and SymbioticA at the University of Western Australia. The previous project ‘Midas’ was researching at a nano level the transition phase between skin and gold. In 2009 he established Collaborative Research in Art Science and Humanity (CRASH) at Curtin http://crash.curtin.edu.au

HEALTH/BODY
Sherryl Ryan
Art under the microscope: artist and scientist observing cancer histology using a two-head compound microscope

Culture at Work (CAW) is a Research Institute in Sydney founded in 2008 offering collaborative art science residencies. Sherryl Ryan, artist founder of CAW and resident artist at the National Breast Cancer Foundation (NBCF), has an interest in breast cancer research. A/Professor Chris Ormandy who leads The Mammary Development Group at the Cancer Program in the Garvan Institute has been collaborating with the artist on this pathway. In that context, the artist had the opportunity to visit the Garvan and to observe histology sections of mice mammary tissue with the scientist David Gallego-Ortega, PhD. Genetically engineered mice have allowed the investigators to examine the effects of specific genes on the development and progression of mammary tumours. In this study, biopsies collected from a luminal breast cancer model (PyMT) have been analysed. 5µm sections of paraffin embedded normal mammary glands and breast cancer tumour biopsies were stained using the Haematoxylin & Eosin technique (H&E) and immunohistochemistry (IHC) labeling. These methods stain the cellular nuclei in blue and the cytoplasm and other extracellular compounds in a range of pink, in the IHC, the cellular markers will appear in brown. The histology sections were analysed and photographed using a two-head Leica Microsystems DM-E Compound microscope coupled to a high-resolution camera, collaboratively by the artist and the researcher a selection of images was performed. As a result, and besides the scientific interest of the images, a strong artistic imprinting is included in every picture. Discussions about the visual implications viewed within the histology sections between scientist and artist while observing through the two-head microscope created a new art science paradigm leading to complex analysis of how cancer may be connected to systems in the universe. An outcome of the collaborative research was an exhibition of photographs at CAW in March 2011.

BIOGRAPHY
Sherryl Ryan is a professional artist from Melbourne and CEO Culture at Work. She studied Fine Art at RMIT and a Post Grad Fine Art at COFA UNSW and Education at Victoria College Melbourne with a Masters in Education from UNSW. Sherryl has developed a research interest in Vygotsky, the relationship between artistic practice and science, creativity in thinking and learning and collaborations with artists and scientists. Sherryl has worked with many arts organisations over 20 years including The State Library, The Australia Council for the Arts, Museum of Contemporary Art, Australian Network for Art and Technology, The Performance Space, Object: Australia Centre for Craft and Design, and as Deputy Coordinator of the IdEAS (Interdisciplinary Enrichment Art and Science) project with the University of New South Wales, The Australian Museum, Object, The Powerhouse Museum and CSIRO. She worked part-time at the Art Gallery of NSW for ten years developing education programs for disadvantaged, Indigenous and gifted and talented children. She is also the Director of a not-for-profit art
Michael Garbutt
The Heraclitus Project

The therapeutic, calming effects induced by the observation of Heraclitean motion (i.e., types of movement that are always changing but always the same, e.g., leaves fluttering in a breeze; fish swimming in an aquarium) are well known (Katcher and Wilkins 1993; Kaplan and Berman 2010).

However, it remains uncertain whether the observation of non-natural sources of Heraclitean motion (e.g., cars on a distant freeway, curtains in a breeze) is more or less effective than the observation of natural objects. Also, it is unclear if the benefits of Heraclitean motion observation (HMO) by either natural or human-made stimuli can be obtained via video representations instead of unmediated experience.

To investigate these questions, I have developed the Heraclitus Project, a series of Heraclitean motion videos featuring natural and non-natural objects. These extended single shot video are designed as art works in their own right but also as therapeutic tools for individual and group use particularly amongst groups such as prisoners and nursing home residents who have restricted access to outdoor spaces.

During the conference I will report on my ongoing research/art and project Heraclitean videos which participants can experience for themselves, as video art and as sources of calm delight and attentional restoration.

REFERENCES


BIOGRAPHY
Dr Michael Garbutt is a lecturer at the College of Fine Arts, UNSW. He is interested in experiencing, designing and representing interior and exterior spaces, so urban design, landscape design, architecture, psychology, painting, drawing
and video are all a part of my practice. I’ve made a series of programs entitled Garbutt’s Way for the ABC TV on architecture and am now Global Design Director for the Health Television Network, a producer of multi-platform interactive programs for teaching and learning in the health sector. My most recent work focuses on understanding, representing and challenging scanpaths (the direction of our gaze) in natural scenes.

**LEAH HEISS**

**Therapeutic Art Practice: How experimental art practice can radically inform the development of therapeutic technologies**

Through this paper I will investigate the expansion of innovation when arts practice approaches inform the development of therapeutic technologies. Within the context of this paper experimental art practice refers both to ways of making work and thinking about work. ‘Ways of making’ encompasses such artistic methods as the generation of iterative models; material-led experimentation; workshop-style hands-on brainstorming; problem solving through making prototypes; and trans-disciplinary approaches to making work. ‘Ways of thinking’ focuses on the use of theoretical framing to drive the making of artwork. These theoretical structures might include models of sensory augmentation and considerations of empathy between the technology and the user. While such framing is not uncommon in the making of body-focused artwork it is highly unlikely to inform the development of therapeutic technologies.

I will investigate the impact that experimental art practice can have on the development of therapeutics through the lens of two projects. The first is Diabetes Jewellery, developed by the author in collaboration with Nanotechnology Victoria in 2008. The Diabetes Jewellery project involved the creation of jewellery-based wearables that utilise NanoVic’s transdermal patches to replace syringes for drug delivery. These patches enable pain-free and continuous delivery of therapeutic drugs - for example, insulin - in a convenient format. The Diabetes Jewellery project illustrates the advantages of having an artist in-house through a residency scenario, to respond to complex technologies and make creative works. Through Diabetes Jewellery the positioning of the device as an intimate jewellery artefact meant that from the outset the device was concerned with issues of empathy and connection between the user and the technology. Thus, the ensuing device has a range of affordances that would not normally be part of a drug delivery mechanism.

The second case study, Seed Sensor, illustrates how experimental ways of making and thinking can help to develop therapeutic technology design (form, functionality, and interface) before a commitment to the ‘hard’ technology is made. In this example, experimental art practice lays the groundwork and parameters for the development of the technology. The ‘Seed Sensor’ is a swallowable device that detects gas fluctuations within the body (methane,
carbon dioxide etc.) that may be an indicator of undiagnosed disease. The 'seed' has a dissolvable coating and unfurls like a flower within the digestive system to take readings before folding up again and moving to another area of interest. The design challenge of the seed sensor is to develop an element that can slow down periodically then speed up again. I am actively using experimental art practice approaches to develop the Seed Sensor including: generating iterative models; material-led experimentation; workshop-style hands-on brainstorming; and problem solving through making prototypes.

**BIOGRAPHY**

*Leah Heiss* works at the intersection of art, design and technology - utilising advanced technologies to develop potent human scale projects. Her research involves developing technology augmented jewellery, garments and devices which facilitate intrapersonal and interpersonal understanding. Her Diabetes Jewellery, developed in collaboration with Nanotechnology Victoria, received wide media exposure across the US, Canada, China, and Europe and on Australian television, radio, and in print. Leah has extensive knowledge of next-generation materials and processes and an arts practice approach to the making of work, particularly an emphasis on communicating work through exhibition and discussion in the public realm. Her research, practice, and teaching are transdisciplinary and her work has been exhibited and presented both locally and globally.

**ECOLOGY/SUSTAINABILITY**

*STEPHEN HEALY*

Ethics for an Experimental Age

The problem is that while we know how to conduct a scientific experiment in the narrow confines of a laboratory, we have no idea how to pursue collective experiments in the confusing atmosphere of a whole culture (Latour, 2003: 3).

For Latour a distinguishing characteristic of the present is the way cold, detached ‘matters of fact’ are, all too rapidly, morphing into warm, entangled ‘matters of concern’ in which everyone, and everything, are implicated. His solution is to effect the building of a ‘good common world’ accommodative of these entanglements deploying the insights and skills of scientists, politicians, economists, moralists and diplomats (Latour, 2004). While the inherent capacity of art to embrace entanglement and connection suggests a focal role in securing the ‘collective experiments’ characteristic of our age questions remain regarding how these are to be configured and performed. This paper focuses upon the question of how the efficacy and ethicality of these ‘experiments’ might be conceived and collectively authenticated.

Most fundamentally this requires that the collective performing these ‘experiments’ embraces broader civic society, most particularly those with a legitimate stake in anticipated outcomes. This enables ‘partial perspectives’ to
be brought to bear whose specificity, granted by location and embodiment, has the potential to provide ‘more adequate, sustained [and] objective transforming accounts of the world’ (Haraway, 1995: 182). These ‘views from somewhere’ (1995: 187) both help to ground experiments situationally and facilitate the deconstruction of the all-seeing ‘gods eye view’ from nowhere, which constitutes conventional scientific objectivity (180). The efficacy and ethicality of such ‘collective experiments’ is then secured by how they serve those with plenty to lose and much to gain from them. These arguments are explored using the example of a number of collective experimental art initiatives focused upon the achievement of environmental sustainability.


BIOGRAPHY

Dr Stephen Healy is a Senior Lecturer in the School of History and Philosophy and Co-coordinator of the Environmental Studies Program of UNSW’s Faculty of Arts and Social Science (FASS). He is also Research Coordinator (FASS) of UNSW’s Centre for Energy and Environmental Markets. A Physicist and Engineer by training he has specific interests in transdisciplinary endeavours across the sciences, engineering and arts. He has worked for Greenpeace International, the NSW EPA and his research interests encompass: climate change; energy; risk/uncertainty; public participation and innovative approaches to socio-materiality.

LINDA WILLIAMS

Environmental art, the Aeolian harp and Gregor’s metamorphosis

This paper will address two related positions in eco-critical theory in response to the works of Australian environmental artists John Wolseley and Harry Nankin. The first arises in response to Timothy Morton’s call for the kind of art production that might express a ‘dark ecology’. Morton argues for a critical ecomimesis (evocation of the ecological subject) pursued through an ‘intersubjectivity’ involving an attempted ‘collapse of aesthetic distance’ between artist and the world. The second related position pivots on the question of the viability of Carey Wolfe’s reading of posthumanism. The potential reconfiguration of standard anthropocentric models of time that may be inferred from these theoretical positions has an analogy in the ways these artists sustain experimental reconfigurations of temporal shifts in the elements, the earth and the biological field within specific sites. Even the traces of the brief lives of creatures largely held
to be mundane such as the ants, dragonflies, spiders or lizards that enter their artworks evoke models of deep time that have a stronger affinity with natural history and astronomy than with the more typical temporal values of humanism. Nevertheless, even with the kind of aesthetic experiments that remain open to unforeseen encounters with non-human biosemiotics, the problem of closing the aesthetic distance between the artist and the world remains unresolved, along with the more general question of humanist values. The paper offers a brief reflection on the theoretical causes of some of these unresolved problems, and concludes with reference to von Uexell and Kafka.

BIOGRAPHY
Linda Williams is Associate Professor of Art, Environment and Cultural Studies at RMIT University where she leads the Art & Environmental Sustainability research cluster, and Spatial Dialogues: Public Art & Climate Change- an ARC Linkage project. Her current research focus is on the role of the arts and humanities in relation to the cultural adaptation to climate change.

LYNDAL JONES
Propositions for an uncertain future: The Avoca Project: art, community and climate change

Why propositions? The importance of propositions to experimentation lies in their suggestion of possibility. They are offers made to address ideas differently. And they can be tested. Unlike questions, however, which need closure in the form of answers, they remain offers. No matter what the result is of their testing, no matter how transformed they become, they remain open.

It is thus propositions, not questions, which underpin and become the core business of my art projects.

In the highly charged arena of climate change, haunted by its lack of answers, it is thus art-as-proposition that enables me as an artist to bring together artists, climate change activists, scientists and residents in the small town of Avoca in central Victoria to work creatively with the complexities of what we no longer like to refer to as ‘global warming’.

In this 10-year research project (begun in 2005), whose central site and subject is a very old house with attitude, the propositions that underpin it have continually elaborated as I have been taught by the house, the townspeople and the changing nature of the issue itself to become more nuanced in my focus. This presentation will address these elaborations in an approach that necessarily speaks, not only to ‘propositions for an uncertain future’, but also to what we currently agree might constitute ‘experimentation’, ‘collaboration’, and ‘community’ and perhaps even what we understand to be ‘art’.

BIOGRAPHY
Lyndal Jones is an artist who focuses on context, place and empowerment through very long-term projects involving performance and video installation. She received a “Keating” Fellowship (1993–1996) for her art project on Charles Darwin and sexual selection, represented Australia at the 2001 Venice Biennale and had a survey exhibition throughout the Australian Centre for Contemporary Art, Melbourne in 2008. Her works have been shown in major exhibitions throughout Australia, Europe, Asia and the U.S.

She has a professorship in the School of Media and Communications at RMIT University where she teaches research strategies to post-graduate art, media, communication and architecture students.

The Avoca Project: Art, Place and Climate Change, her current long-term research project (2005-2015), addresses climate change action at the international level from the perspective of a small Australian country town in central Victoria.

NIGEL HELYER with JOHN POTTS
EcoLocated – and other adventures in the wide blue yonder

Abstract TBC

BIOGRAPHY

Dr Nigel Helyer (a.k.a. DrSonique) is an independent sculptor and sound-artist. He is the director of a small multidisciplinary team Sonic Objects; Sonic Architecture which has forged an international reputation for large scale sound-sculpture installations, environmental public artworks, museum inter-actives and new media projects.

His practice is strongly interdisciplinary, linking a broad platform of creative practice with scientific Research and Development in both Academic and Industrial contexts, and he maintains an active interest in critical and theoretical debates.

Nigel is a longstanding collaborator with and advisor to the SymbioticA lab of the University of Western Australia, realising such projects as GeneMusik a biological music remixing system, the insect installation Host and as the Artistic Director of the infamous LifeBoat project shown in Oslo Fjord 2004, on a Baltic cruise ship during ISEA 2004 and in Zagreb 2006.

He has also worked as an artist/researcher at the Paul Scherrer Institut, Switzerland (as part of the Artists in Labs programme), with the Tropical Marine Research Labs at the National University of Singapore and he maintains a working relationship with the Exploratorium Museum in San Francisco. Nigel has held visiting Professor positions at the School of the Art Institute of Chicago, Stanford University, the department of Architectural Acoustics University of
Sydney and the School of Computer Science and Engineering at UNSW.

A new creative initiative, developed during the Ecolocated (MARIN AIR) concerns the sonification of water quality data, a method which is currently being developed (in conjunction with Dr Jon Drummond) for a series of environmental audio-portraits, the RiverVoices project located in the Murray Darling basin; VoxAura, the River is Singing, for Turku, European Capital of Culture 2011; Upstream/DownStream a commission from the Bundanon Trust 2011/12 and as part of a forthcoming collaboration with Dr Mary-Anne Lea of the University of Tasmania investigating the sonic potentials of bio-logging data in the Southern Oceans.

Principal web archive - [http://www.sonicobjects.com](http://www.sonicobjects.com)

Dr John Potts is Associate Professor in Media at Macquarie University. He has published five books, including A History of Charisma (2009) and After the Event: New Perspectives on Art History (edited with Charles Merewether, 2010). He is a founding editor of Scan Online Journal of Media Arts Culture.

**EXHIBITING**

**KATHY CLELAND**

*New Media Audiences: agency and experimentation in the gallery space*

Discussions of experimentation in art practices typically focus on the active role and agency of the artist. However, as Marcel Duchamp reminds us, it is the viewer that “completes” the artwork. The role of the audience in interpreting and “completing” the artwork has been extended even further in new media art practices, where the viewer or audience plays an integral role in bringing artworks to life through their interaction. These interactive artworks can only be fully experienced in the moment of interaction as audiences trigger, interact and perform with artworks. It is in the gallery space that the agencies of the artist, the artwork (delegated, perceived and emerging) and the audience come into play.

However, despite this enhanced role for the audience, the type and extent of audience interaction is constrained by how the artwork is designed and programmed by the artist. It is these “programmed freedoms” (Flusser) that determine the parameters for audience engagement. Nevertheless, the unpredictable and emergent behaviours of interactive artworks together with the creative behaviour of audiences can generate entirely new and unexpected behaviours, meanings and possibilities for the artwork.

The crucial role of the audience with interactive artworks means that the gallery is just as much a site of active experimentation as the artist’s studio, workshop or laboratory. The gallery exhibition enables artists to see their artworks in action with audiences who don’t share their intimate knowledge of the artwork and its
performance capacities. Does the artwork ‘work’ as the artist intended? How do audiences engage with the work? What meanings do audiences make of it? How do the various agencies of artist, artwork and audience interact in the gallery space?

This paper investigates the experimental role played by the audience in the gallery space and the ways that agency in distributed between the artist, the artwork and the audience.

BIOGRAPHY
Dr Kathy Cleland is an Australian-based curator, writer and researcher specialising in new media art and digital culture. She is Director of the Digital Cultures Program at The University of Sydney, an innovative cross-disciplinary program that critically investigates the social and cultural impacts of new digital media technologies. Her curatorial projects include the Cyber Cultures exhibition series which toured to over 20 venues in Australia and New Zealand from 2000 – 2003, the Mirror States exhibition (2008) at MIC Toi Rerehiko, Auckland, NZ and Campbelltown Arts Centre, Sydney, and Face to Face: portraiture in a digital age currently touring Australia and Asia (2008–2011). Kathy is a founding member of the Robot Cultures research initiative set up by the Digital Cultures Program and the Centre for Social Robotics Centre at the University of Sydney (www.robotcultures.org), and is a member of the Surveillance in Everyday Life Research Group, also at the University of Sydney. She is Chair of the Curatorial Committee for ISEA2013 (International Symposium on Electronic Art) in Sydney. www.kathycleland.com

SU BALLARD
Curiosity killed the cat: accidental encounters in the art gallery

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. Accidental encounters in the art gallery occupy a critical space that moves us beyond established behaviours and expectations. Artworks that experiment with the lingering sonic trace and uncontrolled motion can be most challenging. Martin Creed sent runners through the halls of Tate Britain. Work No. 850 (2008) is neither a thing nor an object and neither visual nor sonic, but matter—formative, kinetic and generative. Tino Sehgal fills spaces with movement and voice. In This Progress (2006, 2010) the invisibility of his materials belie structures of feedback and repetition, and the implicit contract of respect and control conferred by the gallery space. In their embrace of the accidental encounter and the curious audience Sehgal and Creed challenge our understanding of art as singular and fixed. This paper argues that these artworks, amongst others, are formed from “vibrant matter” (Jane Bennett, 2010). The art gallery is a cultural space, traditionally understood as an active mediator
between artworks and viewers. In this paper I will show how accidental and unexpected encounters in the art gallery open up vibrant material spaces where impossible geometries become coupled to improbable experiences.

BIography
Dr Su Ballard lectures in electronic arts, photography and art theory at the Dunedin School of Art, New Zealand. Her research circles around digital aesthetics, sound, utopia, the construction of elsewhere, curatorial practices, the art gallery, and noise. Su is a director of The ADA Network, New Zealand’s only media arts network, and deputy chair of the Physics Room Gallery in Christchurch. She curated Cloudland: Digital Art from Aotearoa for ISEASingapore 2008. Su has published essays in the Fibreculture Journal, Art New Zealand, Digital Creativity, M/C, ArtAsiaPacific and FineArt Forum. She is also the editor of Junctures: The Journal for Thematic Dialogue. Her book The Aotearoa Digital Arts Reader, co-edited with Stella Brennan was published by Clouds in July 2008. www.suballard.net.nz

Marco Pasqualini de Andrade
The Experimental Unit: A Brazilian Pioneer Proposition

The Experimental Unit was established in 1969 at the Museum of Modern Art in Rio de Janeiro city, in order to hold meetings, generate discussion about art and, in the words of the critic Frederico Morais, "carry out experiments on all cultural levels, including sciences, and considering touch, smell, taste, hearing, and vision as 'forms of language, thought and communication'". It was formed initially by the artists Guilherme Vaz, Luiz Alphonsus, and Cildo Meireles.

The activities of the Experimental Unit were speculative in its nature, proposing a kind of "public art", less popular and more provocative. Combative, and not simply perceptive (as was frequently considered the Hélio Oiticica’s environmental proposals). A "phenomenology of the primordial ideas," in the words of Guilherme Vaz. It had not a physical place, but was hosted in a small room at the MAM. Immediately after its beginnings, other artists had approached the Experimental Unit: Teresa Simoes, Artur Barrio, Raymundo Colares, Antonio Manuel, Alfredo Fontes.

They proposed more than a construction of previously formulated theories, but an experimental practice: conquer space with concrete actions, and not necessarily generate "works." It was precisely this climate of experimentation that led to the possibility of a series of radical proposals, which would be presented for the first time in the show called Salão da Bússola, held at that same year in the museum.

This paper, possible with support from FAPEMIG (Fundação de Amparo à Pesquisa em Minas Gerais), will discuss these experiences, contributions and reflections on
Brazilian society and its legacy for contemporary international art.

BIOGRAPHY
Marco Pasqualini de Andrade (b. 1965, São Paulo, Brazil) holds a Ph.D. in Arts from the University of São Paulo and works as Associate Professor in the Federal University of Uberlandia. Acts as independent curator and art critic. Member of CBHA - Brazilian Committee of History of Art and LASA – Latin American Studies Association.

CHARLES GREEN
Producing the Experimental: Mega-Exhibitions and Contemporary Art

What is “experimental” contemporary art? Is it—or rather, was it—so called new media art? And if not, what? This paper draws on jointly-written research towards a forthcoming book on mega-exhibitions by Charles Green and Anthony Gardner. It argues that the question should be reversed—what makes experimental art contemporary—and argues that the answer is located in the social rather than aesthetic domain, since it is exhibitions rather than art works—experimental or not—that have successfully changed the (contemporary) world as well as changed the way we think. For contemporary art has boomed since the late 1980s, and the period’s key art productions have clustered around a particular type of experimental art: often spectacular, expensive new art such as video installation that implied venues able to provide the resources, scale and public prominence required by these works. A type of exhibition—biennales—met these demands, offering experimental artists a stage on which to participate in the global art scene, while enabling a dramatically expanded audience the chance to see experimental art. By now, experimental art, no matter what its genealogy nor what the opinion of its pioneers regarding the cooption of experimental art, is almost indistinguishable from biennales. These are taken to be indexical of the situation of experimentation, and also revelatory of new developments and trends. These assumptions need to be critically examined, and does the very idea of experimental. The paper focuses on the 1st Asia Pacific Triennial (or APT), in 1993, which was hosted by a major state art museum and conceived in a spirit of regional boosterism, and locates it amongst a small group of Asian biennales inaugurated in the early to mid 1990s rather than inside Australian art discourse. APT 1 was designed to discard divisions between artists’ nationalities and to showcase the diversity, correlations and tensions between art practices across Asia and the Pacific, but its achievement was more to legitimate this art as experimental—and thus as globally contemporary—rather than to extrapolate regional definitions of the contemporary. The task of this paper is to show how a scattered, globalizing art world internalised the conditions of the global and identified these as experimental, with profound institutional and artistic consequences.

BIOGRAPHY
Charles Green is Associate Professor of Contemporary Art in the School of Culture
and Communication at the University of Melbourne. Author of Peripheral Vision (1996) and The Third Hand (2001), he is currently working with Anthony Gardner on a forthcoming book that will be a history of biennales, assisted by an ARC grant. He is also an artist, working since 1989 in collaboration with Lyndell Brown. In 2007, they were Australia’s Official War Artists, deployed to Afghanistan and Iraq, and are currently working on a follow-up project with Jon Cattapan, also with the assistance of an ARC grant.

EXPERIMENTAL DISCOURSE & PRACTICE

JIM HAMLYN & LESLEY PUNTON
Experiments in Situated Knowledge

"We feel that even when all possible scientific questions have been answered, the problems of life remain completely untouched." - Ludwig Wittgenstein.

Part academic presentation, part performance, part discursive documentary, this presentation takes an alternative approach to the format of conference presentation in order to argue, by constructive example, that art arrives at its own unique forms of knowledge and knowledge generation through speculative experimentation with concrete reality, form and process.

The profound success of certain forms of epistemic enquiry - principally scientific research and academic thought - has resulted in a relative marginalization of creative and improvisatory forms of critical and analytical investigation and to a parallel adoption, within the arts especially, of aspects of the terminology of science in order to legitimate the processes and practices of art production and consumption. For example, the use of the term ‘experiment’ is itself predicated upon an implicit association with empirical science as opposed to the more abstract trials and even ‘play’ that are fundamental to art production. Drawing upon the experiments of Swiss artist Roman Signer (who’s work literally fuses the improvisatory and experiential with the more exacting necessities and laws of physics, often to explosive effect) and the research of the eight artists and cultural theorists involved in the newly formed “Co-creativity of Hand and Mind” research group based at Gray’s School of Art, The Robert Gordon University, Aberdeen, UK (whose work investigates the interchange between Experience, Experiment and Expertise - etymologically rooted in the term experiri: ‘to try’), this presentation seeks to propose that the language and significance of alternative forms of communication (situated knowledge, contemplation, humor, sex, reverie, narrative etc.) offer valuable ways to understand the indispensable contribution of experimental creativity (art) to our understanding of the world and our place within it.
BIOGRAPHIES

Jim Hamlyn lectures at Grays School of Art, Aberdeen, Scotland and Artist in Residence at Sydney College of Art, August 2011. He has exhibited nationally and internationally in such countries as Egypt, Finland, Japan, South Korea, Thailand and the USA. His work uses an interdisciplinary approach, is often collaborative and incorporates a wide range of media from public sculpture and installation to interactive media and the moving image.

In 2004 he set up the BA (Hons) Course in Photographic and Electronic Media at Gray’s School of Art in Aberdeen which he now leads. In 2005 he founded the company (IDEAS in Public Space LTD) with Jim Buckley (reader on Fine Art at Gray’s School of Art, Aberdeen) and Ivan Drummond (Subject Group Leader, Design, Napier University, Edinburgh) to challenge and redefine conventional notions about the integration of art into the public sphere and the role of the artist in urban regeneration schemes. Several innovative commissions have been completed by IDEAS in Public space and can be seen in various sites around the UK including Glasgow, Wigan, Shrewsbury and the Bristol Channel.

Jim also leads a new research group (The Co-creativity of Hand and Mind) comprised of eight artists and theorists based at Grays School of Art. This research group seeks to expand the understanding of the relationship between art practice, research and pedagogy with a particular focus on experimental pedagogies and the revaluation of art as a form of situated knowledge.

Lesley Punton is an artist based in Glasgow Scotland where she also works as a lecturer in Fine Art Photography at Glasgow School of Art. Lesley has a particular interest in the experiential nature of landscape with reference to the physical processes of walking, climbing and mountaineering. Her work incorporates both photography and drawing in experimental and experiential forms that seek to create parallels between the experiences of landscape and those of recording and representation. The work is informed by a longstanding interest in the history of mountain and polar exploration and through the artifacts, images and literature of exploration, memoir and scientific document.

Often through intensive and laborious drawing processes Lesley’s work seeks to question the ways that these experiences of landscape (rather than landscape itself) both resist and enable the translation into physical form. The work is therefore intended to physically embody an experience as opposed to simply recording one.

Recent works have developed through a growing interest in the landscapes specific to Scotland and an understanding of its geography through personal and physical involvement. Geography provides a means to engage with a more ontological position, and one that is released through the deep time of geology and within the temporal and transitory sensations of weather and climate.

CAT HOPE
Experimentalism is Dead: Long Live Experimentalism

2012 will mark 100 years since John Cage’s birth. Yet the idea of ‘experimental music’ is still thriving. When does experimental music become just music, and not experimental any more? Do experimental ideas and approaches become mainstream at some point? Surely the ideas that made Cage’s music experimental have now been accepted into mainstream practice. Aleatoric approaches, objects as instruments, interactive electronics and new ways to play, listen to, read and write music were all hallmarks of Cage’s practice which have been adopted and developed in music ever since. However, according to Grant, Nyman and others, the term ‘experimental music’ specifically applies to a music practice in North America in the mid twentieth Century, where Cage is seen as an important exponent. Any other use of the term in contemporary practice loosely applies to pushing boundaries of genres, certain kinds of electronic music, hybrid practice and quite often, as a way to disqualify a work as music at all. The time to re-evaluate and clarify the very idea of experimentalism is prime, especially within an academic environment adapting to the recognition of practice as research. Surely, we have superseded the contributions of Cage, and moved on to experiment with music in other ways? There is a need to liberate ‘experimentalism in music’ from past ideas. This paper argues for experimentalism as a ‘backend’ approach to the composition, communication and listening of music, rather than as descriptive term for an outcome.

BIOGRAPHY
Dr Cat Hope is a multidisciplinary artist based in Perth, Western Australia whose work is grounded in sound. Trained as a classical flautist she later moved to bass playing, noise, improvisation, rock, video art and installation and is currently the CREATEC Post Doctoral Research Fellow at WAAPA, ECU. She is a passionate performer and researcher with an active international publication and touring schedule, as a soloist, academic and in her groups Abe Sada, Decibel and sound art collective Metaphonica. Her research interests include low frequency sound, graphic scores, WA new music archiving and the relationship between acoustic and electronic instruments.
http://www.cathope.com

KATE MACNEILL & BARBARA BOLT
Unintended consequences? Experimentation, art and ethics

Art as a form of experimentation and in particular the conceptualisation of art as research within the academy, brings with it a level of scrutiny of artistic practices which may have unintended consequences. In the past the concept of the aesthetic alibi, the suggestion that art is beyond legislative sanction, has been seen to be inviolate. Increasingly this is no longer the case as art education institutions operate within ethical codes of practice and artists must be mindful of
Many contemporary artists pursue practices that are in direct tension with community standards. There are numerous examples of artists whose practices, while acceptable within an art world framing, would not be condoned in everyday contexts and may indeed be deemed illegal. The work of renowned French artist Sophie Calle directly engages with the blurred boundaries of the public and private self. In *Suite Vénitienne* (1980), Calle observed a stranger, followed him across Europe and filmed his movements. In another work, shown at the Venice Biennale 2007, she displayed an email from an ex-boyfriend, making it the central motif of the work accompanied by over 50 interpretations of the text, some of which purported to analyze its author (Bolt, 2011). In 2000 at the Trapholt Art Museum in Denmark, Marco Evaristti challenged viewers to activate food blenders containing goldfish, resulting in animal cruelty charges against the Museum Director. The Australian collaboration between SymbioticA project and Stelarc which grew an ear out of cells has been well documented (Zurr and Catts, 2004) and led to ethical concerns on the part of the exhibiting institution.

In this paper we examine the conceptualisation of art-as-experimentation from the point of view of its compatibility with ethical protocols and research methodologies. We suggest that art as experimentation requires us to rethink approaches to risk and ethical standards that are an integral part of research within the academic institution.

**BIOGRAPHIES**


**Kate MacNeill** is a Senior Lecturer in the School of Culture and Communication at the University of Melbourne where she coordinates the graduate programs in arts and cultural management. She teaches art and the law and has published widely on the intersection between law, art practices and cultural institutions.

**JULIAN PRIEST**

**Participatory Empirical Aesthetics**

The paper revisits 3 participatory artworks, Joindot(2005)[1], *The Political Spectrum*(2006)[2] and *Point of Presence*(2011)[3], and frames them as aesthetic experiments. Joindot was a collaborative drawing based on the children’s game join the dots that was staged at the Open
Congress at Tate Britain in 2005. The piece explored copyright, open source licensing, derivative works, intellectual property and ownership. The Political Spectrum was a participatory white board piece that was staged at the Waves exhibition at the National Museum of Latvia in Riga in 2006 and explored the relationship between the regulatory and policy structures that govern radio frequency allocation and public access to the radio spectrum. Point of Presence was a balloon popping event staged on the Te Papa waterfront in Wellington as part of the Performance Arcade project, and explored the instant of interaction and our emotional relationship to thermodynamics.

The paper re-frames each of these 3 works as an aesthetic experiment, presenting results in the style of a scientific investigation and drawing conclusions. This process is used to develop common themes between the works and as a pretext to explore the possibility of participatory artwork as a form of empirical aesthetics.


BIOGRAPHY
Julian Priest is an artist and researcher. He was co-founder of early wireless freenetwork community consume.net in London. He became an activist and advocate for the freenetworking movement and has pursued wireless networking as a theme in fields of arts, development, and policy.

He was one of the instigators of WSFI, the world summits on free information infrastructures, an international series of events to promote grass roots information infrastructures. He has commented on radio spectrum policy and co-founded policy intervention OpenSpectrum UK to advocate an open spectrum in the public interest, in Europe and the UK.

Since 2005 he has developed an artistic practice around participatory and collaborative forms and shows works internationally. His current interests are themes around the physical and cultural boundaries between technology and the environment, and the connection between energy and information. He is based in Whanganui, New Zealand where is director of project room 'The Green Bench'. He is a board member of the Aotearoa Digital Arts trust and lecturer in creative technologies with the Interdisciplinary unit at A.U.T University in Auckland.
PLENARY

TERRY SMITH
Experimentality in Contemporary Art

A recent conference at Lancaster University (UK) addressed a number of questions of pressing relevance (July 2010). Some of them may be rephrased for our purposes as follows.

Is experimentality becoming a key trope of contemporary society? Is it taking new forms, and if so with what implications?

How do notions of experimentality intersect with other conceptions of change in contemporary societies, such as societal reflexivity, postmodern liquidity, globalizing capitalism, decolonial transition, cosmopolitanism, complexity and contemporaneity?

What can we learn from the differences between the modes of experimentality operating within science, the arts, politics and the wider culture?

This paper will keep these issues in mind as it responds to the ideas of experimentality advanced in papers throughout the conference, with special regard to how experimentality inspires the work of artists and theorists in Australia and elsewhere, and how it might continue to do so.

BIOGRAPHY

TERRY SMITH, FAHA, CIHA, is Andrew W. Mellon Professor of Contemporary Art History and Theory in the Department of the History of Art and Architecture at the University of Pittsburgh, and Distinguished Visiting Professor, National Institute for Experimental Arts, College of Fine Arts, University of New South Wales. He is the 2010 winner of the Mather Award for art criticism conferred by the College Art Association (USA), and is the 2010 Australia Council Visual Arts Laureate. During 2001-2002 he was a Getty Scholar at the Getty Research Institute, Los Angeles, and in 2007-8 the GlaxoSmithKlein Senior Fellow at the National Humanities Research Centre, Raleigh-Durham. From 1994-2001 he was Power Professor of Contemporary Art and Director of the Power Institute, Foundation for Art and Visual Culture, University of Sydney. He was a member of the Art & Language group (New York) and a founder of Union Media Services (Sydney). He is the author of a number of books, notably Making the Modern: Industry, Art and Design in America (University of Chicago Press, 1993; inaugural Georgia O’Keeffe Museum Book Prize 2009); Transformations in Australian Art, volume 1, The Nineteenth Century: Landscape, Colony and Nation, volume 2, The Twentieth Century: Modernism and Aboriginality (Craftsman House, Sydney, 2002); The Architecture of Aftermath (University of Chicago Press, 2006), What is Contemporary Art? (University of Chicago Press, 2009), and Contemporary Art: World Currents (Laurence King and Pearson/Prentice-Hall, 2011). He is editor of many others including In Visible Touch: Modernism and Masculinity (Power