BEAP 07

BIENNALE OF ELECTRONIC ARTS PERTH

STILLNESS

ART + SCIENCE + TECHNOLOGY
EXHIBITION CATALOGUE

BEAP 07

BIENNALE OF ELECTRONIC ARTS PERTH

STILLNESS

THE 3RD BIENNALE OF ELECTRONIC ARTS PERTH
PERTH, WESTERN AUSTRALIA 10 – 23 SEPTEMBER 2007

For the 3rd Biennale of Electronic Arts Perth, works by over sixty artists are presented across three 'showcase' and four 'satellite' exhibitions. This catalogue is a record of the exhibitions and the participating artists.

Humans have a right to stillness:

Stillness as being

Stillness as inertia

Stillness as simplicity

Stillness
CONTEMPLATION AND PATTERN RECOGNITION

Stillness as smallness

Dr Paul Thomas
Founder and former Director of
The Biennale of Electronic Arts Perth

Stillness as culture

Stillness as contemplation

Stillness as deception

Stillness as perception

The theme for BEAP 2007 has been chosen and contextualised around concepts of Stillness. The irony of a festival of electronic arts being themed Stillness initially jars our preconceptions and clichés regarding the technological possibilities of the future. With the development of emergent and convergent technologies, we are heading towards a point in time where the concepts of what constitutes stillness will need to be confronted.

BEAP has drawn together significant works that will be exposed to the concept of stillness, contemplation and discernment. Electronic arts practice inspires a number of aspects of stillness pertinent to our adaptive society in the 21st Century. BEAP seeks to move beyond the corporate technological superhighway, defining a parallel to duration, a contemplative desire to comprehend a contemporary stillness.

BEAP's isolated location will challenge us to ask if we can engage in stillness on the boundary of the 'lived experience'[1], when we contemplate the emerging convergent relationships between arts, industry and science. The exhibitions examine whether the lived experience in its becoming techno-mediated is eroded and dissolved. Our techno-mediated experiences are propelled by a science of fictional futures in which the basis for meaningful exchange seems to be faltering.

The space and time needed for us to discern the relevance of this informational excess is collapsing and dissolving our lived experience. *Stillness* gives us a moment to discover other possibilities. It gives us time for the recognition of alternative patterns; to observe synergies and to establish a ground.

Three historical examples illustrate an overview of the confrontation implicit in an emerging technological change. In Charles Baudelaire's 1862 story, *The Lost Halo* an artist loses his halo while crossing the street in a modern city 'I was crossing the boulevard, in a great hurry, in the midst of a moving chaos, with death galloping at me from every side.' (Berman 1983 p 159)

Marshall Berman suggests this tale presents '(t)he archetypal modern man as we see him here, is a pedestrian thrown into the maelstrom of modern city traffic, a man alone contending against an agglomeration of mass and energy that is heavy, fast and lethal'. (Berman 1983 p 159)

At that point in time, the artist, as modern man/woman facing this barrage of traffic, loses his/her halo as a symbol of his/her inability to comprehend changes that need to be made in understanding contemporary life. Baudelaire's halo of 1862 positions the contemporary artist as an antenna of society, one who receives and transmits. Paul Virilio, in discussing the contemporary nature of modern traffic, states that 'we oppose from the beginning the caricature of global society being hatched for us by big multinational corporations throwing themselves at a breakneck pace on the information superhighways.' (Virilio 1995)

Today the artists' antennae face the maelstrom of contemporary data traffic, overloaded with the speed and density of the information superhighway. The Haussmannism[2] of cyberspace is constructing ever-efficient flows of ubiquitous data that present a concept of immersion. These flows of data traffic are despatched within cyberspace on the metaphorical information super highways.

In the second example, in 2002, Paul Carter, in his book *Repressed Spaces* references Camillo Sitte's subconscious comprehension of traffic patterns:

> Imagine the open square of a small market town in the country, covered with deep snow and criss-crossed by several roads and paths that, shaped by the traffic, form the natural lines of communication. Between them are left irregularly distributed patches untouched by traffic: on these stand our snowmen, because the necessary clean snow was to be found only there. (Carter 2002 p 186)

Here the artist, witnessing the intersections, is not interested in the paths but rather the residual spaces left behind. Contemplating the natural lines of communication the artist finds space and time reflected in the residual spaces as significant signs, realising them as objects; a small piece of ground to attach oneself to, on which to build a base, on which to act.

One of the concepts for *Stillness* is to create this space and time for reflection and contemplation where the metaphorical interlacing cyberspace freeways criss-cross each other. The interstitial spaces that are left by the intersections of the superhighways could hold the key for reflection to take place.

The third example is transcribed from Marshall McLuhan's last public lecture where he discusses Edgar Allan Poe's *A Descent into the Maelstrom*, (Poe 1841)

> "In the descent into the maelstrom Poe imagines the situation in which a sailor who has gone out on a fishing expedition, is caught by not watching the turn of the tide in a huge maelstrom or whirlpool. And he sees that his boat will be sucked down into this thing, he begins to study the action of the strom. He observes that some things disappear and some things reappear by studying things that reappear to which he attaches himself to one of these things, he saves himself. Pattern recognition[3] in the face of a huge destructive force is the way out of the Maelstrom."[3]

This analogy from McLuhan links to the central theme of *Stillness*. Whilst at the centre of the Maelstrom, one sailor discovers a way to save himself through a contemplative comprehension of the situation and surroundings in which he found himself. The sailor discovers, through what McLuhan calls *pattern recognition,* the way out of the storm. Is this Maelstrom analogous for a storm of data transmitted through the air? Is the storm of data a destructive force that we have to deal with, or is it an inevitable aspect of natural exchange? A way of understanding and considering such a concept as 'meaning' in this data storm is through stillness, an immersive, yet engaged, stillness that allows contemplation, observation and discernment.

Data is growing and spreading at a rapid rate into every corner of the globe. This data becomes, like the Maelstrom, a global force that is unstoppable and unpredictable., At the epicentre of this storm is stillness. Ubiquitous stealth technologies saturate and penetrate us with transmissions of data. Multiple forms of data transmission are generated and broadcast through the atmosphere, a networked information like the weather system. The data storm can present a series of possible realities and truths that can disappear and reappear.

The gathering storm of data is built up from a continuous flow of *informatics* emanating from blogs to surveillance, government statistics, day-to-day human communications, media, scientific experiments or fiction. Air, one vehicle for transmission, is the materiality of this gathering storm of data, the same air we breathe.

Jean Baudrillard states

> Genuine stillness is not the immobility of a static body, but the stillness of a weight on the end of a pendulum that has barely stopped swinging and is still vibrating imperceptibly. It is the stillness of time in the instant (the instant of photographic, instantaneity, behind which there is always the idea of movement, but only the idea), the image being there to keep movement at a respectful distance, without ever showing it, which destroys the illusion. It is this stillness things dream of, it is this stillness we dream of. It is this the cinema lingers over increasingly today, in its nostalgia for slow-motion and the freeze-frame, as the highest point of drama. (Baudrillard 1999)

Fig 1. Los Angeles 110/105 interchange

The essence of stillness is where the pendulum has slowed to its imperceptible vibration; its weight is like the body feeling its own weight against the ground when running. Speed is brought back to a human scale. But how can we define a human scale when the speed of technology is seemingly instant in its global coverage?. Here, we have the instantaneity where the idea of movement is a seamless blend of now's. The speed of technology when contrasted with the body of the pendulum, or of the runner whose feet connect to the ground, takes breath. The mediatory breath is taken further when Baudrillard explains how the photographer must hold his/her breath in order to create a vacant region in time and in his/her body. This region allows the information that is being captured to develop unhindered. The photographer becomes reflected by the objects around him/her and captures them as though they were being inhaled. We are at the point where the breath of contemplation might be seen as the inhalation of the data of all these durational moments in time.

Henri Bergson uses the concept of footsteps to understand duration when he explores the relationship between counting the sounds of the steps, as opposed to gathering an impression of the steps as a rhythm, a whole. (Bergson 1960 p 86) Bergson develops a concept where the footsteps, like Baudrillard's swinging pendulum, can be understood as a complete whole object and therefore an object of contemplation that encapsulates the inherent duration of the object.

In this way the transmission of data can be seen to have the sum total of all its parts and is understood to form a whole. The digital code is transmitted, translated and transcoded over the airwaves and, like our sailor caught in the Maelstrom, these machinic codified objects can transmit and translate, disappear and reappear. We can only look for some form of rhythm or pattern recognition that is personified through the objects in the data storm. The stillness is part of the duration of the object's temporality.

Through stillness, the contemplation of the body as a living organism and as a site that encapsulates concepts of scientific evaluation, duration and data streams can be explored. Technologically mediated metaphorical descriptions of the body have been linked through ideas of neural networks, and through studying patterns to define DNA.

Oron Catts, the artistic director of SymbioticA, references the complexity of the body as an interconnected network where 'once a fragment is taken from A BODY it becomes a part of THE BODY. The living fragment becomes part of a higher order that engulfs all living tissues regardless of their current site'. (Catts and Zurr 2007)

In Catts' statement, he suggests that a fragment from A BODY becomes an entity connected to the whole. The fragment is or becomes a part of the whole, and is recognised as a pattern within patterns. The patterns of cells are related to tissues, and in turn to organs, as though various kinds of swarm intelligence are cohabiting within the boundary of the body, and eventually the world.

In an article on the Visual Human Project, Catherine Waldby[4] discusses the translation of the body into text as a binary code for medical dissemination. The living body's unpredictability is rendered unobtainable through death. In the Visual Human Body Project it is used to create a global, medical, textual body. This dead digital body is technologically delivered through the network by the materiality of code as a techno-mediated common object of quantifiable predictability. The point where the machinic pendulum has seemingly given up its hope of swinging cannot be seen in the same way as the body as data. Stillness is linked with organic growth that is durational and slow in the face of technologically incremental increases in speed. Technological developments prescribe an objectification of the world which the living confronts through its being and acting within time. Here we have the clash between the storm of data generated through technologically mediated, scientific discovery and the need for pattern recognition within a totality of experience.

Like photosynthesis, or like an antenna, the body draws breath, receiving and transmitting meaning-laden data from the outer world. Similarly the photographer draws breath preparing him/her self to capture the world that by default is rich with transmitted data, information whose essence may remain in the very fabric of the physical environment.

The theme of *Stillness* is highlighted through the various conference papers and the artists' works in these exhibitions offering multiple narratives of global proportions for the viewer to consider and reflect upon.

BEAP is predicated on establishing a research question that each event attempts to address through the exhibition and conference program. The idea of developing an exhibition program around the concept of *Stillness* existed prior to the Biennale of Electronic Art Perth 2004.

The concept was assisted with input from Nigel Helyer, Oron Catts and Jeremy Blank who, along with Christopher Malcolm and Pauline Williams, were curators of the exhibition program *Samedifference* BEAP 2004. The ongoing contribution of these curators in critiquing and maintaining the theme of *Stillness* has evolved through its own maelstrom. I would like to thank all the curators and supporters of BEAP for their desire to present new and emerging artistic concepts.

DR PAUL THOMAS
Founder and former Director of The Biennale of Electronic Arts Perth

REFERENCES
Baudrillard, J. (1999). 'Photographies.' Retrieved March 10, 2005, from http://www.egs.edu/faculty/baudrillard/baudrillard-photographies.html.

Bergson, H. (1960). *Time and Free Will: An essay on the Immediate Data of Consciousness*. New York, Harper and Row.

Berman, M. (1983). *All Thats Solid Melts Into Air: The Experience of Modernity*. London, Verso.

Carter, P. (2002). Repressed Spaces. London, Reaktion Books Ltd.

Catts, O. and I. Zurr (2007). The Art of the Semi-Living and Partial Life: From Extra Ear to In-Vitro Meat. *Ciencia E Bioarte, Encruzilhadas e Desfios Etiocs*. P. F. d. Costa, Caleidoscopio_Edicao Artes Graficas, SA: 37–56.

Lefebvre, H. (1994). *The Production of Space*, Blackwell Publishers.

Poe, E. A. (1841). 'A Descent into the Maelstrom' Retrieved March 6, 2005, from http://bau2.uibk.ac.at/sg/poe/works/maelstrm.html.

Virilio, P. (1995). 'Speed and Information: Cyberspace Alarm!' Retrieved June 20, 1996, from www.ctheory.net/articles.aspx?id=72.

Waldby, C. (1996). "The Visible Human Project: Data into Flesh, Flesh into Data." from http://wwwmcc.murdoch.edu.au/ReadingRoom/VID/VIDindex.html.

NOTES
1 Henri Lefebvre suggests, 'Space is conceived as being transformed into a 'lived experience' by a social subject. Lefebvre, H. (1994). The Production of Space, Blackwell Publishers.

2 The Haussmannisation of Paris, was an urban plan changing the old Paris of dense and irregular medieval alleyways into a modern city with wide avenues and open spaces commissioned by Napoléon III and led by the Seine prefect, Baron Georges-Eugène Haussmann between from 1852 to 1870.

3 Marshall McLuhan Extract form live audio recorded lecture by from the recent Derrick de Kerckhove Lecture *McLuhan still dead?* 25 years later. http://www.aec.at/en/festival2005/podcasts/podcasts.asp

4 Waldby states that 'Thus in order to see the general vivifying principles of the body, in order to open it out in a complete fashion to the analytic gaze of anatomy as a set of visualisable surfaces rather than an opaque volume, the particular body must be dead. A particular body must die in order that biomedicine can see and analyse the organisation of life understood as a *biocentric field* of force. The bodies visualised by the VHP donate their life force to the visual text'. WALDBY, C. (1996). 'The Visible Human Project: Data into Flesh, Flesh into Data.' from http://wwwmcc.murdoch.edu.au/ReadingRoom/VID/VIDindex.html.

impermanence [contemplating stillness]

JOHN CURTIN GALLERY

ARTISTS:
Mark Cypher (Australia)
Daniel Lee (Taiwan/USA)
Christa Sommerer & Laurent Mignonneau (Austria & France)
Bill Viola (USA)
Lynette Wallworth (Australia)

CURATOR: Chris Malcolm

…stillness is essential; only by stillness are the miasmas of passion and ignorance dispersed and that marvellous tranquillity gained whereby the adept becomes gloriously immune from whatever griefs and pains, whatever shocks and horrors life may have in store. [1]

Although the rigour of spiritual practice may not be a common experience, the basic message nonetheless has a timeless resonance for all. Like many, I appreciate quiet moments to lessen the noise of everyday life and alleviate the overwhelming level of information increasingly filling my being. I value the opportunity to simply be still and empty. These moments are rare for some and elusive for many but perhaps we all gravitate towards an inner stillness, often without fully comprehending it ourselves.

Recognising the fleeting nature of phenomena – thoughts, memories, experiences – we are faced with the underlying impermanence of much of what we see and touch. This *impermanence* is not confined to the realms of theoretical physics and its liberating implications for our sense of reality, but is also a pervasive trend in our everyday lives where we expect nothing to last very long. Technologies are developed to preserve and extend life in new ways, but much else conforms to ideas of the disposable and the temporary so that we surround ourselves with materials designed for frequent replacement. Technology advances so swiftly that inbuilt obsolescence is an accepted principle of our material existence and everyday objects are expendable at increasingly frequent rates. Endurance is a strange concept to the modern human living in an industrialised, developed world. Notions of fashion, redundancy and virtuality have replaced concepts of tradition, durability and actuality. The authentic is becoming less available and arguably less necessary.

impermanence [contemplating stillness]
JOHN CURTIN GALLERY   12 SEPTEMBER – 7 DECEMBER 2007

As a society we seem to be moving towards a state of instantaneity – a desired immediacy. The notion that more is better and better is happier is intrinsic to our impatience with the way things are. In some ways we base our material happiness on the need to access everything we want just at the very moment that we most want it. We are constantly invited to live in a world beyond our means, even though the planet may not be capable of enduring humanity's growth indefinitely. Our focus seems to be on a state of continual growth (material and economic development) when it should be on sustainable existence. Fortunately, a growing awareness of the perils of such an expansive and consuming approach may yet provide a remedy as the viability of our existence seems balanced on the precipice of collapse. Science and technology will no doubt be integral to our salvation, just as they were in creating the predicament in the first place: they are inextricable from our future.

We rely on technology now more than at any other time in our history: given its ubiquitous nature and the promises it brings it is pervasive and difficult to avoid. We learn more from screens and alternate realities with increasing sophistication. Technologies allowing virtual experiences are extending our perceptions into unprecedented realms. We live in a time of unprecedented global discourse about our collective future. Becoming increasingly aware of the benefits of sharing knowledge and recognising the importance of

collaboration, many fields of research are seeking solutions with other creative disciplines. Positive outcomes will rely upon a future determined by intelligent and compassionate use of new and emergent technologies. Significantly, this is becoming a realm where the role of the artist is appearing more frequently alongside that of the scientist, to develop mutually beneficial applications of new technologies. *impermanence* presents innovative projects by a select group of artists from around the world who work with technology to explore the value of the contemplative. They recognise the power of exclusively engaging the viewer in a seemingly endless moment – a stasis contradicting standard perception.

Artists have long considered the potential to distort the viewer's perception as being one of the fundamental aspects of communicating with their audiences. The notion of narrative sequencing as a communicative tool has served the visual culture of humanity for millennia. The advancement of photographic processes since the middle of the 19th century, continuing with the development of motion pictures and sound capturing technologies proliferating in the 20th century, allowed artists to capture snap shots in time. These technologies continue to allow time based events to be recorded and therefore revisited and broadcast with ever increasing efficiency and veracity. The manipulation of the viewer's perception of time has become a powerful tool for the artist that greatly enhances their powers of communication.

A duration of observation, of direct and exclusive communion with the artwork itself captivates the viewer. The longer this duration can extend, the more potential there is for the viewer's sense of immersion to occur. These immersive moments can become transformative, affording the viewer an experience where time seems suspended in the experience of looking or listening. We lose ourselves – transcend our actual situation, become immersed in an alternative where the normal rules of physics may not apply. This shift can lead to the transformation from mere witness to participant, with the viewer briefly sharing in the artist's vision.

Slowing down time, enabling glimpses of the otherwise imperceptible, and using real-time interactivity with immersive computer generated images,

impermanence showcases innovative artworks that interrogate the role new technologies can play in helping us better understand the changing world in which we live. These ground breaking works invite audiences to pause and consider notions of stillness within the growing global technological maelstrom. *impermanence* provides the viewer with an opportunity for quiet contemplation to ponder some of the fundamental issues facing humanity at a critical time in our history.

CHRIS MALCOLM 2007

Chris Malcolm is Curatorial Manager of the John Curtin Gallery, Curtin University of Technology. He is one of the Founding Curators of BEAP and played a fundamental role in its establishment between 1999 and the opening of the inaugural Biennale in 2002. He has curated two acclaimed exhibitions for BEAP: *Immersion* (2002) and *Perceptual Difference* (2004). Malcolm has curated and installed many Australian and world premieres of projects by artists from around the world, including Char Davies, Ken Rinaldo, Victoria Vesna and Bill Viola.

Responsible for exhibition design and installation at the John Curtin Gallery, Malcolm's recognition of the widespread imbalance in display standards adversely affecting public perceptions of new media art led to a fundamental shift in emphasis for the Gallery. With the support of Curtin University of Technology, the John Curtin Gallery set about implementing state of the art presentation technologies for exhibition display which has fuelled the Gallery's current international reputation for presenting new media art.

Chris Malcolm currently lives and works in Perth, Western Australia.

NOTES
1. Blofeld,J. (1979). *Taoism: The Quest For Immortality*, Mandala Books.

(below)
Daniel LEE (Taiwan/USA)
Origin, 1999–2003
stills from DVD video (digital animation sequence)
image courtesy of the artist
Australian Premiere
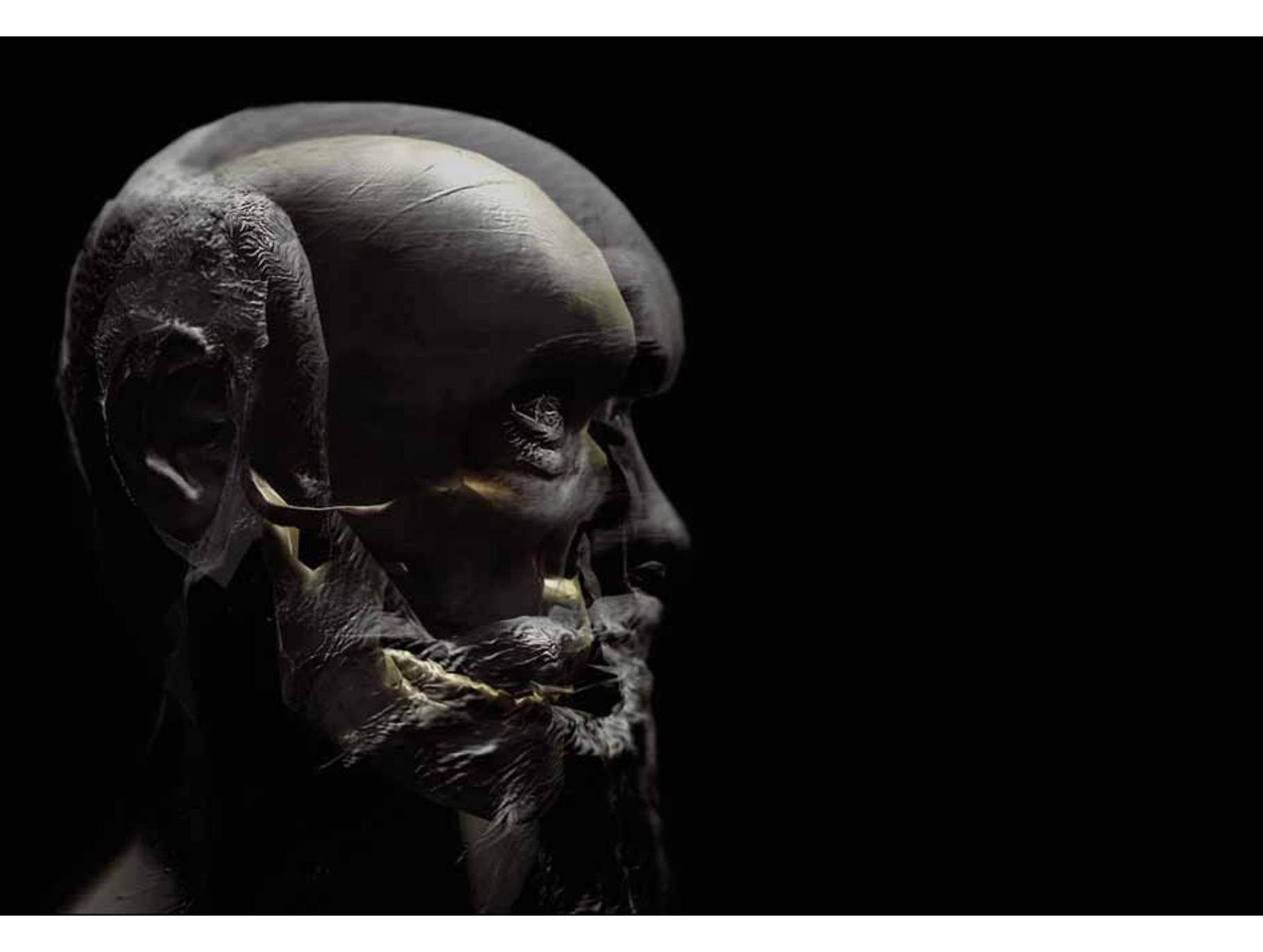
As biological information is passed through genes, so cultural information is passed through what Richard Dawkins[1] has termed memes. Both genes and memes contain data that is inherited, replicated and passed on to subsequent generations. Neither genes nor memes act alone; both emerge out of a systemic relationship with other entities supporting their propagation and replication. Genes require the correct cells, proteins, chemicals and environments to transmit information. Likewise memes are also dependent on chains of entities that influence their assimilation, retention, expression and eventual transmission into a network. In other words, memes and genes are modelled by the systems that they exist in.

Bernard Stiegler[2] argues that as objects or texts are used by successive generations they accumulate more and more information, which is inturn transmitted to future generations. As a result the heritable information contained within is not left unchanged. Considering the effect technological networks have on this information one would suggest that memes can be propagated and hence mutated in a matter of minutes; disseminating units of cultural information with a life cycle in fast forward. In making use of existing technological systems a meme draws more and more relations to itself, enticing other entities to actively support and if necessary intervene in its propagation and consequent mutation. Similarly, *Darwin* attempts to chart the real time evolution of the meme Darwinism as it assembles itself in different configurations, not necessarily over generations but in the 'time space compression'[3] of global networks. Each blog connects to a vast cumulative structure of influence made of social, scientific, technical and material entities and networks, and each will bring into being a difference in the original meme published by Charles Darwin 148 years ago.

Although an author may have contributed to composing a meme they have almost no control over its course or life cycle. Each system that supports a meme's existence will equally influence its trajectory beyond an author's control. From this perspective it would seem that memes have the capacity to modify relations as they move; all the while accumulating alliances by infecting new hosts. Latour[4] defines such influential movement as 'translation' where entities expand their competencies by enrolling the interests of others thereby mobilizing a collectively determined trajectory. This collective action can significantly influence a meme's life cycle or path in ways that would have otherwise been impossible.

The inherent beauty in a network's ability to mobilise influence is its capacity to produce unintentional signs and structures. In other words, entities in *Darwin* like the software, data, the virtual skull, the virtual physics engine etc… have the capacity to influence each other beyond any authorial control. The forms and patterns that result are snap shots in time of the mutating 'memory-in-the-system' that was once Charles Darwin and Darwinism. Just as Charles Darwin himself examined fossil bones to draw connections between the ideas of his time and the bones of his ancestors, so too *Darwin* draws patterns and links between the meme Darwinism and its permutations in the blogosphere; only now the palaeontologist is the focus of his own ideas.

NOTES:

1. Dawkins, R. (1976). *The Selfish Gene.* Oxford University Press.

2. Stiegler, B. (2001). *La technique et le temps,vol. 3, le temps du cinéma.* Paris, Editions Galilée.

3. Harvey, D. (1989). *The Conditions of Postmodernity.* Oxford: Blackwell.

4. Latour, B. (2005). *Pandora's hope: Essays on the reality of science studies.* Cambridge, MA: Harvard University Press.

Mark Cypher
Darwin

Mark Cypher received a Master of Visual Arts in Sculpture in 1995 from Sydney University, Australia, and is currently a Senior Lecturer and Program Chair for Multimedia at Murdoch University in Western Australia. Cypher also began his PhD in 2004 researching Actor Network Theory in relation to interactive artworks. He has participated in several international exhibitions including: *404 II International Festival of Electronic Arts*, Rosario, Argentina; *BEAPworks*, Perth, Western Australia; *VII Salon International De Art Digital*, Cuba; *Siggraph2006*, Boston; File06, Sao Paulo, Brazil; *NewForms06*, Vancouver, Canada; *Collision 06*, Victoria, Canada; *RRF2006: Festival International de Arte Digital*, Rosario, Argentina; Bios4, Seville, Spain; and the *UWA Perth International Arts Festival*, Western Australia.

Mark Cypher currently lives and works in Perth, Western Australia.

(opposite)
Darwin, 2007
internet data, gaming engine and digital projection
World Premiere

The genesis of Daniel Lee's *Origin* came in the late 1990s in anticipation of the impending millennium which reminded him of the 'grand beginning of everything'. The original concept was developed soon after Lee created a self-portrait for a special technology issue of the New York Times Magazine in 1997. Subsequently he produced a sequence of four portraits showing an evolutionary view of our past as monkeys and our future in perspective. Contemplating this notion of change further, Lee supposed that all mammals, reptiles and even fish were all somehow ancestrally linked to humans. On the eve of the new millennium in 1999 he created a series of manipulated photographic images and a short digital animation poignantly illustrating the process. Using his own imagination to describe human evolution in bold narrative, Lee presents ten stages of evolution: from fish form (as Coelacanth), transforming through various stages to reptile, monkey and eventually becoming human.

Origin mesmerises the viewer as it slowly mutates through millions of years of evolutionary change in a matter of minutes looping in a contrived cycle of continuity. The more times viewers watch the entire sequence unfold, the earlier in the sequence the human resemblance seems to appear. As humans we seem hardwired to recognise our own species' visage in the unfamiliar. We are compelled to watch as the traces of human-ness detectable in these 'earlier' forms become dominant, slowly losing all remnants of their 'otherness' until they attain a purely human form in the final frames of the animation. It is as if we are impatient for the process to unfold, trying to anticipate the final frame well before it arrives in a concluding moment heralded in stillness. *Origin* becomes an unsettling reminder of the interconnectedness of all life, bringing us closer to who we are by showing us what we perhaps have been, allowing us a moment to reflect on the 'other' and the often incomprehensible nature of life itself.

Daniel Lee
Origin

Known as Lee Xiaojing in Chinese, Daniel Lee was born in Chunking, China, in 1945 and raised in Taiwan. After receiving a Bachelor of Fine Art in painting in Taiwan he moved to the United States where he studied Photography and Film. Later he worked as an Art Director in New York until the late 1970s when he concentrated on a career in photography. Since the early 1990s Lee has been combining emergent digital technologies with photography in a hybrid medium.

Lee's work is held in many private and public collections around the world and has been widely shown internationally. The original exhibition of *Origin* was installed in a sequence of 12 large digital photographic prints along with a 5 minute long computer animation at O.K. Harris Works of Art, New York (1999).

Origin was then featured in *Cyber 99* at CCB Center in Lisbon. The current version, made for 16:9 wide-screen DVD presentation, has been presented in *Metamorphing* at the Science Museum, London (2002–03), the *50th Biennale di Venezia* (2003) and *ArtTaipei* (2004). The entire series of work had also included in Exposed at Stadtische Museen Heilbronn, Germany (2004), featured in the *Ars Electronica* 2005, Linz, Austria and *Art & Artifice of Science*, Museum of Contemporary Arts, Santa Fe (2007). Daniel Lee currently lives and works in New York, USA.

(opposite)
Origin, 1999–2003
still from DVD video
Australian Premiere

Christa Sommerer and Laurent Mignonneau's *Eau de Jardin* **has been inspired by Monet's late Water Lillies paintings and their panoramic setting at the Musée de l'Orangerie in Paris.** *Eau de Jardin* **is an interactive installation transporting the viewer/participant into the imaginary world of virtual water gardens and was originally commissioned as a site-specific work for the House of Shiseido, Tokyo, Japan.**

Eau de Jardin consists of a triptych of projections becoming an enormous single image filling an entire wall of the gallery, creating an immersive and reflective virtual water garden. When visitors approach a series of hanging vessels containing living plants, sensors capture their presence and a computer responds to the occurring physical tensions, creating images of virtual water plants. These images resemble a close up view of the suspended aquatic plants and are projected on the Gallery's walls as they transform, translate and interpret the user's interactions. The more visitors physically interact with the actual plants, the more the virtual scene builds up on the screen. This process leads to a constant renewal of water garden images being created as their composition reflects the nature and degree of the visitor's interaction with the real plants.

(opposite)

Eau de Jardin, 2004

interactive computer installation developed for
the House of Shiseido, Tokyo, Japan

Australian Premiere

Christa Sommerer & Laurent Mignonneau
Eau de Jardin

Sommerer and Mignonneau are both Professors at the University of Art and Design in Linz, Austria, where they head the Department for Interface Culture at the Institute for Media. They previously held positions as Professors at the IAMAS International Academy of Media Arts and Sciences in Gifu, Japan, and as Researchers and Artistic Directors at the ATR Media Integration and Communications Research Lab in Kyoto, Japan. Sommerer and Mignonneau completed their PhD degrees from CAiiA-STAR, University of Wales College of Art, Newport, UK and the University of Kobe, Japan, respectively.

Since 1992 Christa Sommerer and Laurent Mignonneau have collaborated to produce a prolific body of interactive artwork that has been widely celebrated for their pioneering use of natural and intuitive interfaces. This has led to the creation of a new language of interactivity based on artificial life and evolutionary image processes. Since being awarded the *Golden Nica Ars Electronica Award* for Interactive Art in 1994 at Linz, Austria, they have received several other major international prizes for electronic media art including: the Ovation Award of the Interactive Media Festival 1995 (Los Angeles, USA); the *Multi Media Award '95* of the Multimedia Association Japan; and the *World Technology Award* in London (2001).

Their works have featured in numerous festivals and symposia and have been shown in around 150 exhibitions world-wide. Their works are also permanently installed in media museums and media collections around the world including: the Media Museum of the ZKM, Karlsruhe, Germany; NTT-ICC InterCommunication Center, Tokyo; Cartier Foundation, Paris; Millennium Dome, London; Tokyo Metropolitan Museum of Photography, Japan; AEC Ars Electronica Center in Linz, Austria; NTT Plan-Net, Nagoya, Japan; and the Shiroishi Multimedia Art Center, Shiroishi, Japan.

Sommerer and Mignonneau have published numerous research papers on Artificial Life, interactivity and interface design. Sommerer has facilitated workshops and presented at various international conferences, such as: Dagstuhl Seminar (Germany, 2003); SCI2001 (Orlando, 2001); KES2001(Osaka, 2001); AlifeVII (Portland, 2000); KES2000 (Brighton, 2000); and ART-Science-ATR (Kyoto, 1997). Sommerer is also an International Co-editor for the LEONARDO Journal, MIT Press and in 1998, together with Mignonneau, edited a book on the collaboration of art and science titled *Art@ Science*, published by Springer Verlag Vienna/New York (ISBN 3-211-82953-9).

Christa Sommerer and Laurent Mignonneau both currently live and work in Linz, Austria.

Bill Viola has long been fascinated with the perception of time, uncovering the minutiae embedded within otherwise invisible moments between moments. Pioneering the use of high speed film and video technologies, Viola has developed the means to uncover otherwise imperceptible details previously masked by the mind's conflation of sequential moments into an apparent continuum. By providing access to this hidden world, *Observance* brings a range of human emotion into stark view.

In the artist's own words: "A steady stream of people slowly moves forward toward us. One by one they pause at the head of the line, overcome with emotion. Their gazes are fixed on an unknown object just out of sight below the edge of the frame. An air of solemnity and sorrow pervades the scene. Individuals sometimes touch each other gently or exchange brief glances as they pass. Couples comfort one another in their shared grief.   All are unified by their common desire to reach the front of the line and make contact with what is there. Once their solitary moment is fulfilled, they move to the back of the line to make way for the others."

Described by John Walsh as a "mesmerising ritual of grief", *Observance* allows the viewer the opportunity to bear silent witness to the emergence and subsidence of powerful emotions. Walsh continues: "Death and loss must be the unseen cause, and the scene has the flavour of a solemn public event. Peter Sellars writes of our 'underdeveloped culture of mourning' and our need for 'a grief that makes us more human' in the light of Viola's work. *Observance* has the potential to show the way toward a greater capacity for mourning loss in a communal setting." (*Bill Viola: The Passions*, Getty Publications, 2003)

Viola's works focus on universal human experiences—birth, death, the unfolding of consciousness—and have roots in both Eastern and Western art as well as spiritual traditions, including Zen Buddhism, Islamic Sufism, and Christian mysticism. Using the inner language of subjective thoughts and collective memories, his videos communicate to a wide audience, allowing viewers to experience the work directly and in their own personal way.

Bill Viola
Observance

Bill Viola is considered a pioneer in the medium of video art and is internationally recognized as one of today's leading artists. He has been instrumental in the establishment of video as a vital form of contemporary art, and in so doing has helped to greatly expand its scope in terms of technology, content, and historical reach. For over 35 years he has created videotapes, architectural video installations, sound environments, electronic music performances, flat panel video pieces, and works for television broadcast. Since the early 1970s, Viola's video installations have been shown in museums and galleries worldwide and are found in many distinguished collections. In 1977 he met Kira Perov in Melbourne, Australia and they began a lifelong partnership and collaboration, working and traveling together.

Viola's first large exhibition of works toured six venues in Europe organized by the Kunsthalle Düsseldorf in 1992. He represented the U.S. at the 46th Venice Biennale in 1995, premiering an ensemble of five new installation works titled *Buried Secrets*. In 1997 the Whitney Museum of American Art organized *Bill Viola: A 25-Year Survey* that travelled to six museums in the U.S. and Europe. In 2002, Viola completed an ambitious 5-part High Definition video project, *Going Forth By Day*, commissioned by the Deutsche Guggenheim Berlin and the Guggenheim Museum, New York. *Bill Viola: The Passions* was exhibited at the J. Paul Getty Museum, Los Angeles (2003), the

National Gallery, London, the Fondación 'La Caixa', Madrid and the National Gallery of Australia, Canberra. In 2005 Viola created a four-hour video work for concert performances of Richard Wagner's *Tristan und Islode* (stage director Peter Sellars), at Walt Disney Concert Hall, Los Angeles, Lincoln Center for the Performing Arts, and fully staged at the Paris Opera. Most recently, one of the largest exhibitions of Viola's installations to date, *Bill Viola: Hatsu-Yume (First Dream)* (2006–07), was presented at the Mori Art Museum in Tokyo.

Viola is the recipient of numerous awards and honors, including a MacArthur Foundation fellowship (1989), and was a scholar at the Getty Research Institute, Los Angeles (1998). He holds honorary doctorates from Syracuse University (1995), The School of the Art Institute of Chicago (1997), and Royal College of Art, London (2004) among others, and in 2006 he was awarded Commander of the Order of Arts and Letters by the French Government.

Bill Viola and Kira Perov live and work in Long Beach, California.
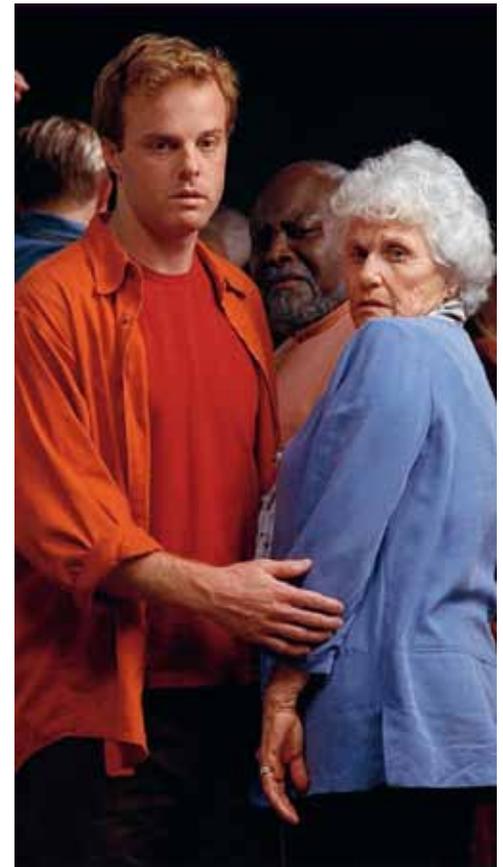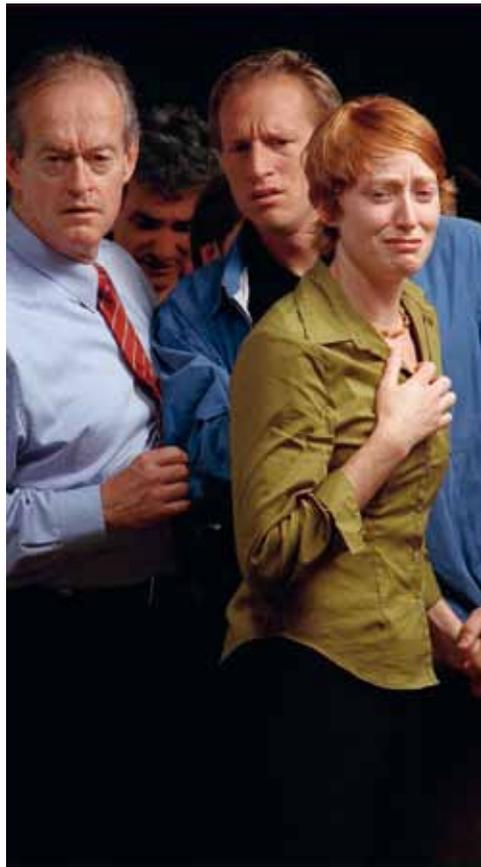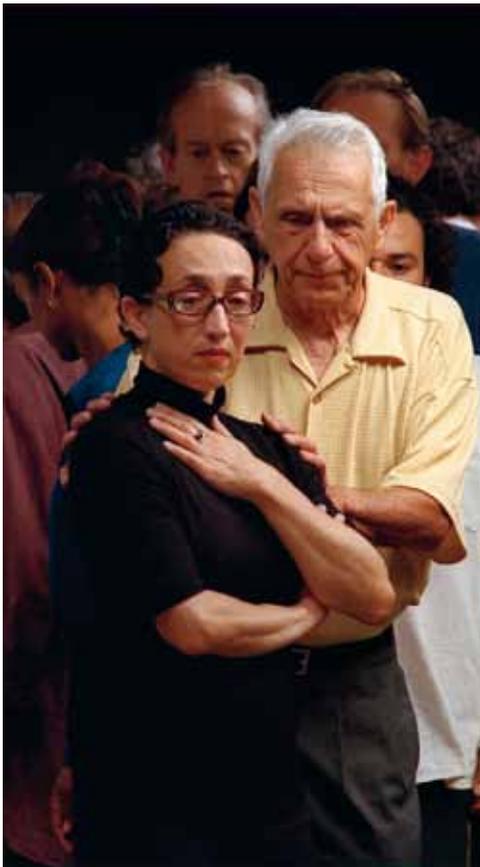
(above)

Observance, 2002
colour High Definition video on plasma
display mounted on wall
Photographer: Kira Perov

***Still: Waiting2* is an immersive installation environment that is both unsettled and revealed by our presence. It is part of a continuum in the artist's work that explores the rendering of appearance and invisibility. Filmed on high definition video in an eerie twilight, *Still: Waiting2's* evocative surround sound-scape amplifies the dramatic movement of enormous flocks of birds.** The imagery comes from the Flinders Ranges, South Australia – an area that is home to huge flocks of native Corellas that meet at first and last light in the Red River gums of dry creek beds. Amongst the most social birds known, Corellas have evolved scouts who fly ahead of the large flocks to ensure safe travel.

Wallworth's installation sets up two modes of viewing for zones of presence that operate within the work. The first is a kind of hide, where we are present and veiled from intimate imagery of the birds in silhouette. The second zone occurs as one enters the expanse beyond. At this moment the space is ruptured: the birds flee, leaving subsequent visitors to enter a space containing a landscape of solitary trees where that intimacy is lost. The work is about a threshold, a gateway that is passed through often unknowingly. Movement causes rupture and triggers changes that we cannot anticipate and often cannot see, contemplating a basic truth: entering any space has consequences.

A second contemplation point: stillness reveals. As the threshold is crossed for the first time, the intimacy of the hide does not return but another view is offered to us. This perspective is one that is gained over time. The work offers us a choice, however as we – like the Corellas – live in social groups, our choices are affected by others. The first point of entry from hide into territory may be made by someone else, maybe too hurried for us, perhaps before we are ready. However, from this moment, first entry ceases to exist, and all we can offer is to wait in stillness, to exist motionless within this ecosystem, to see what will be shown to us over time. This waiting stillness is at the core of the work; *Still: Waiting2*, like many of Wallworth's environments, functions around visitors' relationships that are communal rather than solitary – reflecting on human immersion in a complex, interconnected world.

Lynette Wallworth
Still: Waiting2

(opposite)

Still: Waiting2, 2006

single channel HDV cam, 5.1 surround sound

Commissioned by New Crowned Hope and Arnolfini

Produced by Forma

Supported by Arts Council England and the City of Melbourne Arts House program, Australia Council Fellowship New Media and Visual Arts Board

Lynette Wallworth's practice spans video installation, photography and short film. Her work focuses on the relationships between ourselves and nature and explores how we are made up of our physical and biological environments, even as we re-make the world through our activities. The activation of the work by the viewer becomes a metaphor for our connectedness within biological, social and ecological systems.

Wallworth was awarded a New Media Arts Fellowship from the Australia Council for the Arts 2003–2004. Recent exhibitions include *Invisible by Night*, commissioned by Experimenta for the 2004 Melbourne Festival, *Still: Waiting1*, Ivan Dougherty Gallery, Sydney as part of Terra Alterius which toured to galleries throughout Australia during 2005. Arnolfini Gallery, Bristol, UK, presented the European premiere of Wallworth's work with *Still: Waiting2* in 2006 and she completed an Arts Council England Fellowship residency at the National Glass Centre, Sunderland, UK. In November 2006, the first major European solo exhibition of her work took place at the New Crowned Hope Festival in Vienna. In early 2007, the National Glass Centre in Sunderland hosted Wallworth's first UK solo show, whilst the Auckland Triennial featured her most recent work *Evolution of Fearlessness. Damavand Mountain* was presented in Regarding Fear and Hope at Monash University Gallery, Melbourne 2007. The BFI Gallery London commissioned the next stage of her work Hold, presenting *Hold: Vessel 2* in June 2007.

Lynette Wallworth lives and works internationally and makes her work in Melbourne.

I took a deep breath...

PERTH INSTITUTE OF CONTEMPORARY ARTS

ARTISTS:
BORIS + NATASCHA (Germany/Australia)
George Khut (Australia)
Ulf Langheinrich (Austria/Ghana)
Kylie Ligertwood (Australia)

COORDINATING CURATOR: Hannah Mathews

PICA is proud to present four artist projects as part of *BEAP 07: Stillness*. Collectively titled *I took a deep breath…*, these distinct and ambitious works platform intriguing intersections between art, technology and science while bringing together electronic art practices from a range of leading Australian and international artists.

I took a deep breath...
PERTH INSTITUTE OF CONTEMPORARY ARTS   13 September – 21 October 2007

In showcasing a rich and challenging mix of visions and accomplishments, *I took a deep breath…* provides audiences with a range of access points into the complex notion of stillness. Across a variety of media, each artist offers a poignant reading of this theme via contemplative and perceptual meditations and embodied experiences. That said, *I took a deep breath…* is also a collection of highly idiosyncratic works that take the viewer in various, unexpected directions; a natural outcome for works that emerge from powerfully distinct sets of imaginings and preoccupations.

Ulf Langheinrich's *WAVEFORM B* premieres in Australia during BEAP 07, providing viewers with a dramatic and immersive audiovisual environment. Comprising a sophisticated composition of four cloned projection fields and accompanying strobes, the work displays artificial light waves that pour 13.5 metres down from PICA's grand ceiling to the central gallery space. These emissions come together to create an organic sync symphony of mesmerising blue that hovers atop a glowing white platform on the ground floor. PICA's mezzanine level allows audiences a unique opportunity to experience *WAVEFORM B* from a height, coming face to face with the work's projection strobes.

The work in totality, however, is best experienced from PICA's ground floor where the subtle changes of the material can be seen up close. Here, standing at its perimeter, the viewer becomes propelled between the work's extreme oscillations of pure colour and minimal structure. Soundtracked to the low rumble of symphonic and harmonic compositions, *WAVEFORM B* is a temple to technology, enabling audiences to meditate upon the inherent stillness of a contemplative, digital void.

In counterpoint to Langheinrich's physical investigation of stillness in the data age, George Khut's *Cardiomorphologies v.2* offers us a truly embodied experience of stillness. This work sees a visit to the doctor turn into an interactive installation that allows participants to explore the connection between body and mind through their own breathing and heart rate activity. Wearing a breath-sensitive belt that straddles the ribcage, seated participants grasp cylindrical sensing devices to measure the physiological

clockwork of their body. Leaning back into a comfortable recliner, this collected data is transformed into an abstract interactive artwork and sound environment; 'a beautiful, temporary, solipsistic universe' in which everything you see, hear and feel is generated from within your own body. The result is a synaesthetic augmentation of the body where the viewer, still in the here-and-now of their own subtle physicality, becomes aware of their embodied existence in the world.

In the Westend gallery, BORIS + NATASCHA offer a 21st century perceptual meditation on the idea of stillness. Taking their alias from the Russian pranksters of the 1960's television series *Rocky and Bullwinkle*, BORIS + NATASCHA have been collaborating since 2003. As part of BEAP 07, the artists premiere their recently completed *Meditations* series of five guided visualisations. Known for creating dark and often socially critical cross-media works, *Meditations* is a twisted re-imagining of self-help videos that play with western society's obsession with fear, albeit with a slightly more sinister bent. Shrouded in darkness and wearing headphones, the viewer is secluded in a field of meta-narratives and subjected to a series of dramatised scenes of contemporary life. Physically disengaged from the drama playing out on screen, we visually navigate these various modern scenarios, projecting ourselves into these mediated spaces. Guided meditations usually lead the viewer into the 'light', however, *Meditations #1–5* welcomes us into a darker realm of fear, anxiety, paranoia and panic attacks. This is anti-relaxation for tough times, providing moments of double-edged stillness within our increasingly frantic world.

Kylie Ligertwood's *Home (0,0)* takes us full circle in our exploration of stillness. A homegrown and emerging new media talent, Ligertwood has forged a diverse practice that hybridises genres and mediums. Encountered by entering PICA's elevator, this newly commissioned work for BEAP 07 is a site-specific audio experience that simulates the resident loft of 120 homing pigeons. While the pigeons cannot be seen, their movement and gentle cooing can be heard. These birds find their way home via the detection of the earth's magnetic fields, the sun, ultraviolet and polarised light, infrasound and changes in air pressure. Once at their destination, the pigeons occupy the sound of stillness where the organic and the inorganic are as one.

Similar to Langheinrich's *WAVEFORM B* where stillness is identified at the eye of the digital void, the title of Ligertwood's work alludes to a search for calm amidst the noise of the everyday. Through her efforts to sort the signal from the noise, *Home (0,0)* also explores the transformative powers of sound and its virtual possibilities of flight as visitors travel from one gallery floor to another. The meditative quality of this experience is not dissimilar to that captured by BORIS + NATASCHA, yet the work also offers possibilities for spiritual illumination as embodied in Khut's *Cardiomorphologies v.2*.

I took a deep breath… profiles an ambitious and challenging collection of electronic art and offers various interpretations of the notion of stillness as it has been discussed and theorised throughout history, and more specifically the 21st century. By providing points of engagement through mediation, contemplation and embodiment these works also open our consciousness to new experiences and dialogues of stillness in an increasingly progressive age. The works presented as part of *I took a deep breath…* are discussed in some detail across the following pages along with artists' biographies for those wanting to learn more about the artists' backgrounds. PICA would like to acknowledge the support of JumboVision in realising the presentation of these projects and that of Der Regierende Bürgermeister von Berlin. PICA would also like to extend a big thank you to the artists for giving their time and ideas towards this project.

HANNAH MATHEWS 2007
Hannah Mathews is the Coordinating Curator of *I took a deep breath…*

BORIS + NATASCHA

Is modern life full of fear?

BORIS + NATASCHA's *Meditations #1–5* presents us with a series of dramatised scenes that depict modern life whilst teasing out the shifting relationships between the viewer and the films' characters. The disparity between screen event and the expression of the characters' own inner anxieties, allows the viewer a portal into a complex world, less shiny than the gentrified image initially apparent.

The urban and suburban locations chosen as the backdrops for these works, present stages for a string of experiments in interaction: those between the character's internal dialogue, and us – distant and dysfunctional relationships, which perhaps have become our norm.

Unlike the author of literature who can choose whatever voice and nuance needed, writers for the moving image have always wrestled with finding new forms to express multiple viewpoints. Filmmakers have to actually show what is happening – the lens does not allow the nuances of the pen – whereas literature can get right inside your head placing the reader in the mind of the writer. Fyodor Dostoevsky excellently demonstrated this in *Notes from the Underground,* which extends and shifts the internal monologue to its most complex level. His character, self-questioning through multiple layers in the first person, depicts humans as irrational, uncontrollable and uncooperative, possibly for the first time and is considered to be the first existential text.

The cinematic image has often had to rely on recordings of a narrator's voice, to speak of what is happening off screen or inside the characters' mind and then laying it on top. Similarly, the tradition of converting texts into scripts is a large part of narrative cinema's history and is often reliant on the voice over; a crude technique. Raymond Chandler's iconic protagonist, Philip Marlowe, originally existed in text in the first person before becoming translated into the drawling voice over of Humphrey Bogart in the film of the same name. Similar to the curiosity of the private eye, BORIS + NATASCHA have a fixation with the personal imagination and fear. They also share a fascination with language and the discrepancy of diverse perspectives, which when applied to the personalities they choose to feature, might have come straight from a Chandler novel.

'I'm a romantic, Bernie. I hear voices crying in the night and I go to see what's the matter. You don't make a dime that way… No percentage in it at all.'

Philip Marlowe, private eye and voice of the contemporary video artist?

MIKE STUBBS 2007

Mike Stubbs is an artist and Director of FACT (Foundation for Art and Creative Technology), Liverpool.

(left to right)
Meditations # 2–5 (2007)
production stills
images courtesy of the artists

Using photography, video, mixed media and text, BORIS + NATASCHA produce twisted conceptual works that explore the human condition. Born during the war of Not-So-Nice-Land vs the world, Boris learned fast to have an evil plan. Although he never imagined one day to meet his evil twin: Natascha, daughter of communist immigrants, born in Convict Country. After two lifetimes as solo artists – throwing bombs in places like Deichtorhallen, Hamburg; Künstlerhaus Bethanien, Berlin; Videonale Bonn; European Media Art Festival, Osnabrück; The Australian Centre for the Moving Image, Melbourne; The Australian Centre for Photography, Sydney; The Australian Centre of Contemporary Art, Melbourne; The Next Wave Festival, Melbourne and the Edinburgh, Taiwan and Hannover International Film Festivals – they started collaborating in 2003. In between their dark pranks, BORIS + NATASCHA maintain university teaching positions in Pottsylvania and Mainz.

BORIS + NATASCHA are represented by Strychnin Gallery New York/Berlin.
www.borisandnatascha.com

Across many cultures the breath and heart symbolise the unity of body and mind. Physiological metaphors spring from the intimate entwining of our bodily sensations with our passions, anxieties and intentions. Your heart aches with love; wonder takes your breath away.

Try this: *Locate your breath in your body wherever you feel it most, maybe in your throat or chest or at the tip of your nose…*
Place your hand on your heart, or on the pule point at your wrist. Can you feel it beat?

As soon as we draw attention to our breath and heart we immediately become aware of our embodied existence in the world. Our conscious minds come home to our bodies. This is the basis of many different traditions of meditation and somatic body-work. George Khut makes it the basis of his art practice.

Cardiomorphologies v.2 creates real-time visual and sonic representations of your breath and heart. Seated in a comfortable reclining chair, you are fitted with a breath sensor, which stretches around the body, and given heart sensors to hold. On a large screen a shifting pattern of spheres of light comes to life. The spheres directly respond to breath and heart rate; they expand and contract, overlapping one another, blurring, sharpening, changing in hue and intensity. Coloured rays emanate from the bright point at the centre of the spheres. The different colours and lengths of the rays indicate aspects of your psycho-physiological state, such as whether you are alert and aroused or calm and relaxed. You are surrounded by a responsive soundscape composed of amplified heart sounds and seductive harmonics.

The experience of *Cardiomorphologies v.2* is powerful and unusual. Khut's highly refined audiovisual style focuses attention on the subtleties of the physiological changes that drive the artwork. The sensitive, delicate programming creates a seemingly organic, intelligent connection between you and the system. The result is a synaesthetic augmentation of the body in which the breath and the heartbeat are simultaneously seen, heard and felt. *Cardiomorphologies v.2* creates a beautiful, temporary, solipsistic universe, in which everything you see, hear and feel is generated from within your own body.

George Khut
Cardiomorphologies v.2

(opposte)

George Poonkhin Khut, with Lizzie Muller and Greg Turner
Cardiomorphologies v.2 (2005)
installation view at Beta_space Gallery, Powerhouse Museum, Sydney 2005
photograph by Greg Turner

NOTES

1. George has recently been awarded a Doctorate in Creative Arts based on this body of work. For more details see Khut, G. *Development and Evaluation of Participant-Centred Biofeedback Artworks*, Exegesis for Doctorate of Creative Arts, University of Western Sydney, 2006.

2. See Shusterman, R. *Performing live: aesthetic alternatives for the ends of art*, Ithaca, N.Y., Cornell University Press, 2000.

But the artwork will not let you sink into narcissism. While your connection to the sounds and images is viscerally felt, the ambiguities of the visualisations keep you questioning and wondering: what are these visualisations telling you about the state of your thoughts and sensations? How much control do you really have over your body? How do the sensations in your body influence your thoughts and feelings? What is your relationship to yourself?

Cardiomorphologies is part of a series of biofeedback artworks created by Khut between 2003 and 2006[1] that create visual and sonic representations of physiological data from the audience's body. With these works, he aims to provide a way for participants to explore the relationship between their physiology and their subjectivity. Khut is influenced by a number of different cultural and intellectual traditions including Eastern practices of meditation and martial arts, Western somatic practices such as Feldenkrais and the emerging philosophical field of Somaesthetics, proposed by Richard Shusterman[2], which asserts the central role of the body in the creation and appreciation of art. Khut's art practice is a meeting point of different ways of thinking about the body in the world. The material he works with is *your* experience of yourself.

LIZZIE MULLER 2007

Lizzie Muller is a curator, writer and researcher specialising in audience experience and interaction.
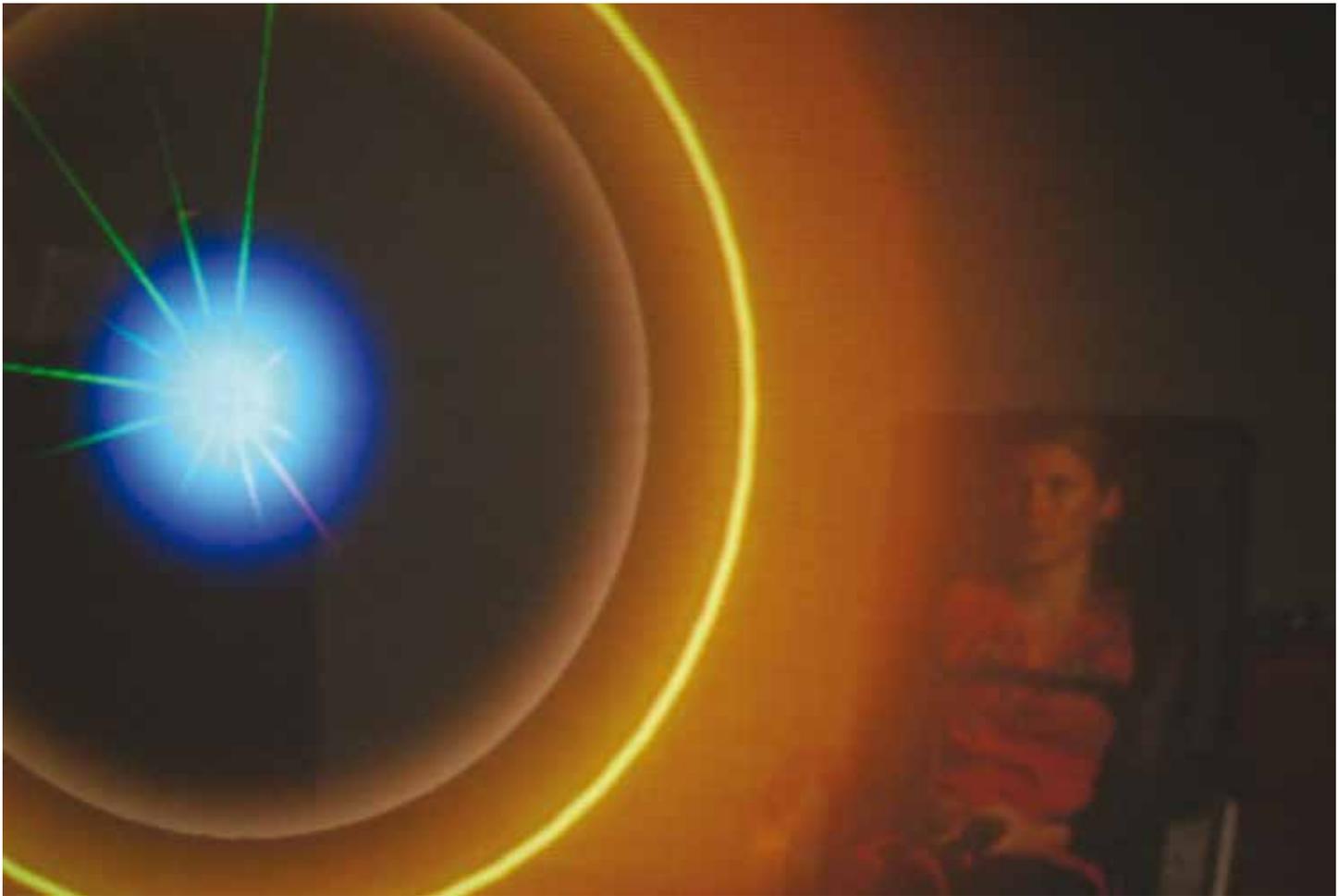
George Khut was born in Adelaide in 1969 and currently lives and works in Sydney. His practice-based research interests focus on the use of biofeedback and physiologically responsive media as tools for sensing and re-imagining the lived experience of mind-body interrelation. His interactive installation works enable participants to experience and interpret aspects of their own bodily processes as dynamic audio-visual environments. Recent works include *Drawing Breath* and *Cardiomorphologies v.1* (with John Tonkin) and *Cardiomorphologies v.2* (with Lizzie Muller and Greg Turner), both of which where developed during his Doctorate of Creative Arts candidacy at

the University of Western Sydney. George has exhibited widely throughout Australia and overseas, including *Cardiomorphologies v.2*, Arnolfini, Bristol (2006); *Strange Attractors*, Zendai Museum of Modern Art, Shanghai (2006); and *Asian Traffic*, Gallery 4A, Sydney (2005–06). In addition to his recent work with interactive media, George has also worked as a sound designer and video artist on numerous dance, theatre and community arts projects.

www.georgekhut.com

Ulf Langheinrich is not the 'usual' type of multimedia artist found in the milieu of new media. Before turning to new media, he had a long career as a painter, developing both classical and contemporary techniques. In parallel, Langheinrich also became involved in musical composition and sound design. After more than ten years working in Granular-Synthesis alongside Kurt Hentschläger, Ulf's new solo projects now refer to both his past works as an artist and his new media career.

As with many pieces by the artist, *WAVEFORM B* is part of a collection of works that begins with *OSC*; a square image on a wall. This work eventually developed into *PERM*; an abstract interactive film projected on a dome that was developed for Australian artist, Jeffrey Shaw's *EVE Interactive Cinema* (which premiered at the exhibition *Cinémas du Futur* in Lille, France, 2003–04). Another work of note in this collection is *HEMISPHERE*; a half-spherical immersive film projected on a suspended 10 meter wide bell that dominates the audience (and premiered in the RomaEuropa Festival in 2006).

While these works inform one another and intend the work to dominate the viewer both in scale and form, *WAVEFORM B* marks a significant shift for the artist. Here a subtle paradox occurs between the work and each individual: the visitor is in a dominant and quasi divine position above the floor-based projection but is simultaneously totally immersed or trapped in the vertigo generated by the artwork.

This vertigo is the result of two main aspects of this artwork. *WAVEFORM B* is a radically abstract artwork that takes us to the boundaries of perception, oscillating between noises and cycling stripes. It is also a totally organic universe, leading to a second paradox – this universe is in constant implosion defying the usual laws of movement. Both aspects generate diverse feelings ranging from the vertigo described above to a euphoric or sensual feeling; visitors or even couples may begin to move or dance spontaneously on top of the artwork!

Ulf Langheinrich
WAVEFORM B

Like many of Langheinrich's artworks, *WAVEFORM B* also allows us to speak about 'enthusiasm' – with regard to both its historical reference as 'full of God' and in its more prosaic existence of today. For that reason, *WAVEFORM B* can be linked in a poetic way to the new trends of Informational Physics that was initiated by Democritus and Kant and developed recently with the new tools of our century by a generation of physicians such as Jeffrey Bub, Christopher Fuchs or Alexei Grinbaum.

This capacity to combine seemingly irreconcilable elements, such as cold, abstract, radical concepts and visual elements of warm, organic, human-orientated emotions and feelings, is the trademark of a strong and rare artists' community of which Ulf Langheinrich is one of the most elegant members.

RICHARD CASTELLI 2007

Richard Castelli is a producer, curator and the Director of Epidemic, France.

(opposte)
WAVEFORM B (2005)
installation view
image courtesy of the artist and Epidemic
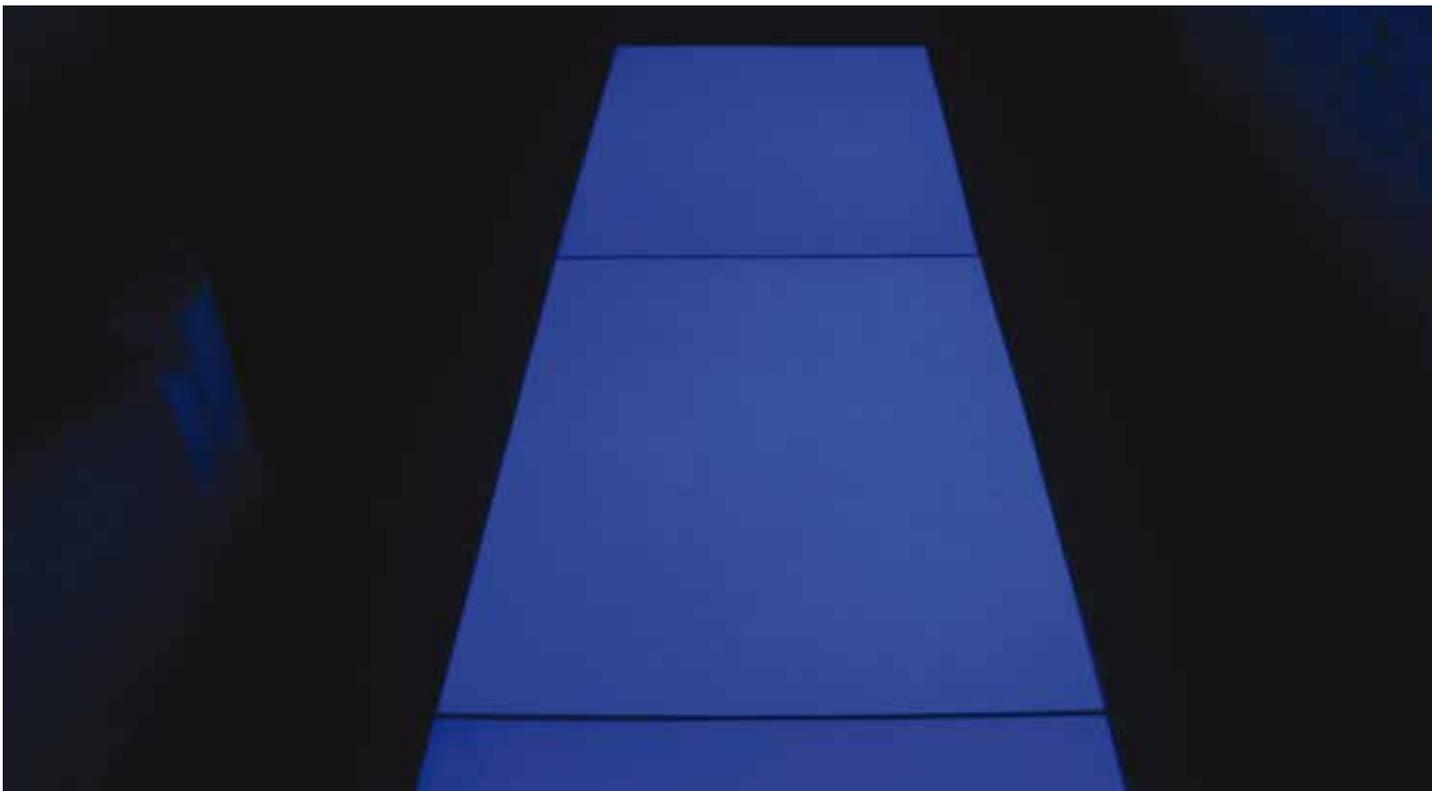
Ulf Langheinrich was born in Wolfen, Sachsen Anhalt, Germany in 1960, and currently lives and works in Austria and Ghana. His projects utilise photography, sound and video, light and technology to create sensory environments that seek to question the conventions of multimedia. Ulf began studying art at the Dresden Academy of Fine Arts in 1978 (the same year he undertook his military service in the National People's Army of the GDR), and continued his studies at the College of Art and Design in Halle, Germany from 1981–1984.

From 1991 to 2003 Ulf's career has been dedicated to Granular Synthesis, a media-art collaboration he formed with Kurt Hentschläger in 1991. The ambitious projects of Granular Synthesis have been exhibited widely, including *Modell 5* at VEO Festival, Valencia, Spain; Australian Centre for the Moving Image, Melbourne; and the Institute of Contemporary Art, London (1994–06); *Noisegate* at Museum of Contemporary Art, Montreal and Creative Time, New York (1996–00); *POL* at Zeitfluss / Salzburg Festival, Wien Modern, Vienna (1998–00); *Areal* at Elektra Festival, Montreal and Dissonance

Festival, Rome (2000–06); *Reset*, created specifically for the Austrian Pavilion at the Venice Biennale (2001) and *Lux* at Eyebeam, New York and The Center for Art and Visual Culture, Baltimore (2003–06).

Since 2003, Ulf has received much recognition working as a guest professor at both the Academy of Visual Arts, University of Leipzig and at the FH Salzburg University, Austria. A number of Ulf's recent solo installations / performances have also been included in international group exhibitions and art fairs, such as *From Flash to Pixel*, Zendai MoMA, Shanghai (2006); *Ars Electronica*, Linz and Madrid (2005–07); *White Noise*, Australian Centre for the Moving Image, Melbourne (2005); *Art Brussels*, Chromosome Gallery, Belgium (2004); and the *Dutch Electronic Art Festival*, Rotterdam (2004). He was also the featured artist at Ars Electronica in 2005 and an artist in residence at RMIT University, Melbourne in 2006.

Ulf Langheinrich is represented by Epidemic, France.
www.epidemic.net

The title of Kylie Ligertwood's site-specific PICA commission, _Home (0,0)_, is a metaphor construed from the work's audio source: sound recordings of homing and racing pigeons. This idea is reinforced by the siting of '0,0'; coordinates for the beginning and end point: home.

Home (0,0) follows an earlier work by the artist entitled _Flock_ (2005). This audio installation comprised 14 birdcages that were suspended as a mixed group from architecture and trees at various locations around Perth. Each cage contained a single speaker that carried the artist's composition [1]. In _Home (0,0)_ there is a kind of inversion of the earlier work, though both artworks are unique in their conceit in that they are expansive and pleasurable for their audience. In _Home (0,0)_ the audience is asked to occupy an elevator cage to hear or witness the work; the sounds of racing pigeons at rest in their coop.

Ligertwood's concerns with the transitory nature of pigeons and flight are grounded in the science and metaphysics of their flight patterns and the use of the physical world in ways mostly unseen by us. The title alludes to a search for 'stillness' amidst the noise of the everyday. It is believed that pigeons use electromagnetic forces, low frequency sound, light and changes in air-pressure to map their journey home. It is the artist's intention to understand these forces as connecting to certain fundamentals: life force, ancient systems, 'the charge that pulls things together or keeps them apart'. Ligertwood suggests that to tap into that charge; to use it rather than being driven by it, is to find stillness within the interstices of and within the journey. To sort the signal from the noise.[2]

Stillness here is not the populist Zen notion of 'oneness' or the romanticism of the Pre-Raphaelites, enmeshed in passion and desire fulfilled only by nature. Ligertwood's pigeons are not Christina Rossetti's metaphoric doves 'stilling the earth' in _Dream Love_ [3]. Ligertwood's pigeons are critically aware: if 'stillness' is an escape from the surrounding and alienating 'noise', it is therefore an effect of violence. Hence the notion of home in the title is both a desire for a base and an acknowledgement of survival, a return to safety. The desire to cite stillness requires its opposite to be nearby.

Kylie Ligertwood
Home (0,0)

NOTES

1. The audio compositions in _Flock_ were comprised of bird song, bells and a totaling machines: interspersed in the composition is the spoken word 'now'.

2. From an email exchange with the artist.

3. Christina Rossetti, _Dream Love_ (1854). In _Dream Love_ doves are used as metaphor for a lover, 'stilling' the earth.

4. Beckett, Samuel, _Waiting for Godot_. New York: Grove Press, 1954, p.58

Ligertwood dares us to break habit and fly beyond the everyday, yet we wonder about the landing rather than the flight: is everything in place, where things should be? Choice circulates from within and around us. And whilst we know instinctually the translucent oceans of the air, what it is to fly, to love, we keep to our pattern and stay close to what is common; this is habit and as Beckett's Vladimir would have it "habit is a great deadener"[4]. Our choices are mostly local, safe. It is fitting then that Ligertwood's pigeon sounds are located in an elevator and that we defy gravity vicariously, the excitement of the ascent, the beating heart, soaring followed by the inevitable descent: these conditions parenthesised by a cage.

Notably, these modest, squat cooing and preening ex-posties have soared through time: thrust up upon violent gusts; forced near ground at a speed that would make all but the strongest of us scream in terror. We easily give way to pressure, free fall, furiously flapping to no effect! Yet we dream the highs will lift us toward the sun – over the treacherous lows in a moment. Released from a shrunken world into an expanded universe where time is not measured and every moment exists without a whit of second-guessing.

For me this is the sense in Ligertwood's work: we all know how to soar above the noise; it is the will to remember to work against fear, fly against habit, leave the cage but maintain the stillness of home.

DEREK KRECKLER 2007
Derek is an artist and teacher. He lectures at the University of Wollongong.

A home grown and emerging new media talent, Kylie Ligertwood has forged a diverse practice that hybridises genres and mediums. Having previously completed her Honours in Medical Science, Ligertwood graduated with a Bachelor of Arts (Electronic Arts) from Edith Cowan University in 2005. She has maintained a consistent exhibition history since 2004, including commissioned work for the 2005 Artrage Festival, participation in PICA's Studio Program in 2006, and inclusion in the *Hatched National Gradaute Show* of the same year. Kylie has also undertaken curatorial work, including *You are Here…entangle* for Tura New Music's 7th Totally Huge New Music Festival (in association with SoundCulture WA) and was an Associate Producer of the 2006 Artrage/City of Perth Northbridge Festival.

(above)

image from artist's archive

photograph by Hugh Peachey

Still, Living

SYMBIOTICA

ARTISTS:
Art Orienté objet – Marion Laval-Jeantet & Benoît Mangin (France)
S.Chandrasekaran & Gary Cass (Singapore/Australia)
Brandon Ballengée (USA)
Beatriz da Costa (Germany/USA)
Critical Art Ensemble (USA)
Verena Kaminiarz (Germany/Canada)
Zbigniew Oksiuta (Poland/Germany
The Tissue Culture & Art Project – Oron Catts & Ionat Zurr (Australia)
Paul Vanouse (USA)
ORLAN (France)
Natalie Jeremijenko (Australia/USA)

CURATOR: Jens Hauser (Germany/France)

Let's step back a moment and try a transhistorical thought experiment: What if we considered nowadays art that deals with biological systems as a contemporary vanitas version of yesteryear's tradition of Still Life?

At first sight, this approach may seem awkward. Of course, Still Life – the depreciative French term for it is *nature morte*, dead nature – consists in depicting inanimate natural or man-made subject matter, and in recomposing the isolated fragments of life in a different manner. However, while by the 15th century Still Life objects were often meant to enhance religious paintings of spiritual *gravitas*, later, its highly detailed optical realism became independent and focussed on material *vanitas*, while being increasingly considered at the lowest order of artistic recognition by the dominant academia who established hierarchies of genres based on their subjects. Why weren't they appreciated, those skulls, pocket watches, hourglasses or candles burning down that contrasted with the sumptuous arrangements of fruit, flowers and banquet tables laid with fine crystal? They were symbolic reminders of life's *impermanence* and human's transitory nature.

Art that concretely deals with carbon-based biological systems is ephemeral by its very nature. The artists featured in *Still, Living* act less by pure technophile affirmation of anthropocentric biotechnological prowess or cognitive dominance over the non-human than by reflected scepticism towards our current notions of progress. Despite the accelerating rate of technological innovation and the growing impact of techno-scientific discourses on economy, worldviews and belief systems, this field of art indeed slows down, scales down, by its re-materialization. No plug-and-play here. Growing needs stillness, even in a field of growing interest. Our thought experiment has to deal with an apparent paradox. As biology's ascent to the status of the hottest physical science has been accompanied by the massive use of biological metaphors in the Humanities, this has also generated a wide range of biotech procedures that are providing artists simultaneously with the topics and new expressive media: transgenics, cell and tissue culture, plant and animal selection and breeding, homografts, synthesis of artificial DNA sequences, neurophysiology or synthetic biology. Artists are in the labs.

Still, Living
THE BAKERY ARTRAGE COMPLEX 15 – 23 SEPTEMBER 2007

But at the same time, the phenomenological engagement with *wetwork* that artists can now experience has not led to an overall 'Promethean' impetus to absolutely wish to inform living matter, based on the concept of our own physical architecture as information. Despite the growing prominence of the engineering approach in contemporary life sciences, artists tend to remember that biology not only is about manipulation but also about observation of the logics of life. Bio-media and bio-topics in art today indicate a still unclear post-digital paradigm of what W.J.T. Mitchell describes as "the Age of Biocybernetic Reproduction", in which the *cybernetic* refers to the control and communication, and the *bios* as being the subject to control but which "may resist that control, insisting on *a life of their own*".[1] Biological art touches on the visceral at the same time that it produces meaning. It does not only picture or represent but gives a feeling of being linked to the presence of a holistic *bios*.

BEAP, the Biennale of Electronic Arts Perth, has been the first experimental art festival worldwide to regularly include *wet* biological art practices since its beginning. *Still, Living* now explores the relation between biological systems at the micro and the macro scale, questions the primacy of logo- and phonocentrism, stages the silent running of invisibility and physiological experiences, looks into trans-species relationships and soft architecture, and considers our bodies as a battlefield for biopolitical thinking as well as tactical biomedia use. What is *new*? New media transforms artistic expression, and today new media is not necessarily only about digital media anymore. But the *newness factor* itself is very old, as much as technological flux is intrinsically dynamic. *Still, Living*, with the quality of the ephemeral which is inherent to the works, remembers Still Life, in that every minor detail can gain great symbolic importance. It is striking that in the early 20th century Still Life of European Modernism responded to mechanized industrialisation by Cubist-derived abstraction which amplified the isolation of objects in the world. Today though, after a certain disenchantment from Modernism, artists who are in contact with the ever increasing fragmentation resulting from life sciences often seem to deliberately wish to contrast the molecular micro level with a systemic macro level that is expressed through ecological concerns, interest in cognitive ethology and the corresponding epistemological challenges.

Another change appears in art that deals with biological systems. It has been commonplace for Still Life to integrate animals as equivalent to other inanimate objects, thus stressing the large gap separating them from the human form, be they dead or alive. A good example is Jean Siméon Chardin's *The Silver Tureen* (1728) in which a curious cat looks at a dead hare and a soup bowl. Now, a biotechnological art display such as *NoArk* by the Tissue Culture & Art Project, in which cells from various organisms are fused, questions the scientific relevance of anthropocentric classification in the light of contemporary chemotaxonomy, and criticises the biblical roots of displays seen in our Natural History museums. *NoArk* is also a good example of what the German philosopher Nicole C. Karafyllis calls a *biofact*[2] – a neologism which melts the *artefact* and the *bios*, a hybrid between an epistemic thing and a living being or system and in which the central characteristic of growth is induced through technical treatment. *Skin Culture* by the French duo Art Orienté objet, as well as ORLAN's prototype of a transracial, composite *Harlequin Coat*, are further examples of a strategy to enlarge the metaphorical potential of biological artwork by metonymy. Whereas metaphors function by similarity between two fields, metonymy works by contiguity and association. Materially speaking, the signifier and the signified overlap. The medium of expression – the cells – is identical to the signified, which has an influence on how we may perceive those *biofacts* through co-corporal projection. What this gives rise to is a realm of emotional tension and interplay between two possible modes of perceiving the action: the viewer switches back and forth between the symbolic realm of art, and the "real life" of materials and performative processes that are being put on display and that is being suggested by organic presence. In this light, the *Bleeding Angel* – a staged event that survives through its sculptural remains – by S. Chandrasekaran & Gary Cass also underlines the performative component in such art. Knowledge is not a still value, interpretations of scientific data are in motion and ephemeral, such as the vanishing images that Paul Vanouse creates in his live experiment *Latent Figure Protocol* by running DNA samples on a reactive gel.

Art Orienté objet, with their cultured, hybridized and tattooed skin composed of the artist's own epidermis and pig derma, and destined to be grafted by collectors onto themselves, revisit the question of animal experimentation and enquire about "the damages of Humanism that is understood as prime motor of technological development, (…) by disaggregation of a positive relationship with nature, and above all, without the ethical sense of existence which relies on the respect of the other."[3] Reverse strategies of this kind are frequent. Brandon Ballengée asks whether progressive techniques can be used to breed backwards. His long-term experimental project *Species Reclamation Via a Non-linear Genetic Timeline* cynically turns over Noah's Ark spirit, by recreating an extinct frog from close extant species, thus harbouring the illusion that new technology might be able to undo damage to the environment caused by past human technologies. Can artists re-enrich biodiversity? Verena Kaminiarz's double-headed flatworm in *Ich Vergleiche Mich Zu Dir* is struggling for the right direction. Natalie Jeremijenko's *OOZ: For the Birds* is ZOO backwards, a zoo where animals remain by choice and engage in interspecies communication with humans. Likewise, Beatriz da Costa's *PigeonBlog* engages homing pigeons in collecting pollution data to collaborate in the quest for a cleaner environment that benefits all species. Even Zbigniew Oksiuta's gelatine architectural objects from his *Breeding Spaces* series, conceived as a possible future organic space habitat, have an ecological undertone as they are fully biodegradable.

Naturally, art that deals with biological systems is difficult to display and to maintain in a gallery situation. And although its a/live character can be seen as intrinsic, the preservation, presentation and mediation of frequently ephemeral projects is often assured either in the form of material remnants that refer back to the process in the manner of a synecdoche, or by film, photo or video documents. This is the case, as an example, for *Immolation* by the Critical Art Ensemble. The video installation treats the subject of the use of incendiary weapons on civilians after the Geneva Convention, and shows their devastating effects to the body on the cellular level. Like a film still refers to the moving images, the video here acts as a placeholder for the live experiment. As art theorist Boris Groys states, "art documentation as an art form could only develop under the conditions of today's biopolitical age, in which life itself has become the object of technical and artistic intervention. In this way, one is again confronted with the question of the relationship between art and life – and indeed in a completely new context, defined by the aspiration of today's art to become life itself, not merely to depict life or to offer it art products."[4]

Thinking about biological art in the light of Still Life of course does not exclude other thought experiments. There are many perspectives to look at *Still, Living* and the artists oscillate between unstable utopia and fruitful dystopia.

JENS HAUSER 2007

NOTES
1. Mitchell, W.J.T.: *The Work of Art in the Age of Biocybernetic Reproduction*. In: *What do Pictures want? The Lives and Loves of Images*. Chicago, 2005, pp. 309-335.
2. Karafyllis, Nicole C. (Ed.): *Biofakte. Versuch über den Menschen zwischen Artefakt und Lebewesen*. Paderborn, 2003.
3. Laval-Jeantet, Marion: *Les Culture de peaux d'artistes d'Art Orienté objet*. In: Hauser, Jens (Ed.): *L'art biotech*. Nantes/Trézélan, 2003. P. 61.
4. Groys, Boris: *Art in the Age of Biopolitics. From Artwork to Art Documentation*. In: *Documenta 11_Plattform 5*. Ostfildern, 2002; pp. 108-114.

Skin Culture is the fruit of the artists' experimenting on themselves. Skin cells have been biopsied, cultured, hybridised and tattooed to form a cabinet of curious biotechnological self-portraits, like contemporary totems, and destined ideally to be grafted by collectors onto themselves. *Skin Culture* originates from experimental work the group has been undertaking with American laboratories in the Boston area in 1996, while being enrolled as *guinea pigs* in the "Framingham cohort", a group of individuals who volunteer to submit to extensive medical tests as part of a longitudinal study whose aim is to create a natural history of the living body: "We carefully tattooed these tissue samples with the emblems of our desire to belong to a marginal tribe that is dedicated to the preservation of rare species. So we decorated ourselves with the most popular animal imagery in fashion in tattoo parlours in the United States: varied imagery, honorary totems that would transform our skin into a type of wallpaper, a fleshy *toile de Jouy*. No new materials here: just us, recycled in our unrefined state as works of art with our utopias… small self-portraits that you can find attaching or that you can attach."

Marion Laval-Jeantet and Benoît Mangin founded Art Orienté objet in 1991 as a collaboration intended to resemble that between a playwright and a stage director in constant dialogue. During the last fifteen years their work has been focussing on "the sciences of life" in general, from the life sciences to ethology and trans-cultural psychiatry.

Art Orienté objet Marion Laval-Jeantet & Benoît Mangin
Skin Culture

(above)
Skin Culture – First Skin 1996
skin culture, formaldehyde
photographer: Art Orienté object

S. Chandrasekaran & Gary Cass
Bleeding Angel

Bleeding Angel aims to establish how certain human activities such as the act of standing, bleeding and drinking attributes to be part of human consciousness, and these attributes are part of everyday reality. By interpreting these attributes as part of everyday reality the project deals with the notion of divine that lies latent within and then acts on decision making and problem solving during encounters with others. In this performance, the Cyborgian system bleeds with wine and stages the interaction between living bacteria and a metallic machine. As the Cyborg bleeds it produces a self-healing skin-material.

The Cyborg represents several bodily properties such as skeletal systems, ossification, bleeding, bruising and skin formation. During this process, the audience can participate by drinking the wine. The *Bleeding Angel* intents to express how bodily functions of the Cyborgian systems such as smelling, bleeding and producing of skin-like material relate to the Human body during the performance process.

Singapore born S. Chandrasekaran is well known for his performance works since 1983. He has been lecturing at various art colleges, and was the Head of the School of Fine Art at LASALLE-SIA College of the Arts/Singapore. Presently, he is pursing his Doctor of Creative Arts at Curtin University of Technology. Gary Cass is a scientific technician with the Faculty of Natural and Agricultural Sciences, University of Western Australia teaching laboratories, and has been a scientific collaborator with SymbioticA. He has worked with many art projects engaged with biological specimens in these labs.

(below)
Bleeding Angel 2007
metal, 2 m x 1.5 m
image courtesy of the artist

This long-term experimental project involves breeding Hymenochirus family frogs. Brandon Ballengée has been working with what he believes to be several domesticated sub-species, while attempting to selectively breed generations 'backwards' to produce a Hymenochirus curtipes:

"An investigation into historic scientific literature leads me to believe that H. curtipes is a shorter limbed wild-type version that differs considerably from the domesticated laboratory frogs that I began with. In what Darwin referred to as regression, I have bred like with like attempting to resurface historically described physical traits. When exhibiting this project in a museum or gallery context, I display documentary photographs and text explaining the progression and methods employed within this project. But more importantly though, I exhibit the multiple generations of the living Hymenochirus frogs. I consider them to be the actual artworks. Each generation is stylistically different just as each individual animal is unique and should be viewed simultaneously as a living creature and a work of art."

Ballengée's projects involve exploring the historical origins and current practice of artificial selection and/or genetic engineering.

Brandon Ballengée is a NY based artist who explores the boundaries between art, science and technology by multidisciplinary works out of information generated from ecological field trips and laboratory research. He has collaborated with numerous scientists to conduct primary biological research and has collected specimens for several scientific organizations. In addition, he regularly conducts workshops in ecology, field biology and genetics at urban parks, zoos, pet stores and fish markets.

Brandon Ballengée

Species Reclamation Via a Non-linear Genetic Timeline: An Attempted Hymenochirus Curtipes Mode Induced By Controlled Breeding

(right)

Cleared and Stained Hymenochirus Metamorph: Generation 6 2003/07

scanner photograph of chemically altered preserved Hymenochirus family

(left)

Historic Specimen of Hymenochirus Curtipes collected from Congo, Africa in 1920 2003

digital photograph of specimen in the collection of the Natural History Museum in London

image courtesy the artist, Arts Catalyst, London, and Archibald Arts, NYC

PigeonBlog enlists homing pigeons to participate in a grassroots scientific data gathering initiative designed to collect and distribute information about air quality conditions to the general public. Pigeons are equipped with custom-built miniature air pollution sensing devices enabled to send localized information to an online server without delay. Pollution levels are visualized and plotted in real-time over Google's mapping environment, thus allowing immediate access to the data for anyone with connection to the Internet. The pigeon 'backpack' consists of a combined GPS/GSM unit and corresponding antennas, a dual automotive CO/NOx pollution sensor, a SIM card interface, a microcontroller and standard supporting electronic components. This project uses homing pigeons as reporters of current air pollution and seeks to achieve two main goals: 1) to re-invoke a sense of urgency around a topic that has serious health, environmental and political consequences, but often lacks public action and commitment to change; and 2) to broaden the notion of grassroots scientific data gathering while building bridges between scientific research agendas and activist oriented citizen concerns.

Beatriz da Costa is an interdisciplinary artist and researcher. She works at the intersection of contemporary art, science, engineering and political activism. Her work takes the form of public participatory interventions, locative media, conceptual tool building, and critical writing. Recent interests include interspecies collaborative efforts in order to promote the responsible use of natural resources and environmental sustainability. Beatriz is an Associate Professor in the Arts, Computation, Engineering (ACE) graduate program at the University of California, Irvine.

Beatriz da Costa with Cina Hazegh and Kevin Ponto
PigeonBlog

Critical Art Ensemble
Immolation

Immolation is a video installation concerned with the subject of the use of incendiary weapons on civilians after the Geneva Convention and the *Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons* of October 1980. This video chronicles the major war crimes of the United States involving these weapons on a (macro) landscape level, and contrasts it with the damage done to the body on the (micro) cellular level. To accomplish this task, CAE grew human tissue at the SymbioticA Art and Science Collaborative Research Laboratory in Perth, Australia, and using high-end microscopy shot the micro footage. In addition to this imagery, CAE uses film footage of present and past wars that have used immolation against civilian targets as a strategic choice for the sole purpose of terrorizing entire populations. The goal is to provide a different way of imaging, viewing, and interpreting the human costs of these war crimes, in contrast to the barrage of media imagery to which we have become so desensitised.

Critical Art Ensemble (CAE) is a collective of tactical media practitioners of various specializations, including computer graphics and web design, wetware, film/video, photography, text art, book art, and performance. Formed in 1987, CAE's focus has been on the exploration of the intersections between art, critical theory, technology, and political activism. The collective has performed and produced a wide variety of projects for an international audience at diverse venues ranging from the street, to the museum, to the Internet.

Disintegrating human tissue cells

(above)
Immolation (detail)
screen capture
image courtesy of the artists

The video piece *Ich Vergleiche Mich Zu Dir* (in German: I compare myself with you) features planaria, a type of flatworm that has the ability to regenerate body tissue. The artist has caused the planaria to grow a second head. Both heads have control but the choice of the direction of motion is not always settled on unanimously between both heads so that the altered worm engages in a visible struggle between the two heads – an endless search for an undefined and unreachable goal as well as the spectacle of an uncanny decision being made. Therefore the piece alternates between failure and success: the successfully altered worm becomes a failure as it attempts to control its own basic decision making processes. "I believe that this oscillation between failure and success mirrors the processes of genetic research in a larger sense, as the successes of today may become the demons and monsters of tomorrow", Kaminiarz says. With the immensely magnified projection of the planaria a dialogue is opened up surrounding the issues of modern scientific experimentation in relation to the human form. Through anthropomorphism the planaria's role changes from one located in elementary biology, to one of tragic realism.

Verena Kaminiarz' art practice involves using scientific equipment but deviating from conventional methodology. She has completed her BFA in Vancouver/Canada in 2002 and is currently graduating with an MSc. Biological Arts from SymbioticA, the School of Anatomy & Human Biology at the University of Western Australia.

Verena Kaminiarz
Ich Vergleiche Mich Zu Dir

Zbigniew Oksiuta
Breeding Spaces

Zbigniew Oksiuta is convinced that the principles of biological transformation of energy into form will be the main topic of this century: "Human expansion has two cardinal directions. The first one is directed inwards, into the micro cosmos of Life, the world of molecules, genes and chromosomes. The second one is leading us into the macro cosmic space, into the ocean of planets and stars. As we conquer outer space, investigate weightlessness and plan settlements on other planets, this tremendously large spectrum requires a new form of thinking in order to investigate our physical and spatial living conditions beyond the known structures, forms and norms."

Breeding Spaces is a project that envisages vegetable matter as a live habitat, an isolated spatial entity that takes up, transforms, and synthesizes matter and energy from its surroundings by biological means. Oksiutas technological principles are: 1) the use of biological polymers as construction material (*spatium gelatum*), 2) the creation of spatial forms under water, using neutral buoyancy (*isopycnic systems*), 3) the generation of biological containment as a *pneu* (*liquid bubble*), 4) the processes of self-organization and internal tensions in the polymer surfaces as sources of the amorphous shape formations (*bending energy*), 5) the creation of biological containments in a different scale: a cell, a pill, a fruit, a shelter, a cosmic 'biosphere' (*space garden*).

Zbigniew Oksiuta's projects are a crossover of architecture, art and biological sciences. Graduated from the Faculty of Architecture at the Warsaw University of Technology in 1978, Oksiuta scrutinizes dynamic systems that are known to transfer information and energy through liquid medium. He also produces and directs films, and lectures on architecture and art internationally.

NoArk **is a research project exploring the taxonomical crisis induced by life forms created through biotechnology.** **NoArk** **takes the form of an experimental vessel designed to maintain and grow a mass of living cells and tissues that originated from different organisms.** This vessel serves as a surrogate body for a collection of living fragments; it can be seen as a tangible and symbolic 'craft' for observing and understanding a biology that combines the familiar with the other. As opposed to classical methodologies of collection, categorization and display that are seen in Natural History museums, contemporary biological research is focused upon manipulation and hybridisation, and rarely takes a public form. *NoArk* uses cellular stock taken from tissue banks, laboratories, museums and other collections. It contains a chimerical 'blob' made out of modified living fragments of different organisms, which are living together in a techno-scientific body. Like the cabinets of curiosity that preceded the Natural History museum's refined taxonomy *NoArk's* unified collection of unclassifiable sub-organisms acts as a symbolic precursor to a new way of approaching a made nature.

The Tissue Culture and Art Project (TC&A) has explored the use of tissue technologies as a medium for artistic expression since 1996, and in 2000 became one of the core research projects at SymbioticA, The Art and Science Research Laboratory, School of Anatomy and Human Biology, University of Western Australia (winner of the prestigious Prix Ars Electronica for Hybrid Art 2007). ARTRAGE Director Marcus Canning last collaborated with TC&A in 2003 as part of the BioFeel exhibition at PICA during the inaugural BEAP.

The Tissue Culture & Art Project – Oron Catts & Ionat Zurr, NoArk vessel design in collaboration with Marcus Canning
NoArk

Paul Vanouse
Latent Figure Protocol

Latent Figure Protocol takes the form of a media installation that uses DNA samples to create emergent representational images. The installation includes a live science experiment, the result of which is videotaped and repeated for the duration of the gallery exhibit. Employing a reactive gel and electrical current, *Latent Figure Protocol* produces images that relate directly to the DNA samples used. In the first experiment, a copyright symbol is derived from the DNA of an industrially-produced organism (a plasmid called "pET-11a"), illuminating ethical questions around the changing status of organic life and the ownership of living organisms. Vanouse states: "A DNA fingerprint is often mis-understood by the lay public to be a single, unique human identifier. Its complex banding patterns imagined as an unchanging sentence written by mother nature herself that corresponds to each living creature. However, there are hundreds of different enzymes, primers and molecular probes that can be used to segment DNA and produce banding patterns. These banding patterns that appear tell us as much about the enzyme/primer/probe as the subject that they appear to reproduce. My point is that the DNA gel image IS a cultural construct that is too often naturalized."

Paul Vanouse has been working in emerging media forms since 1990. Interdisciplinary and impassioned amateurism guide his art practice. His electronic cinema, biological experiments, and interactive installations have been exhibited in 19 countries and widely across the US. Vanouse is an Associate Professor of Visual Studies at the University at Buffalo, NY where he is also co-Director of the Emerging Practices MFA program.
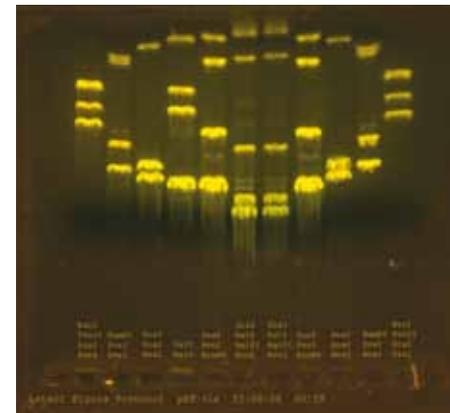
Harlequin Coat **presents the realization of a composite, organic coat, made from an assemblage of pieces of skin of different colours, ages and origins.** This prototype of a biotechnological coat, consisting of coloured diamond shaped in vitro skin cell cultures in petri dishes, will be made to symbolise cultural crossbreeding. This project continues ORLAN's investigation into hybridization using digital photography. Her recent series, entitled *Self-Hybridation: Précolombienne*, *Self-Hybridation: Africaine* and *Self-Hybridation: Indiens d'Amérique* endeavoured to crossbreed beauty canons of other cultures and other media (sculpture, photography, painting) with the artists' own image. *The Harlequin Coat* project develops and continues the idea of crossbreeding and hybridization, using the more carnal medium of skin cells. This work on the figure of the Harlequin is inspired by the text "Laïcité" written by French Philosopher Michel Serres, in which he uses the Harlequin as a metaphor for multiculturalism. *Harlequin Coat* seeks to raise various questions: "Can skins of different colours be cultivated? What kind of information can be obtained from the donors? Can a person still be the owner of his or her cells? Does self-ownership continue to exist at the fragmented level? How are such issues perceived in various countries, and especially in the context of a non-western viewpoint?"

ORLAN is an internationally renowned French artist who has been active in photography, video, sculpture, installations and performance since 1965. She wrote the Carnal Art Manifesto, and from 1990 to 1993 conducted a series of nine surgery-performances in which she refigured her face and created new images referring to non-Western cultures. ORLAN is currently an artist in residence at SymbioticA.

(above)
Harlequin Coat 2007
photographer: Tony Nathan

ORLAN
Harlequin Coat

Natalie Jeremijenko
OOZ: For the Birds

OOZ is ZOO backwards. Unlike the traditional zoo, the distributed interfaces of OOZ are sited where animals themselves decide to inhabit, i.e., they are there by choice. Like a traditional zoo, *OOZ* is a place where animals and humans interact. However, the interactions around the *OOZ* differ substantially from those in a zoo. *For the Birds* is part of the *OOZ* interface between people and birds, and consists of a series of perches equipped with sensors for birds to land on. Birds can use this interface to trigger sounds, lights, dispense food, squirt water, or shoot at other birds. The perches emit an audio file that translates bird concerns into human dialect for communicating directly with their human neighbours. The birds explain the complex ways in which people enjoy the environmental services birds provide. Through day-to-day use birds learn to use the perches to rudimentarily communicate with visitors. The *OOZ* bird-operatable communication technology resembles experiments in operant conditioning, a technique that works equally as well on humans as it does on animal models. "This is not a new concept for the birds", Jeremijenko says. "Urban birds use human technology for their own purposes, from electricity infrastructure to signage

systems which provide shelter. However, it's a new concept for humans – that we share our technology and urban systems with non-humans."

Named one of the inaugural top young innovators by the MIT Technology Review, design engineer and technoartist Natalie Jeremijenko is a Professor of Art, Computer Science and Environmental Studies at New York University where she is the director of the xdesign Environmental Health Clinic. She is also a visiting professor at the Royal College of Art/London.

Located at the School of Anatomy & Human Biology, University of Western Australia, SymbioticA is an artistic laboratory dedicated to the research, learning and critique of life sciences. It is the first research laboratory of its kind, in that it enables artists to engage in wet biology practices in a biological science department. It provides an opportunity for researchers to pursue curiosity-based explorations free of the demands and constraints associated with the current culture of scientific research while still complying with regulations. SymbioticA also offers a new means of artistic inquiry, one in which artists actively use the tools and technologies of science, not just to comment about them, but also to explore their possibilities.

One of the main aims of SymbioticA is to democratize this knowledge through the workshops, courses and residencies it offers. By disseminating the know-how of the life sciences and biotechnology to artists, philosophers, ethicists and other interested people SymbioticA assists in creating a platform that actively engages in proposing different directions in which this technology can be employed.

SymbioticA was established in 2000 by cell biologist Professor Miranda Grounds, neuroscientist Professor Stuart Bunt and artist Oron Catts. Oron Catts and Ionat Zurr from the Tissue Culture and Art Project (TC&A) had been working as artists/researchers in residence in the School of Anatomy and Human Biology since 1996. The shared vision of Grounds, Bunt and Catts for a permanent space for artists to engage with science in various capacities led to the building of the artists' studio/lab at the attic of the School of Anatomy and Human Biology at The University of Western Australia.

SymbioticA – the Art and Science Collaborative Research Laboratory

SymbioticA had more than forty resident researchers and students undertaking projects that explore and develop the links between the arts and a range of research areas such as neuroscience, plant biology, anatomy and human biology, tissue engineering, physics, bio-engineering, mycology, anthropology, molecular biology, microscopy, animal welfare and ethics. Projects developed in SymbioticA have been presented in prestigious exhibitions, events, festivals and biennales around the world, including the Biennale of Electronic Arts Perth, of which SymbioticA is a founding member. The unique Art and Biotech workshops SymbioticA runs have been widely acknowledged as the best hands-on introduction to art and biology, and SymbioticA's academic courses are considered to be the benchmark for art and science education. As a mark of international recognition of its activities SymbioticA was awarded the 2007 Prix Ars Electronica inaugural Golden Nica for Hybrid Arts.

In broad the terms research ranges from identifying and developing new materials and subjects for artistic manipulation, researching strategies and implications of presenting living art in different contexts, and developing technologies and protocols as artistic tool kits. Some of the projects in SymbioticA are also very relevant to scientific research and the complexity of art and science collaborations is intensively explored.

While not claiming exclusivity or superiority of any one approach to artistic engagement with the life sciences, SymbioticA favours researchers that can utilise the unique resources it has access to. Having access to scientific laboratories and tools, SymbioticA is in a unique position to offer these resources for artistic research. The uniqueness of the hands-on approach to biologically based art is that it produces actual manifestations of contestable ideas. In a sense this art is "philosophy in action". In a society so saturated with, and desensitized to visual representations shown in all kinds of media, this type of art actually deals with the direct, and sometimes visceral, presentation of processes and outcomes of life manipulation. This direct experience, of both the artists who develop the work, and the audiences which are exposed to it, generates a reaction and a discourse that could not have been achieved by traditional representative media.

ORLAN – Skin and Stone
Refiguration Self-Hybridization, Pre-Columbian series
HOLMES À COURT GALLERY 14 SEPTEMBER – 4 NOVEMBER 2007

Representations of the Real
spectrum project space 15 SEPTEMBER – 6 OCTOBER 2007

ARTISTS:
Nicola Kaye (Australia)
Stephen Terry (Australia)
Christopher Crouch (Australia)
Clive Barstow (Australia)
Amanda Allerding (Australia)
Jeremy Blank (Australia)
Cat Hope (Australia)
Malcolm Riddoch (Australia)
Rob Muir (Australia)

paintedSKY
HORIZON – THE PLANETARIUM AT SCITECH 18 SEPTEMBER – 13 NOVEMBER 2007

ARTISTS:
David Carson (Australia)
Brian McClave (UK)
George Millward (USA)
Thomas Ulich (Finland)

ArCade V
JOHN CURTIN GALLERY 12 – 30 SEPTEMBER 2007

In an interview with Hans Ulrich Obrist, documented in her 2004 monograph, ORLAN revealed some of her thinking about her art.

"Little by little I broke free of painting; I began thinking that, as a female artist, the main material and recording surface I had to hand was my body…I thought working directly on the representation of my body – including its public representation – was much more interesting, much more problematic, and much more efficient politically – especially in those days – than hiding myself behind canvas and paint". (Obrist 2004, p.190)

What followed was twenty-five years of painting, sculpture, installation, photography, body sculpting, poetry, dance, theatre, street and video performance and social activism, using her body as her material, mixing the real with the unreal.

Between 1991 and 1993, using her body as her artistic tool and the operating theatre as studio she directed a series of surgery performances in which her face was refigured in an attempt to make her exterior correspond to her interior self.

The surgery performances are an extension of her 'self sculpting'. She explains – "In that respect the surgery performances are an extension of these ideas, a way of refiguring yourself, of vacillating between disfiguring and refiguring, the idea of not accepting what is automatically inherited through genes – what's imposed, inevitable – but of trying to pry open the bars of the cage". (Obrist 2004, p. 199)

She completed this series by having two silicone implants inserted into her forehead, deliberately violating dominant aesthetic criteria. She hoped that people would free themselves from the models conditioning their judgment and see that her lumps "are aesthetic possibilities". (Obrist 2004, p.199)

ORLAN – Skin and Stone Refiguration Self-Hybridization, Pre-Columbian series
HOLMES À COURT GALLERY 14 SEPTEMBER – 4 NOVEMBER 2007

Continuing the remodelling of herself and her investigation of aesthetic possibilities, in 1998 she began her exploration of different standards of beauty across civilisations through history.

She began with the Pre-Columbians, travelling through Mexico studying the Olmec, Mayan and Aztec histories and cultures. These were organised societies with systems in place to manage life on earth and the afterlife. With regard to their standards of beauty, they favoured cross-eyes and deformed skulls and actually contrived to achieve these features at the baby stage. They thought also that false noses were beautiful. Scarring was deliberate and ritual and signified status and identity. These features were captured in the stone of the statuary and the artefacts that ORLAN examined.

The Pre-Columbian civilisations sacrificed thousands of slaves every year to the Gods to nourish them and keep them happy, hoping to ensure they would look after humankind. ORLAN was particularly inspired by the myth of Aztec God Xipe Totec, a life-death-rebirth deity who flayed himself to give food to humanity. Without his skin he was depicted as a golden god. Slaves were sacrificed to Xipe Totec. They were carefully flayed to produce a nearly whole skin that was then worn by the priests during the fertility rituals that followed the sacrifice.

Working with a digital imaging specialist ORLAN produced hybrid photographic portraits in which the skin of her refigured face was combined with the stone features found on artefacts and statuary from Pre-Columbian civilizations.

Using the components of bio-art (her refigured face) and computer art, with digital manipulation she could refigure her image, not needing now to use physical surgery to do it.

"Here the hybrid is not simply two images brought together to make a third but a composite of non-Western and Western cultures, of the past and present, of sculpture and photography, of Orlan's skin and stone, flesh, wounds and scars." (Cros, Le Bon, Reyberg 2004, p167)

Orlan takes the statuary in under her living, flesh and blood skin, melding the past with the present, trying to force us to recognize and acknowledge the other and the memory of what's gone before. Getting us to admit that we don't have all the knowledge,that we can learn from others. We were not the first to be, think and feel.

Julian Zugazagoitia says:

> "In the current climate of globalization ORLAN highlights a search for a plural aesthetics, based on the cultural specificity and the uniqueness of various peoples. In this sense, the Self-Hybridization series is an education in looking that embraces the richness of what is possible. It is an appeal for tolerance, for a respect of differences. Her art, which she formerly situated between the madness of seeing and the impossibility of seeing, is no longer in the order of the fascinum tremens, but instead criticizes ideological blindness. She suggests that the inability to recognize the other is an act of resistance and a subtle form of fanaticism." (Zugazagoitia 2004,p220)

Governments don't colonize these days, as the Spanish did in the Americas, but have allowed others to take on 'development' roles, ignoring indigenous civilizations still, destroying habitat and livelihoods.

Eleanor Heartney in her essay *Orlan: Magnificent "And"* has this take:

> "The notion that one's life might literally be written on one's face offers another context for ORLAN's recreation of identity through surgery in her self-hybridizations, her own history inscribed in her reworked features, and especially the bumps on her forehead blend seamlessly with the ritual deformations practised by other cultures." (Heartney, 2004, p.231)

Some might say this is appropriation. I would say it is not the archaic definition of 'seizing or taking possession of', but rather the act of 'taking the other to, or for oneself'. She is recognizing, acknowledging and allowing the possession of herself by the other. Merging the two so that the new hybrid lives.

We can see that life and awareness in the eyes which express thought and emotion. These windows of the soul are the unifying factor. They are unmistakably Orlan's eyes but they are also the eyes of the past. ORLAN is saying, I think, that we are all a mix of past, present and each other and we might as well admit it. Even if there is not the physical hybridization through the mixing of blood there is mental and spiritual hybridization as we learn about and are influenced by the knowledge and spirits of others and we take to ourselves ideas and beliefs and assimilate them, continuously refiguring our own self- hybrid. That is, if we are healthy, living organisms.

Looking at the images themselves evokes thoughts, emotions and intuitions. Each of these very feminine women seems comfortable in their own skin and each seems to be individual, feeling or thinking something different from the others. Each has a different background colour. Each looks confident and self-contained. They all do look as if they contain the wisdom and experience of the past. They all do look as though their exteriors reflect their interior selves. They are all strangely beautiful. Scarring, forehead lumps, false noses and cross- eyes go unnoticed. The beauty of the hybrid shines forth, the strength and wisdom of the past combines with the living, refigured flesh of the present and perhaps some, the few who have hope in their eyes, are able to imagine potential future realities for women and the world. A fair amount of refiguring will be necessary, of course, as we tentatively bring our interiors out onto the exterior surfaces of ourselves and determine a different interface with the world.

ORLAN herself continues to be a 'chronicler' of her time. She says: "I'd even say that the avant-garde is no longer to be found in the field of art but rather in the sciences, in biotechnology." (Obrist 2004, p.200)

She is currently in the process of making a 'Harlequin Coat' of skin cultured from her own cells and those of other human beings and species. Her theme comes from a Michel Serres book *Tiers-Instruit* where, as she explains,

Refiguration Self-Hybridization, Precolumbian series, n°17, 1998
archival inkjet print
100 x 150 cm
technical assistance digital images: Pierre Zovilé

"In it a Harlequin figure is taken as a metaphor for a melting-pot culture because his particoloured costume is composed of different fabrics of different origins and different hues." (Obrist 2004, p.200)

Impossible here not to echo with that old Blue Mink lyric from the sixties:

> *What we need is a great big mixing pot.*
> *Big enough to take the world and all it's got*
> *Keep it stirring for a hundred years or more,*
> *Turn out coffee coloured people by the score.*

Would that enable us to look at the 'other' in a different way? Recognize the commonality of flesh? Perhaps… if artists like ORLAN continue to draw our attention to it.

SHARON TASSICKER   Director, Holmes à Court Gallery

REFERENCES:
Caroline Cros, Laurent Le Bon, Vivian Rehberg 2004, *Photochronology* Orlan, Flammarion, Paris
Hans Ulrich Obrist 2004, *Orlan Interviewed* Orlan , Flammarion, Paris.
Julian Zugazagoitia 2004, *Orlan: The Embodiment of Totality?* Orlan, *Flammarion*, Paris.
Eleanor Heartney 2004, *Orlan: Magnificent "And"* Orlan, *Flammarion*, Paris.

The Government of Western Australia's Department of Land Information's *Skyview*[1] allows the public to view their house and land online and to look at neighbour's and friend's houses.

This seemingly innocuous voyeuristic tool can actually exacerbate the consumerist mindset by ensuring the Jones's are kept up with – new decking, lap pools and such – ignoring the fact there has been more home repossessions in the last few years than any previous time.

This of course is not restricted to WA's backyard, the global Internet means greater access to the world through the virtual. *Google Earth* and *Metrocams*[2] for instance allow users to navigate real world cities where "Some sites are presented as virtual cities where digital individuals live their lives parallel to the 'real ones'"[3]. You can also visit the Andy Warhol museum, Times or Trafalgar Squares, or observe the habits of the giant panda – why bother leaving the comfort of your own home? This exchange increases the dynamic between the real and virtual worlds. This stratum constructs a new conception of the individual within virtual contexts viewed live on the Internet and provoke questions regarding gender, personal identity, national identity, terrorism, and ultimately how technology frames and gives us meaning. What is represented by digital culture determines how we behave, becoming a model for our contemporary condition: how do we symbolically, emotionally, physically and intellectually deal with representation?

Representations of the Real
SPECTRUM PROJECT SPACE 15 SEPTEMBER – 6 OCTOBER 2007

We are seduced by the idea that what we see is 'real' perhaps more real than our everyday lives, where the fiction becomes 'indistinguishable from reality'[4]. Slavoj Zizek informs us of our contemporary condition and commonalities can be drawn with Guy Debord's writings on the spectacle, sociologist Anthony Giddens' sequestration of real experience and many of the writings on virtual escapism. Our representations and realities therefore become intertwined, mutating into new forms. The emotional event of being seen is ever more contextualised by the Internet with social networking sites *MySpace* and virtual worlds like *Second Life*. These contemporary virtual examples suggest our need to be connected to others, but often gets confused (like real world situations) with narcissism and exhibitionism as a substitute for meaningful exchange – this is what the works in *Representations of the Real* address.

The works are a result of collaborations commenting on the significance of negotiating with others in the search for meaning in an ethical way – taking into account ethnicity, gender, history and so forth. The artists consider how representations constitute the real and this is significant in our increasingly

mediated WA context. It is hoped the viewer will reflexively question their representation and ask whether the real ultimately becomes a reflection of their own virtual construction.

The collaborative works in *Representations of the Real* deal in one way or another with how we position and represent ourselves in contemporary culture. What they have in common is their questioning of how we navigate the terrain of information systems whether through representations of identity, social norms and/or our interaction with technology. *Identities/Hybridities* negotiates what it means to be part of a culture (is there any commonality?) and how individual voices identifying with differing forms of representation create new incommensurate spaces – spaces of difference. It is from these divergent contexts to specific locales that concern *Bypass: What is an opera without an audience?* This work serves to disrupt seemingly benign spaces asking us to interrogate our contemporary social landscape asking what issues are forgotten and what is our shared ethical responsibility? *Phonebook* too asks us to think of what is shared and how it is communicated, and questions the

possibility of new identities to be formed through communication networks and if this in fact usurps the written word? *Representations of the Real* invites the audience to interact with the works. To become actors that interrogate the world we inhabit, questioning our representation and understanding that we all have an important part to play in determining what the real is and the forms that this can be.

NICOLA KAYE 2007

www.physicalvirtual.com

NOTES:

1. http://www.landonline.com.au/skyviewwa/content/asp/skyviewwa_index.asp?product_group_id=78

2. http://www.earthcam.com/metrocams/

3. Koskela, H. *Webcams, TV Shows and Mobile phones: Empowering Exhibitionism.* http://www.surveillance-and-society.org/articles2(2)/webcams.pdf [Retrieved 30th July 2007]

4. Zizek, S. (2002) Big Brother, or, the triumph of the gaze over the eye. In T.Y. Levin, U. Frohne and P. Weibel (eds.). *CTRL[SPACE]: Rhetorics of Surveillance from Bentham to Big Brother.* Karlsruhe: ZKM

5. Centre for Art and Media. pp. 224–227.

(above)

stills from collaborative film projection

Amanda Allerding, Clive Barstow, Jeremy Blank, Christopher Crouch and Nicola Kaye.

Identities/Hybridities   ARTISTS: Amanda Allerding, Clive Barstow, Jeremy Blank, Christopher Crouch and Nicola Kaye

Out of a daily confusion of information we attempt to plot a course that gives clarity and cohesion to our experience of what we see (and who we are), but the more we concentrate on the particulars of what is in front of us, the more we lose sight of the broader concerns of our times. The more we frame our lives within those broader concerns the more we lose sight of individual correspondences that illuminate our personal existence.

Ultimately we have to look at this work as a celebration of cultural differences but one that acknowledges the limits of ever being able to fully communicate across cultures. It celebrates the attempt to find a relationship between the many cultural voices that are available to us in the 21st century attempting to distinguish those which control and those which empower. *Identities/Hybridities* is a digital work in which images and ideas collide and ricochet against one another in an attempt to find a place to rest, and to be significant. It is a work of individuals working collectively in an attempt to find a collaborative voice. In this way perhaps this work expresses what it is to be Australian, and in this way to be Australian is to be like everyone else in the world.

A version of *Identities/Hybridities* was shown as part of the Shanghai International Arts Festival, China (2002) and Hangzhou Art Gallery, China (2003)

Bypass: What is an opera without an audience?
ARTISTS: Stephen Terry and Nicola Kaye

Bypass: What is an opera without an audience? displays constructed video narratives of specific Perth sites of desirable and undesirable spaces. Realtime editing places the viewer involuntarily into these contexts forcing a re-negotiation of the space as they are inserted within the narrative. By making the viewer complicit within the projection we hope to promote a level of uncomfortability paralleling issues of social concern.

It is through a combination of new technologies and interactivity that helps us discuss our contemporary socio-political landscape and especially an awareness of how we are acted upon by digitally mediated information; by the audience viewing themselves within the realtime narrative it alters the perception of their mediated context (and ultimately their physical context). We seek to disrupt a normative viewing and hopefully a rethinking of the audience's position by allowing them varying levels of control of how they might navigate these virtual spaces.

Bypass: What is an opera without an audience? is a development of work shown in BEAPworks-06 *Bypass* (2006) at John Curtin Gallery, Perth WA.

PHONE BOOK (2006) Metaphonica   PRINCIPAL ARTIST: Cat Hope
COLLABORATING ARTISTS: Malcolm Riddoch, Rob Muir.

PHONEBOOK is a work where mobile phones are fitted into carefully selected books. This installation consists of a four-part composition that is interrupted and added to by people 'calling in' to it with their own telephones, using numbers provided. Mobile phones are fitted into certain books on a full bookshelf, and play readings of excerpts of the text that has been removed to make room for them. Here the mobile phones use their voice recording and playback facility without connecting to any 'network', other than the one they create by playing back collectively. You may also choose to send your own spoken word to a phone's message bank, which accumulate on the *metaphonica* web site for playback.

The work contemplates the state of spoken word delivery through audio books, podcasts and telephones. Will they replace written formats? Are we a new generation of listeners and speakers?

A version of this work (with different books) was premiered at the Transmediale Festival in Berlin, Germany in 2006 where it was developed during a residency at the Transit Lounge.

(opposite page)
Stephen Terry and Nicola Kaye
stills from Bypass: What is an opera without an audience? 2007
digital video stills

(above)
Cat Hope
Phone Book 2006
digital stills

Inuit say: He who looks long upon the aurora soon goes mad.

"The aurora is a majestic light show seen in the sky of the polar regions. In the north it is called the Aurora Borealis, which means literally, the 'northern dawn'. In the south, Captain James Cook was the first European to witness the Aurora Australis. Particles from the Sun become entangled in the Earth's magnetic field and cascade down into the upper atmosphere. At altitudes between 70 and 600 km they strike atoms of oxygen and nitrogen, causing them to emit spectral colours. The changing magnetic field gives rise to diverse forms which an observer sees as bands, rays, drapery, and flaming corona."

Dr John Kennewell, Principal Physicist at Learmonth Solar Observatory, Exmouth, Western Australia

paintedSKY is a collaboration between videographer Brian McClave (UK), electronic musician and atmospheric physicist George Millward (USA), Thomas Ulich, geophysicist at the Sodankylä Geophysical Observatory Finland, and West Australian artist David Carson (Aus). Research for this project took place during several visits to Finland between 2003 and 2007.

My involvement in this project goes back to 2003 when I received a phone call on a Tuesday in the middle of January from Brian McClave in Brighton. I remember the day as it was a scorching 40C+ in Perth. Brian asked me how busy I was, as he had a proposition, but needed an answer by the end of the day. Could I get to Helsinki by Friday and could I spare ten days to help with some 3D video work as George Millward had to pull out at the last minute. When I eventually arrived in Sodankylä on the Saturday it was -40C. It was an interesting experience.

paintedSKY
HORIZON – THE PLANETARIUM AT SCITECH 18 SEPTEMBER – 13 NOVEMBER 2007

Brian and I returned again to Finland this year to meet with Thomas Ulich to make a selection of images from his collection of 4000 auroral photographs (transparencies) for inclusion in the paintedSKY exhibition. As we trawled through the images we became aware that Thomas had a highly acute sense of aesthetics in the Caspar David Friedrich mold (and being German that really is no great surprise). However, Brian and I were both passing over certain images in favour of images with less obvious romantic overtones. In filming the night sky with wide angle lenses from parallel but remote locations it was important not to have any landscape references to get the 3D effect—so we were striving for the same aesthetic in the photographs.

The exhibition features works resulting from several visits made to the Sodankylä Geophysical Observatory located at 67° 22 N, 26° 38 E, which is 130 km north of Rovaniemi and 7 km south of Sodankylä, in the middle of Finnish Lapland deep inside the Arctic Circle. The Observatory performs continuous measurements of magnetic field, magnetic pulsations, cosmic radio noise, upper atmosphere radio soundings, ionospheric tomography, seismic recordings and cosmic rays. SGO publishes some of the measured geophysical data from Sodankylä in real time including geomagnetic field measurements and all-sky camera pictures. The all-sky camera operates automatically every night from early September to mid April. The camera runs whenever the Sun is more than 10° below the horizon and it is dark enough to see the aurora borealis. Black and white (intensity) photos are taken every 20 seconds using a green filter (557.7 nm); this picture is updated on-line once per minute. paintedSKY features a series of these specially prepared timelapse movies of auroral events extracted form the all-sky camera

The Aurora Borealis had never been seen in three-dimensions before. The phenomenon, also known as the Northern Lights due to the northerly latitudes they are mainly associated with, hovers anywhere between one hundred and five hundred kms above the surface of the Earth. As the human eyes are only separated by a relatively insignificant six centimetres we are unable to derive any stereoscopic spatial information from the spectacular curtains of light waving and swirling above us.

That is why our teams were out on frozen lakes, in minus 40C conditions, working twenty miles apart. What we were doing was replacing the human eyes with cameras and then virtually expanding the human head so that the 'eyes' were now twenty kms apart. When presenting the final film, the footage from one camera is fed into one eye of the audience and the footage from the other camera into the other eye. The viewer's brain then reforms a stereoscopic – 3D - image of the Aurora which appears shrunken to a size that allows for clear comprehension of its shape, structure and motion as it floats before the projection screen. It feels as if we could reach out and touch its delicate curtain-like bands of pulsating light.

The original Aurora project was initially a collaboration between Brian McClave and George Millward. George is an atmospheric physicist and musician. They have worked together on several video and installation projects over the years, both in the UK and in Australia with David Carson, but always with George wearing his musician's hat as opposed to his scientist's hat. Some of these past projects have been 3D stereoscopic films. In 2001 we were selected to show what was probably the only 3D video to have been screened at the Sundance Film Festival in Utah. These earlier films were complex, multi-layered affairs with a definite 'everything-including-the-kitchen-sink' aesthetic, often with an underlying scientific theme. This current project is a stripped back minimal-intervention affair as the Aurora itself requires no post-production special effects.

The Aurora Borealis, and its Southern equivalent the Aurora Australis, is a stunning display that represents an immediate and dynamic relationship between the planet Earth and the Sun. As the sun 'boils off' atomic particles – protons and electrons – they radiate out and create what is known as the Solar Wind. After a couple of days, part of this radiation bombards the Earth's magnetic field. The electrically charged particles are guided down toward the Polar regions along the magnetic field lines.

As this energy comes into contact with the oxygen and nitrogen within the Earth's atmosphere, at a height between one hundred and five hundred kms, they generate light in the same way that light is generated in a neon tube. Unlike a neon tube however, the Aurora is set in motion by the interaction between movement in the atmosphere, the dynamics of the magnetic field and the varying intensity of the bombardment from the sun. As these variables collide the light wobbles, pulsates and spirals across the night sky, in various colours, at speeds up to one hundred miles a second.

DAVID CARSON 2007
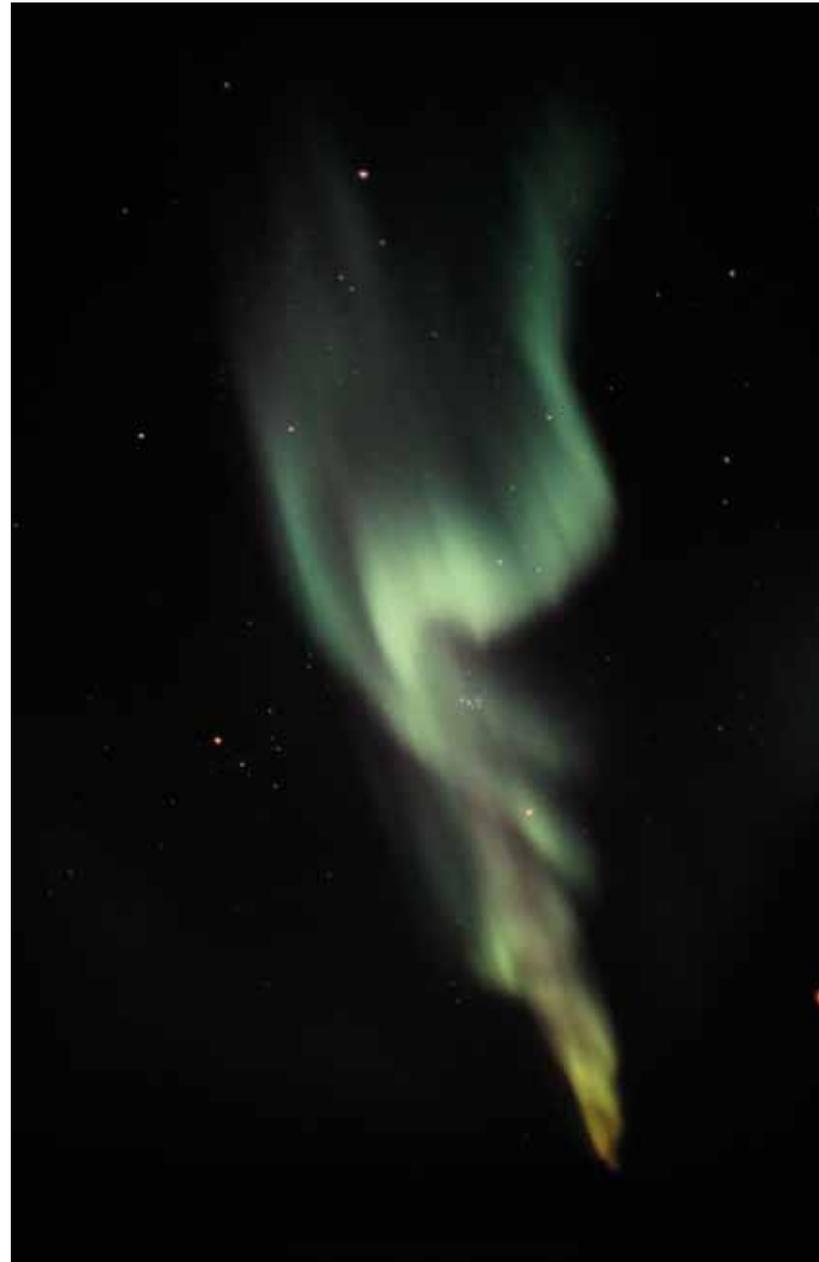
Horizon – the Planetarium at Scitech is the biggest planetarium in Australasia and one of the most technologically advanced in the world. Since it opened in April of 2004 more than 200,000 visitors have sat under its 18-metre dome screen, immersed and inspired by the wonders of the Universe. Planetarium manager, Pete Wheeler says "Aurora have always intrigued me and as yet just like most people I've not been fortunate to see such a wonderful phenomenon.

The *paintedSKY* exhibition brings this phenomenon right into the planetarium foyer space at Scitech in Perth in a unique art installation, which includes the world's first-ever successful recording of the Aurora in stereoscopic 3D.

paintedSKY is the result of a Brian McClave/George Millward initiative funded by Nesta (UK). The project involved making the world's first 3D video recording of the Aurora Borealis by placing groups of cameras ten miles apart on frozen lakes in the Arctic winter. The project was undertaken in -40C temperatures 200k north of the Arctic Circle. Geographic: 67° 22 N, 26° 38 E Geomagnetic: 63.8°, 120.0°, -26.7°, dip = 76.7°

Research team members also included – David Smith, Jude Aldred, Amy Chamberlain and Tony Hatton

(previous page)
Aurora
photograph by Thomas Ulich,
Sodankylä, Finland. (c)2007, All rights reserved.

(above)
Aurora, 2004
stereoscopic 3D video projection
400 x 300
video-still Brian McClave and George Millward

(opposite page)
Sodankyla Observatory (c)2007
photograph by Thomas Ulich, Sodankylä, Finland.
All rights reserved

Brian McClave is an experimental video artist, his background is in experimental photographic art, building and modifying cameras to perform unusual functions. During an MA in America he was introduced to digital imaging and digital video technology. It became apparent that principles used in 19th century stereoscopic photography could be applied to digital video to produce manipulatable 3D (stereoscopic) moving images. The experimentation that followed, coupled with advances in computer gaming 3D imaging systems (that crossed over into the world of video), resulted in the production of several strange 3D videos.

George Millward is a US based sound-artist and an atmospheric physicist – currently Visiting Scientist at NOAA/Space Environment – Laboratory for Atmospheric and Space Physics CU, Boulder. He is a member of the Atmospheric Physics Research Group and his interests are the chemistry and dynamics of the Jovian Ionosphere and Thermosphere. His recent musical collaborations have included – Spaced Out, a visual remix of NASA footage to original beats; taking a leftfield look at 40 years of space exploration creating original music and visual mixes of the Gemini era, the Apollo moon landings, Skylab and shuttle missions.

David Carson recently completed a two-year residency at the Centre for Living and Electronic Arts Research at the Innovation Centre in Perth, Western Australia, working with geologist, musician and film-maker John Reed. David has worked as an independent curator of several major exhibitions which have toured Australia supported by ARTSWA, The Australia Council for the Arts and Visions Australia. He has been an active advocate of 3D stereoscopic video in Western Australia, inspired by Brian McClave's example and is currently an advisor and teacher of 3D video at the FutureSphere at Christ Church Grammar School in Claremont WA and lecturer in the Communications Department at Notre Dame University in Fremantle.

Thomas Ulich is a geophysicist at the Sodankylä Geophysical Observatory in Finland. Born in Nienburg/Weser, Federal Republic of Germany in 1968. He has lived in Finland since 1993. He is currently researching long-term changes in the upper atmosphere, and his operational tasks include work with ionosonde and VLF measurements. The observatory is an independent department of the University of Oulu, Finland, and an integral part of the university's broad space research programme in ionospheric, magnetospheric and heliospheric physics. The paintedSKY exhibition includes a small selection from Thomas' extensive personal collection of auroral photographs. As he quotes an Inuit wisdom: He who looks long upon the aurora soon goes mad. How true!

Carson, McClave and Millward have worked together previously on a number of projects including Geoderma and Skylab touring exhibitions.

It is now twelve years since I conceived the first 'ArCade', this being an exhibition of original, limited edition, and artists' prints, all of which, at some stage in their production, had involved the use of computers to generate and manipulate the imagery.

My intention was to use the exhibition to demonstrate (to art and design academics and students) opportunities for using emerging technologies to create a new print medium on the one hand, and a hybrid link between old and new technology on the other.

ArCade V, the UK's Fifth Open International Exhibition of Electronic Prints, continues to document these concerns and presents a selection of works that bridge both traditional and digital worlds, providing a synthesis between new technological tools and traditional printmaking techniques such as etching, lithography, relief printing and screen-printing.

Some of the prints are further enhanced by the addition of drawing, paint, collage, serving to heighten their expressiveness and repudiate the flatness of the digital output. Such works provoke earlier debates between 'original' and 'reproductive' prints, opening up new artistic paradigms for the Fine Art Printmaker by moving away from the physicality of the print process (and the authentic gesture of the hand) to 'computer prints' that can be completely produced through the use of sophisticated hardware and software, using devices such as digital cameras and scanners. The artist's hand may have had no other intervention than to manipulate the keyboard, mouse and scanner, or to finally signing the work. The final print production is also mechanically driven, never hand-pulled, thus opening up the possibility of generating 'radically new' physical and aesthetic frameworks.

ArCade V
JOHN CURTIN GALLERY 12 – 30 SEPTEMBER 2007

(left)
Bonnie Mitchell (USA)
Into the Obscure
digital print

(opposite page)
Brian Evans (USA)
zigs (grillin')
digital print/screen based

The artists represented in *ArCade V* include independent, academic and research-active new media artists. The works encompass a rich diversity of styles and imagery from scientific, to the generative, ecological and autobiographical. *ArCade V* also incorporates a number of screen-based works that explore the interrelationship between image and sound.

This is the first time that an ArCade exhibition has been shown in Australia, being presented exclusively by the CADE (Computers in Art and Design Education) Conference and BEAP 07.

SUE GOLLIFER 2007
Sue Gollifer is a Principal Lecturer in Fine Art Printmaking in the School of Arts and Communication, University of Brighton, UK

Artists and works represented in *ArCade V:*

Derek Besant (Canada), *5 Restless Nights*, Digital print

Paul Brown (Australia), *4^16*, Screen based

Vlatko Ceric (Croatia), *Unclassified_objects-3*, Digital print

Lesley Cullan (UK), *Roses*, Digital print

Brian Evans (USA), *igs (grillin')*, Digital print/Screen based

James Faure Walker (UK), *Lose Eight*, Digital print

Sue Gollifer (UK), *Untitled BX2*, Digital print

Ian Gwilt (Australia), *foldersx120*, Digital print

Bill Hart (Australia), *I think therefore I am not sure if I am.*, Digital print

Dorothy Simpson Krause (USA), *Ascending*, Digital print

Vladamir Martynoff (Russia), *Gold Totem*, Digital print

Bonnie Mitchell (USA), *Into the Obscure*, Digital print

Michael O'Rourke (USA), *Woman*, Digital print

Cynthia Beth Rubin (USA), *Sand and Grasses in the Desert*, Digital print

Semiconductor (UK), *The Sound of Microclimates*, Screen based

Squidsoup (UK), *Altzero 5*, Screen based

Marty St. James(UK), *Oneiric*, Screen based

Philip Wetton (USA), *Sail*, Digital print

John Curtin Gallery

impermanence [contemplating stillness]

Perth Institute of Contemprary Arts

I took a deep breath...

SymbioticA

Still, Living

Holmes à Court Gallery
ORLAN —Skin and Stone

In association with
Tony Nathan @ Unit 3

THE UNIVERSITY OF
WESTERN AUSTRALIA

AllianceFrançaise

RÉPUBLIQUE FRANÇAISE
Ambassade de France en Australie

---

spectrum project space
Representations of the Real

spectrum project space

spectrum project space is a continuing initiative of the School of
Communications and Contemporary Arts, Edith Cowan University, Perth.

artopia

---

paintedSKY
Horizon – the Planetarium at Scitech

SCITECH

HORIZON
THE PLANETARIUM

Australian Government
Australia Council

artswa

lotterywest
supported

*This project is supported by ArtsWA, Scitech and the
Australia Council for the Arts.*

ArCade V
John Curtin Gallery

CADE
Computers in Art and Design Education

Curtin
University of Technology

ECU
EDITH COWAN

TAFE**WA**
central

WERE ESTATE
MARGARET RIVER

The West
Australian

The 3rd Biennale of Electronic Arts Perth is made possible through the generosity of its Public Funding Partners, its Presenting Partners, and its Associate Partners. Collectively they have enabled BEAP 07 to present wide-ranging artistry from around the globe, the works galvanising about the theme of 'stillness'.

In pursuing the ever-evolving intersections between art, science and technology, BEAP seeks to maintain its presence at the cutting edge in electronic, bio and associated arts practice.

BEAP Inc sincerely thanks former staff and Board members, and applauds all of the many contributors to BEAP 07.

FUNDING PARTNERS

Presenting Partners

Associate Partners