



**New.  
Brave.  
World!**

TRONDHEIM  
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2010

**meta.morf**

BIENNIAL FOR ART AND TECHNOLOGY

***New.Brave.World!***



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Brave.  
World!**

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BIENNIAL FOR ART AND TECHNOLOGY

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#### ABOUT US

TEKS – Trondheim Electronic Arts Centre is a non-profit organization founded in Trondheim in 2002. The organization is a resource and competence centre that aims to realize techno related art projects within all art disciplines.

TEKS initiates and organizes artistic productions and projects, works with promotion and education through courses and workshops, and acts as organizer or coorganizer of various techno related cultural initiatives.

TEKS is in 2010 funded by the Norwegian government, the Arts Council Norway and The City of Trondheim.

TEKS is a member of PNEK, Production Network for Electronic Arts, Norway.

#### BACKGROUND, META.MORF

TEKS has for eight years in a row, since 2002, arranged an annual festival for arts and technology called Trondheim Matchmaking. The festival acted as an arena for presentations of innovative ideas, music- and art projects, a place for sharing and developing technological and artistic competence and resources. Meta.Morf is the festival's successor and the new biennial will continue and further develop the traditions built during the Trondheim Matchmaking festivals.

#### TEKS

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# Meta.Morf 2010 Introduction

The development and use of new technologies happens at an increasingly rapid pace, and biotechnology, nanotechnology and new communications and computer technologies entail examples of new tools for artists, tools that can open new worlds of ideas as well as making previously not manageable ideas realizable.

New scientific insights often implies philosophical and existential problems and questions. Artistic and scientific research is continuously challenging and changing our perspectives. The artist as a direct and an indirect conveyor and interpreter of new knowledge and research, plays a crucial role for society's ability to both having a proper insight, and being able to maintain an adequate discourse, regarding the use of new technologies and scientific advancements.

Meta.Morf will for a broader audience present artists, musicians, writers and researchers with projects and performances that in different ways reflect man's position and possibilities in our globalized time.

The biennial includes art exhibitions at Trondheim Art Museum, Trøndelag Centre for Contemporary Art and Babel Art Space, as well as several conferences, workshops, film screenings and concerts throughout the entire month.

**Espen Gangvik**  
Director, TEKS



# Metamorf Children's Prize

**A children's jury will award the best artwork of the biennial. The price of NOK 30,000 will on behalf of the prize winner be donated to the initiative "One Laptop per Child".**

**The prize is founded by the local IT community and is awarded in cooperation with NTNU.**

**Information about the prize is available at [www.artentnu.com](http://www.artentnu.com)**

# Meta.Morf 2010

# New Brave World!

Nearly nothing on this planet has been left untouched by humankind and its actions. Sometimes as a side effect, but often as a conscious interference from trying to sculpt the world according to our dreams and fears. Mastering and designing all aspects of life is closely related to the development of science and technology. New technologies have become tools for trying to change nature from its unpredictable and uncontrollable state, into the opposite, a predictable and controllable planet of "perfection". Ideas we can recognize amongst other from modernistic thinking and practice.

The logic and politics of the pure as a basic principle for shaping our lives has for the last century been the leading mindset within our society, and it has had amazing, world changing consequences. New models for perceiving and understanding the world and ourselves have been introduced, opening up for new, specialized knowledge domains to emerge. However, today we are experiencing how limited some of these ideas and their according lifestyles can be. We just have to look at the many examples of mistakenly biopolitics, and the devastating effects these have had on the environment, whether it applies to natural resources, urban planning, population control, agricultural and refined food production, or the issue of diversity in general.

The experience we have gained from these experiments has taught us that the processes that sustain and shape our lives cannot be controlled top-down: they work bottom-up, continuously becoming more complex. Even modest activities on a micro scale interact and coalesce into the macro systems governing our tangible world.

We have during the last decade, within different creative practices, the sciences and the educational sector, seen several initiatives that foster trans- and interdisciplinary collaborations. New alliances and new ways of collaborating between the arts and the science field have created new areas of research and a new "practice". This explorative playfulness is characterized by hybridity and cross-fertilization that as a result constitute qualitative factors for creating and understanding interactivity in its widest sense.

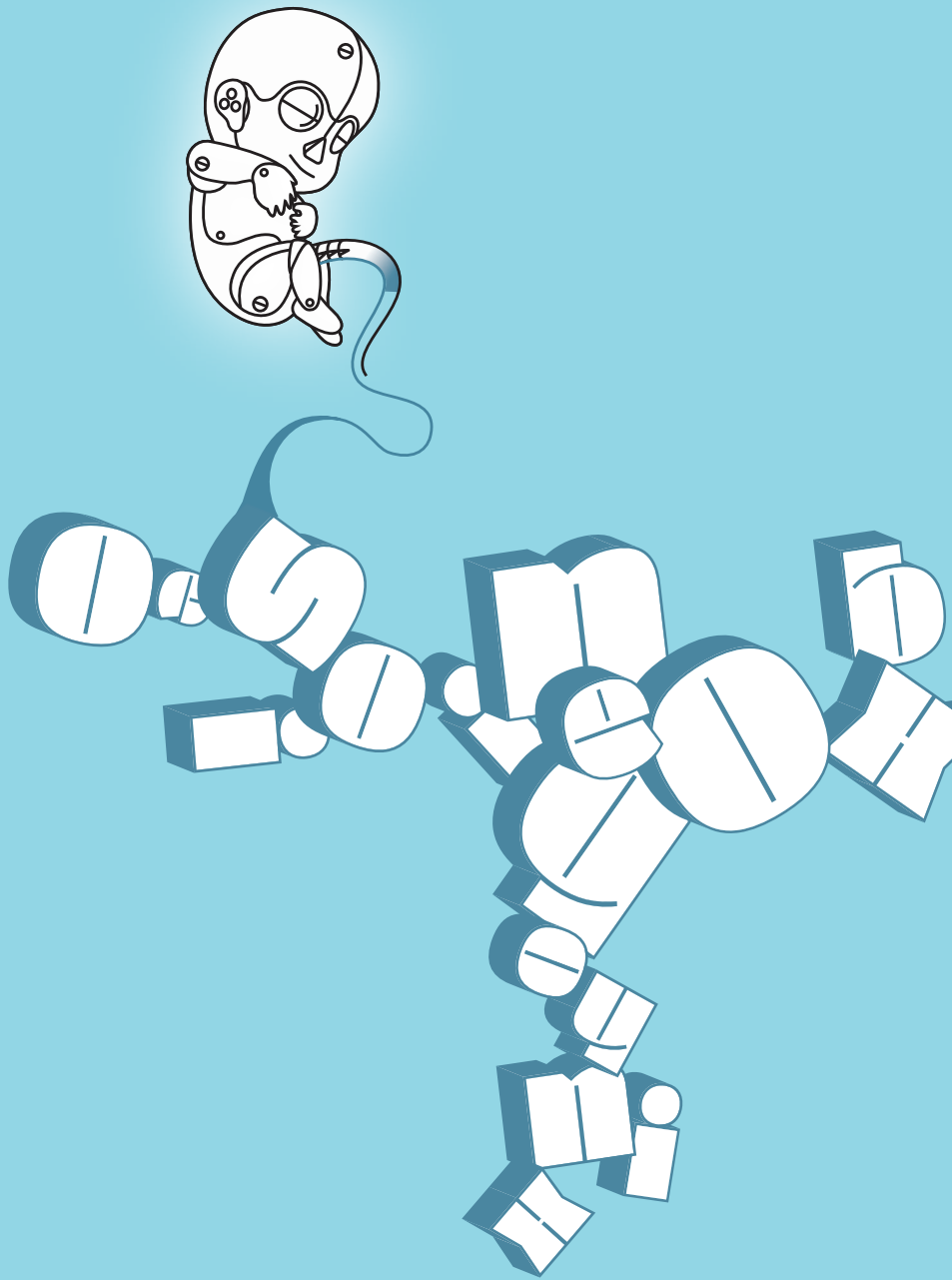
The need to understand how humans and objects interact with one another (and thus recreate each other) is critical with regards to the dire issues of our age, such as the questions of sustainability, the environment, material resources, food production, energy resources, migration problematics and so forth. Contemporary artistic practice has seeped into all these aspects of our modern life, and this biennial seeks to further reflect and explore this practice.

Meta.Morf 2010 acknowledges the bankruptcy of our exploitive lifestyle. There is an urgent need to create new concepts and models that can cope with the contemporary state of the world, a world which in its ground is based on contradictions, instability and disorder. These factors have given us the impression of an uncontrollable, fuzzy and incomprehensible world because of the fact that we are not used to look for coherence in what at first glance seems like chaotic behaviour patterns. Meta.Morf 2010 wishes to explore the contradictory and unstable features of Life and Art and make use of them as productive impulses and tools for artistic and scientific projects.

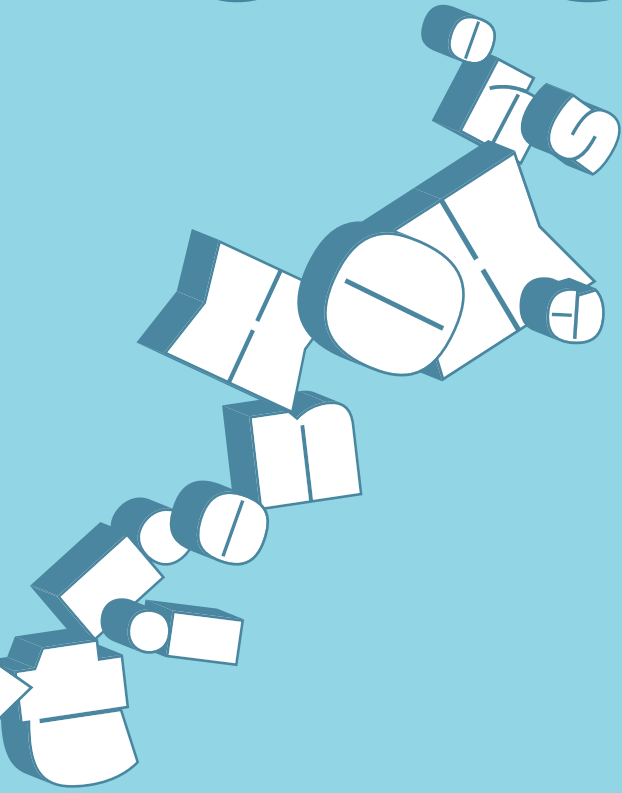
Meta.Morf 2010 positions itself as a trans-disciplinary platform for artistic practices that presents, debates and investigates new models and concepts for how sustainable structures can emerge from complex and "messy" interactions.

New, brave and global perspectives.

**Alex Adriaansens / Espen Gangvik**



# exhibitions



## CURATORIAL STATEMENT

# New. Braille. World!

Today's pictures of planet Earth are showing a mesh of satellites being in orbit. It represents the largest surveillance and information distribution infrastructure mankind has ever created. Anything and anybody can be connected to everything wherever it is located. All information flowing from one place or person to another is passing this grid of satellites or follows the fibre optic cables that has been buried in the ground in all streets of our cities and crossing all oceans. Out of this technical infrastructure social and cultural networks spontaneously emerge, and grow and diminish through interaction, but at the same time this infrastructure facilitates extreme surveillance and control mechanisms. Interaction in this context is the formation of connections and networks, and the bringing about of organisation and structure. Interaction thus changes bodies and objects that "inform" themselves via these interactions that generate diversity and variation of "bodies" and objects. To better understand the working principles of networks, its performative character and its underlying interactions as new fields of interest within the arts, artists are researching and experimenting these principles in very diverse ways. In "The Conversation", a work by the German artist **Ralf Baecker**, an autonomous apparatus incorporates an analogue (99 solenoids/magnets, rubber bands) and a digital part (computer/software) that together create a network of interrelated elements. These almost inseparable elements in the network try to adapt to each other. As the process does not perform a linear program it is not obvious which part controls whom. The machine has 99 solenoids mounted in a circle pulling three rubber bands (that function like attractors) in the centre of the circle. Each magnet works autonomously and tries to adapt to the forces in the network. The aim of the system is to keep a balance of forces. The rubber band, to which all solenoids are connected, acts as mediator between the single solenoids. The work of **Jose Manuel Berenguer** takes a different approach, here the issue of self-organisation of autonomous agents in networks is the research objective. He studied communities of fireflies as a starting point for his work "Luci – No Name and No Memory". In specific groups of fireflies the male start to flash individual light signals to attract females, there is no pattern but a chaotic flashing at first, after a short while all fireflies get in sync with each other and start to flash in rhythms at the same time. In the installation itself there are no fireflies; instead Berenguer used 60 electronic and 64 computing elements that follow the principles of self organisation within a network. The individual conduct of each agent, whether analogue or computational, gives rise to "Luci: No Name and No Memory" and generates a subtle audiovisual experience.

Understanding how basic forces work and what kind of structures spontaneously arise through self-organization is one of the underlying topics in the art works presented at the Meta.Morf exhibition. In the art works this is expressed in the design of networks and interaction in and between them; the relationship between power, control and self-organization in technological systems and in social networks; the issue of diversity and variation; and the question of form finding principles of organic and non-organic materials. Form in this context can be described as structured and informed matter of any kind. Form can develop itself without conscious human intervention, or through processes which are designed and controlled by us but parallel also follow their own organising principles. Within this context the Meta.Morf exhibition has an emphasis on the transformative and manipulative forces of technology instead of its symbolic and representative qualities an issue addressed in many events in the nineties. The transformative force of technology is probably best expressed in the works of Jonathan Schipper titled "Lie" and Herwig Weiser "Lucid Phantom Messenger".

In the work of **Schipper** we see a car slowly crashing against the wall of the exhibition space, it takes about two weeks before the crash is completed and the car gets its final shape. In this work the car, as a symbol of modern western life style, crashes in a sublime visual spectacle. The forces the car is exposed to via a pulling system, are absorbed by the car. One cannot really see that one is witnessing a car crash since all is performed in extreme slow motion. "Lucid Phantom Messenger" by **Herwig Weiser**, is

also performing itself in time but with varied temporalities and in a much more complex setting of forces working upon each other. The work uses electrochemical processes, programmed through an electronic control system to generate sculptured-images in an electrochemical fluid. From degenerated materials like crystals, silicon, glass fibre, salts etc. an object/image emerges out of a complex process of interactions. The results are large surrealist sceneries that “grow” in a Plexiglas box, the process one can follow over time reminds us of forces in the cosmos like gasses, plasmas and matter, that mingle and interact and from which, after billions of years, life spontaneously emerged.

The messy process described above is somehow opposite to what one could call the logic and politics of reduction and abstraction that has been strongly embedded in our Modern way of thinking. Breaking up reality in small particles and study them in isolated and ideal laboratory conditions gives us a different picture of reality than we experience outside of the Lab where things are messy and full of complex interactions. Today we know how limited this reductionist world view and according lifestyle is, we just have to look at its devastating effects on the environment, biodiversity, natural resources, urban planning and population control, agriculture and refined food production, or the issue of diversity in general. We now know that the processes that sustain and shape our lives cannot be simply controlled from the top down within a reductionist worldview: they work from the bottom up always achieving more complexity and diversity via messy interactions. The works of **Tuur van Balen** take a clear position in this respect, it is a research in how all modest activities on a micro scale interact and coalesce into the macro systems governing our tangible world. He takes a designer’s approach in which he’s not looking at the functional aspects of design but at how design products and concepts might evoke drastic change once released into the real world. For this he focuses on user-product interaction that is embedded in a complex context of social, psychological, philosophical and cultural factors. The project “My City = My Body”, one of his works that are exhibited, looks at how the rise of biotechnologies might influence our future interaction with the city, it is an exploration into future biological interactions within an urban context, meaning that what we eat, drink and inhale and excrement is making us who we are. **Michiko Nitta**, who also has a design background, has a different approach and is proposing scenarios to open up debate on environmental issues as well as social relations in our technological culture in general. These scenarios are in between fiction and reality. Her project “Extreme Green Guerrillas” (EGG) takes current green trends to the extreme in the areas of communication, food, and death. As environmental damage becomes the top of almost every government’s agenda, she questions the green trends and the rise of eco-consumerism which means that problems we generate are becoming economic investment projects that aren’t really questioning the underlying issues that caused our environmental problems. EGG isn’t meant as a real solution but it contributes to possible solutions through provoking us by proposing extreme scenarios that are performed by the fictive EGG community. Like Tuur van Balen, Michiko Nitta too comes up with bottom up scenarios addressing questions about technology, biology, culture, environment and social factors as being closely intertwined with each other.

Reading the above it might be clear that research and innovation have become keywords in the vocabulary of a.o. the arts, they express the way we understand ourselves and the world around us as being fully entangled and interacting, meaning that they shape and change each other over time and through interaction. Technology in our Modern worldview has until today mainly been a tool for reduction and abstraction, purifying nature from a state of randomness and messiness into one of cleanliness, controllability and perfection. Our contemporary interest to understand the working principles of interaction, and how structure and form emerge from that, is looking at technology from a reversed direction, it is about connecting, sharing, and weaving instead of separating, reduction and alienating.

Contemporary research and innovation within the above mentioned context characterises itself through transdisciplinary collaborations, and by sharing knowledge and experience between previously separated knowledge domains, for example art and science. Such transdisciplinary collaborations have in the meantime become more a rule than an exception, they define the basis for social, cultural, economic and political innovation in general. **Ionat Zurr** and **Oron Catts** who direct SymbioticA, a research centre within the School of Anatomy and Human Biology at The University of Western Australia, cross the disciplines of art and the life sciences as the basis for their artistic work. In the work “NoArc II” shown at Meta.Morf they encourage a better understanding and articulation of cultural ideas around scientific knowledge, and bring about an informed critique of the ethical and cultural issues of life manipulation. Zurr and Catts suggest and offer a new means of artistic inquiry, one in which artists actively use the tools and technologies of science – not just to comment on them – but also to explore their possibilities. Within the SymbioticA program, an opportunity is also provided for scientific 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. The research undertaken is speculative in nature. SymbioticA strives to support non-utilitarian, curiosity-based and philosophically motivated research. In broad terms, the research ranges from identifying and developing new materials and subjects for artistic manipulation, researching strategies to implications of presenting living art in different contexts, and developing technologies and protocols as artistic tool kits.

How we perceive and understand the world, how we construct models of the world through media and technology, concerns our playfield for social, economic, political and cultural acting and interacting today and tomorrow. We have to encounter the realities constructed by technology, not solely by asking questions but also by proposing new models to understand and experience the realities we live in.

### **Alex Adriaansens**

curator

### **Angelica Schmitt**

Theoretical and curatorial concept

**ALEX ADRIAANSENS** (NL) studied at the Royal Academy of Art and Design in s-Hertogenbosch, the Netherlands. He is the director of V2\_Organisation, which he cofounded in 1981. He is on the advisory committee of the (Dutch) Foundation for Visual Arts, Architecture and Design and the Mondriaan Foundation. He has given presentations at many festivals and art institutes, a.o. Documenta X, MoMa NY, eArts Festival in Shanghai, NAMOC in Beijing, ICC Tokyo. He has been (co)curating international exhibitions a.o. MOCA Taipei, NAMOC Beijing, DEAF festival, and Laboral in Gijon.

He has been a member of different juries for international art festivals and price awards a.o. eArts festival in Shanghai, Ars Electronica (Austria), Transmediale (Germany), Share (Italy), Laboral (Spain); WRO festival (PL); Nova Luz (Sao Paulo).

His (co)curatorial work at V2\_ is a.o.: The Body in Ruin (1993), Generated Nature (1994), Digital Territories (1996), The Art of the Accident (1998), Machine Times (2000),

Information is Alive (2003), The Art of Open Systems / Feelings are always Local (2004); Interact or Die! (2007). V2\_Zone (Taipei, 2007); Life&Art (2009 - ongoing), Co-curator of Millennium Dialogue - exhibitions, conferences and workshops - Beijing (Millennium Museum, Tsinghua University, National Art Museum Of China - in 2004, 2005, 2006, 2008); 3rd I exhibition - World Expo2010 Shanghai.

**ANGELICA D. SCHMITT** (DE) studied Art History, Audio Visual Media and Philosophy. Beside her artistic work, she is a theorist, researcher and author on contemporary media art practices focused on the impact of digitalization. In the early nineties she started her theoretical research by questioning if interactivity can be understood as an aesthetical quality that is addressing the adaptation of traditional art theory to digital conditions.

Angelica Schmitt has been collaborating with Two Suns Media Development in Berlin for whom she authored the development of processing software for intelligent environments. She participated in several media art projects, conferences and festivals in Europe and China. Currently she is working on her interactive Art project, a multi-user-environment, where she is transferring the notion of "Interface" into the epistemological field. In this project she undertakes an extrapolation of western thinking with regard to technological developments and global conditions. She translates the relationship between traditional concepts of perception and a mediated reality into the form of a critical stocktaking research.

With V2\_ publishing (among others), she has written *Do You Understand Chinese Media-Art?* in 2007's *Interact or Die!*.

**ESPEN GANGVIK** is a Norwegian sculptor and curator. He graduated from Trondheim Art Academy in 1984. Gangvik has participated in numerous group exhibitions at home and abroad. He is represented in many public collections, and has since 1986 undertaken a number of commissions, including "Trinigon", the national monument of liberty in Narvik. "Objects from an altered existence", 2007, at Trondheim Art Museum, was his up to now last solo exhibition.

In 2002 he founded TEKS - Trondheim Electronic Arts Centre, which aims to facilitate the production and dissemination of art that utilizes new technologies, and he is currently General Manager of the foundation. TEKS organized the festival "Trondheim Matchmaking" of electronic arts and new technologies from 2002 to 2009, with Gangvik as main curator. In 2010 he is curating the new biennial for art and technology in Trondheim, Meta.Morf - New.Brave.World!.





**EXHIBITION VENUES:**

**Trondheim Art Museum - Gråmølna**

**Trøndelag Centre for Contemporary Art**

**Babel Art Space**

Herman Asselberghs (BE)

## Beste Steve / Dear Steve



“Beste Steve / Dear Steve” is directed to Steve Jobs. With an interesting twist this is also precisely the kind of action that lets you loose your Apple warranty immediately, probably even getting you blacklisted. What Apple advertises alternatively as a machine “carved from a single block of aluminum” or a unibody, Herman Asselberghs’ video takes a closer look “into” the machine that is our interface to and with the digital realm.

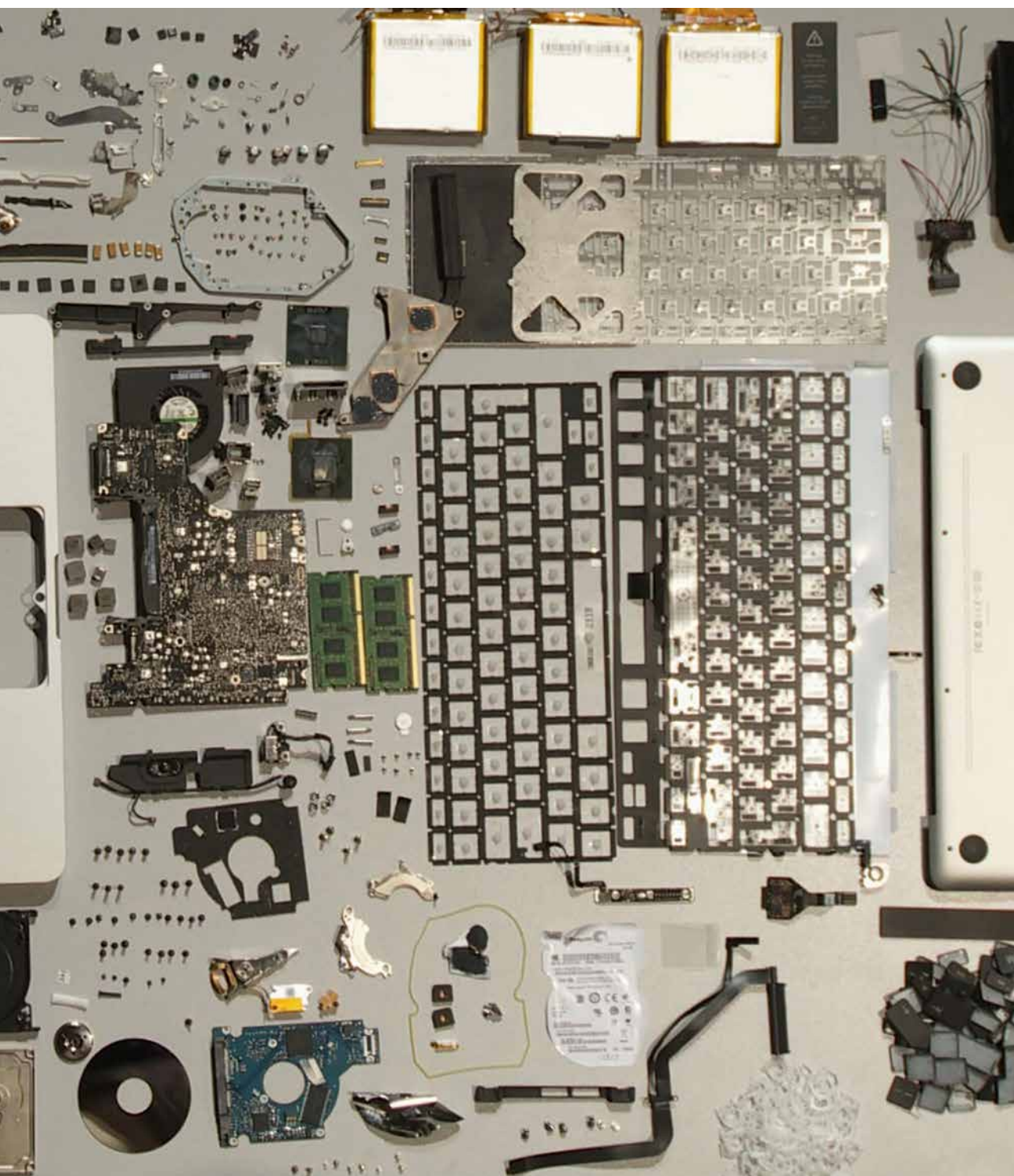
Composed of a lot of different pieces (as can be seen in the still), nevertheless – it is usually estimated that a \$2,500 machine costs about \$500 in manufacturing. And, what is deemed miraculous in modern-day work-efficiency, looks bare, naked and dysfunctional in its dismantled form.

In Herman Asselberghs’ autopsy of the laptop (which means “see for yourself”), he ponders the “relative invisibility within the field of cultural production – how often do we actually get to see laptops in exhibitions or films, or as artworks even? – contrasts starkly with the indispensability of the mobile personal computer in our present-day globalized cultural economy.”

Herman Asselberghs is an artist and critic. His work is focused on the questioning of border areas between sound and image, world and media, poetry and politics. His video works have been shown a.o. at Muhka, Antwerpen, International Film Festival Rotterdam, Centre Pompidou, Paris; Documenta X, Rencontres Internationales Paris/Berlin. He is the winner of the Transmediale Award 2007 with the video Proof of Life (2006). Herman Asselberghs teaches at the film department of Hogeschool Herman Asselberghs teaches at the film department of Hogeschool Sint-Lukas Brussel and is a founding member of the Brussels production platform Auguste Orts. He lives and works in Brussels, Belgium.

*BESTE STEVE / DEAR STEVE: Video stills. Continued overLeaf.*





Ralf Baecker (DE)

# The Conversation (VI)

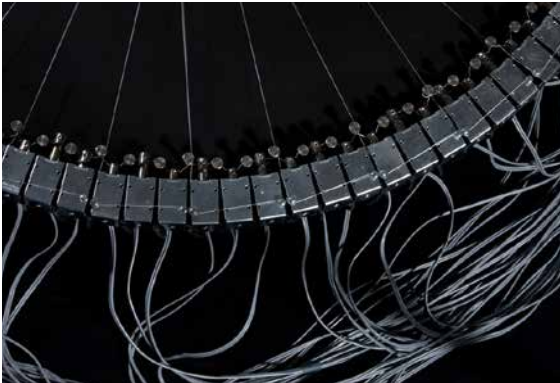
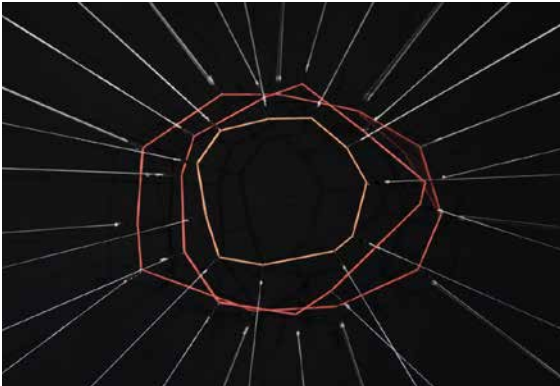


## PATAPHYSICAL PROCESSING ENVIRONMENT

The Conversation is an autonomous apparatus that incorporates an analogous and a digital part. These almost inseparable elements try to adapt to each other. As the process does not have a linear program it is not obvious which part controls which.

The machine consists of 99 solenoids mounted in a circle. Together they carry three rubber bands (attractors) in the center of the circle. Each magnet works autonomously and tries to adapt to the forces in the network. The aim of the system is to keep a balance of forces. By turning the machine on, a process is activated that tries to conserve its initial state by contraction and relaxation. The rubber-band acts as mediator between the single solenoids. Different initial rubber-band configurations (tensions) generate different patterns in time. Constellations appear and stay until disturbances make them decay. The whole installation is immersed in a polyphonic buzz generated by the constant shifting forces of the solenoid array. The Conversation is part of a series of installations and sculptures that deconstruct the fundamentals of symbolic processes.

After his study at the Kunst Hochschule für Medien in Cologne Ralf Baecker studied Computer Science at the University of Cologne. Next to his artistic work he is also working as a freelance programmer. He has been showing his work on many international exhibitions a.o. Sonic Acts, SHARE and Elektrohype.

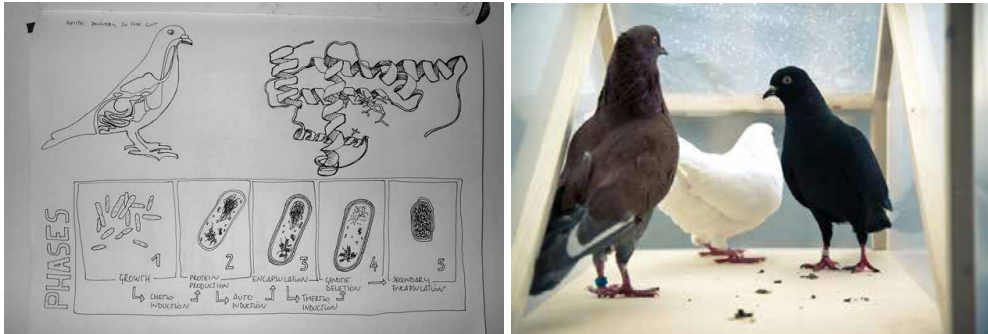


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Industrial*

Tuur Van Balen (BE)

# Pigeon d'Or



Pigeon d'Or explores how pigeons can serve as a platform and interface for synthetic biology in an urban environment. By modifying the metabolism of pigeons, and specifically the bacteria that live in their gut, synthetic biology might allow us to add new functionality to what is by many seen as flying rats. This would happen through feeding the pigeons special bacteria and would be as harmless to them as eating yoghurt is to us. Initially, the project attempts to create bacteria that would allow a pigeon to defecate biological soap.

Pigeon d'Or considers the city as this vast and incredibly complex metabolism of which the human species is the tiniest of fractions: tiny yet intensely linked into an intricate organic embroidery beyond our understanding. It is in this hugely complex fabric that (future) biotechnologies will end up. The project therefore sets out to design the appropriate architectural interfaces for these technologies.

Pigeons and feral pigeons present themselves as the ideal platform and interface for urban biotechnologies. While seen by many as venom, one could argue that they're actually a product of biotechnology as their ancestors were designed to look pretty, deliver post, spy, tumble or race. The project draws on the rich culture around pigeon racing: from the refined pigeon-psychology to the social and economical practices.

*All photos by Tuur van Balen, except bottom right page, photo by Pieter Baert*





Tuur Van Balen (BE)

# London Biotopes

Only a small amount of the pharmaceuticals and chemicals we swallow are taken up in our bloodstream, most of them pass through our bodies into the city's wastewater. Since wastewater treatment plants are not designed to remove pharmaceuticals, the contents of our medicine cabinets eventually end up in the drinking water. This results in local differences in tap water, based on the food we eat and the drugs we take.

Tuur van Balen branded tap water from three different areas: Notting Hill tapwater benefits from the highest density of organic shops, tapwater in the city of London is enhanced with various stimulants and Golders Green 'produces' a very fertile water due to the low concentration of people taking anti-conception pills.

This branded tap water was then sold on a sunny Saturday morning on Broadway market and people were asked to also put their tap water on the map, speculating it's special qualities. On the project website, people also added stories about their tap water to the map. The result is a new map of London, revealing potential local city-body ecologies or biotopes.

This is part of the "My City = My Body" project, a design research project on how the rise of biotechnologies might influence our future interaction with the city. In this part, a series of public interventions was created to critically engage the audience in a future scenario, balancing fiction and reality.

*Top: Filling bottles in the City, and Golders Green  
Middle: Selling tap water on the market; people's stories*



Tuur Van Balen (BE)

# Synthetic Immune System

Synthetic Biology's potential to make health care more personal and participatory might turn us into our own doctors and pharmacists; constantly monitoring and tweaking our body. It might even allow us to externalise our immune system by outsourcing metabolic processes to external micro-organisms. These micro-organisms, for instance yeasts, sense and diagnose anomalies in our body to produce and deliver chemicals accordingly. Such a Synthetic Immune System would be tailored to one's genetic predisposition, age, lifestyle and therefore risk.

This synthetic immune system is a network of biosensors, made of yeast. Each vessel contains a different yeast, designed to monitor a specific anomaly for a specific person; helping break down lactose, caffeine or other ingredients, detecting vitamin deficits or diseases and producing chemicals or drugs accordingly. The selection of biosensors is personal and relies on genetic predisposition, lifestyle and fears.

The yeasts are fed with water and sugar from the central bowl. When using the spoon to stir the mixture, a drop of blood drips into the system to disclose your body's state. Your synthetic immune system will need feeding every evening to produce for your needs overnight. Every morning, use the mouthpiece to take in the different remedies produced specifically for today.

Tuur Van Balen (Belgium, 1981) uses design to explore the wider implications of emerging technologies. Through objects and interventions, he engages a wider audience in critical reflections on the possible roles of new technologies in our everyday lives. Since 2008, Tuur has been bringing design into the world of synthetic biology and vice versa.

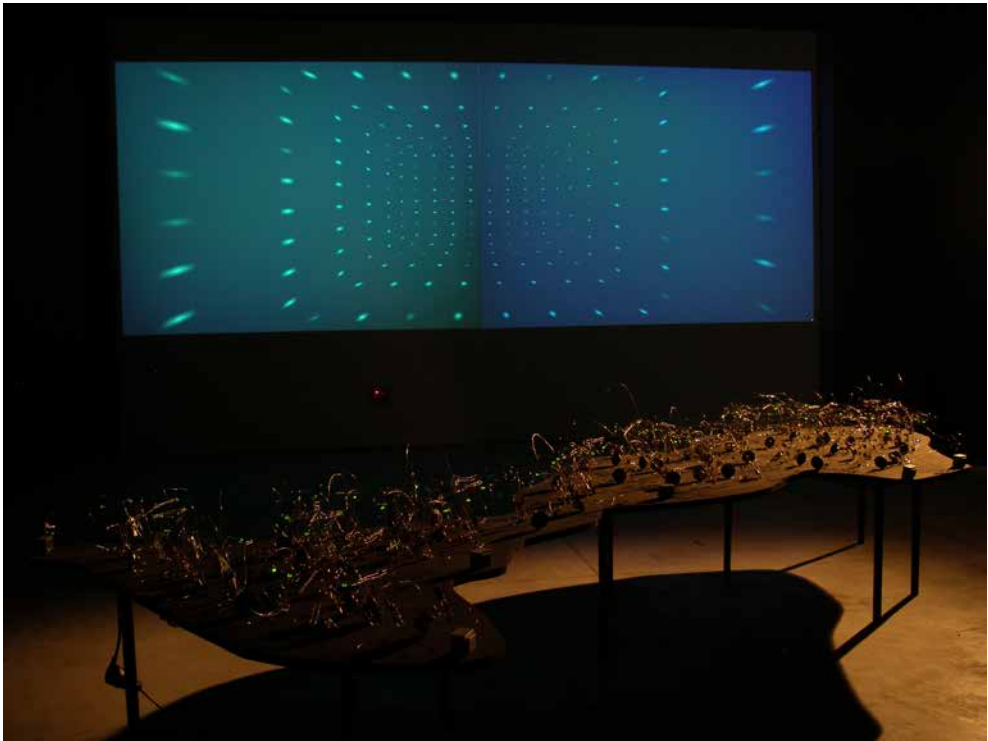
He is currently working on a project that proposes the use of feral pigeons and synthetic biology to create aesthetic interventions in urban metabolisms. The project is in collaboration with the Centre for Synthetic Biology and Innovation at Imperial College and is funded by a design/research grant of the Flemish design and architecture council.

Tuur has exhibited and presented his work in various contexts, both within the UK and abroad. More information: [www.tuurvanbalen.com](http://www.tuurvanbalen.com)



Jose Manuel Berenguer (ES)

# Luci: No Name and No Memory



Luci is an electronic and computational emulation of synchronic behavior of South East Asian Fireflies. Its 64 electronic and computational fireflies complete networks that reach stable beating patterns after they have been following chaotic paths through finite sets of instable beating patterns. Chaotic beating patterns emerging from synchronisation gives complex visual and sonic rhythms. The individual conduct of each agent, whether analogue or computational, gives rise to “Luci: No Name and No Memory”, which is nothing but an unexpected emergence.



Jose Manuel Berenguer is the director of the Orchestra of Chaos and the Música 13 Festival, the founder of NauCòclea, a member of the Académie Internationale de Musique Electroacoustique of Bourges and honorary chairman of the Confederation of Electroacoustic Music of the UNESCO International Music Council. His work focuses on installation art, real time and interactivity, which he uses to address the philosophy and history of science, the limits of language, ethics, artificial intelligence and life, robotics, the metabolism of information, and the outer limits of human comprehension and perception.

Andy Gracie (UK)

# Fish, Plant, Rack

The work is made up by two biological entities – a fish – the virtually blind elephant fish *gnathonemus petersi* – in a tank, some plants in a hydroponic system – and a robot with AI behavior. The fish and the plants are physically separated from each other but are technically connected with each other via the robot.

The robot's actions are set in motion via the electrical impulses it receives from the fish. The robot, which follows a basic set of rules, nurtures and observes the plant by interpreting the electrical signals by the fish. Thus the fish has a direct impact on the plants whom it can 'see' via a small display near the fish tank. The robot as the intermediary observes both biological systems but has a limited behavior dictated by the fish. Nevertheless all three entities more or less depend on each other without being aware of it (we assume).

"Fish, Plant, Rack" creates a real circuit with concrete inputs and outputs across multiple lifeworlds; where none of the actors recognise the other but each acts on its own limited input. The circuit flows; fish – electrical impulses – robot – nutrients – plant – video – fish. For the robot, the fish is a signal, a stream of clicks and pulses; for the fish, the plants are a video image. The mediated network that links the individual members of the ecology add up to something more mysterious, a complex that finds a way to function, each individual becomes a part in a new whole. The media that circulates them maintains the form of data or stimulus rather than form or content.

*Credits: The work is indebted to Gary Burns for assistance with the electronics involved in this project.*

Andy Gracie is an artist and researcher. He graduated in 1991 with a BFA from Liverpool Polytechnic School of Art (UK). Gracie focuses on contemporary media arts including sound, video and installation, placing special emphasis on the link between biological and technological systems. He has a special interest in studying organic intelligence, emergent systems and new kinds of evolutionary synthesis. His works have been exhibited worldwide, including the Manchester Museum (Manchester), the Institute of Contemporary Arts (London), the Performance Space (Sydney), Mejan Labs (Stockholm), COMAFOSCA (Alella) and Galeria Kapelica (Ljubljana), ISEA (Nagoya, 2002), The Liverpool Biennial (Liverpool, 2002), Ars Electronica (Linz, 2007).

He has delivered a wide range of presentations and lectures at international contemporary art symposia as part of Transmediale (Berlin), Ars Electronica (Linz), FLAIRS (Florida), Futuresonic and Dias de Bioarte (Barcelona). He is the author of several articles on adaptive and intellectual qualities of artificial systems. Gracie has won several awards such as artist residencies and honorary mentions at VIDA 9.0 (Madrid), an international competition on Art & Artificial Life, and at Ars Electronica





## Henrik Menné (DK)

# 114L



Whether they are dynamic or static; sculptures by Henrik Menné are basically about process, balance and about organizing matter through both rigid systems and chance.

The major part of Mennés production consists of large-scale machines or arrangements temporarily put at work when exhibited – all sculptures are “in the making” so to say. Their process is always silent, controlled and structured by repetitive movements as the machines transform a single material – plastic, wax, metal or stone – into peculiar objects. These soft-formed elements are seldom regarded as autonomous art works and destroyed or recycled when no longer on show.

Although closed and often self-referring, the system in which the process takes place both changes the environment and is sensible to changes in the environment. The instability of the physical context is therefore what causes important marginal variations in the shapes of the particular outcome.

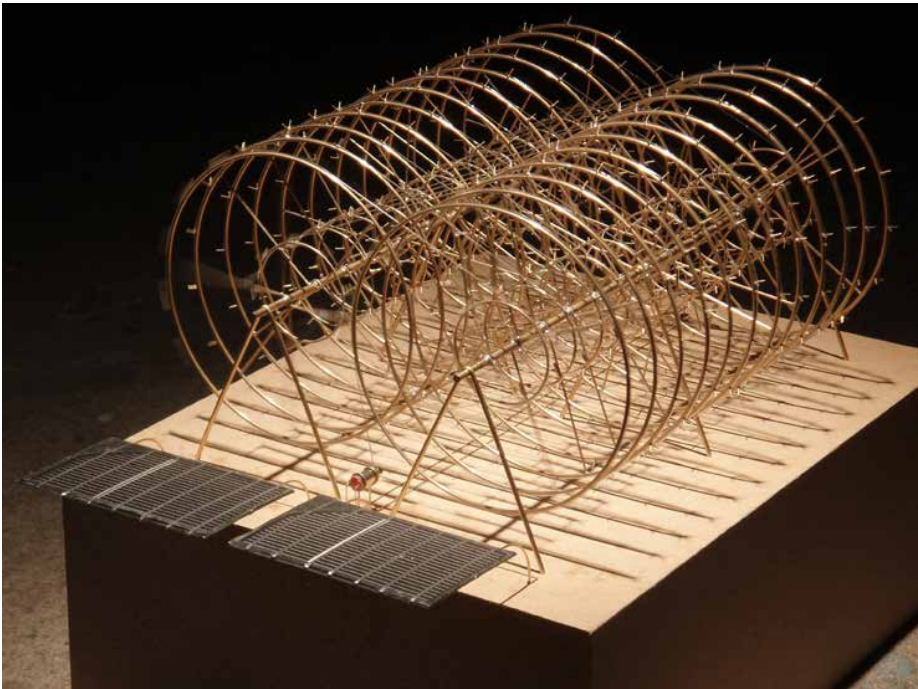
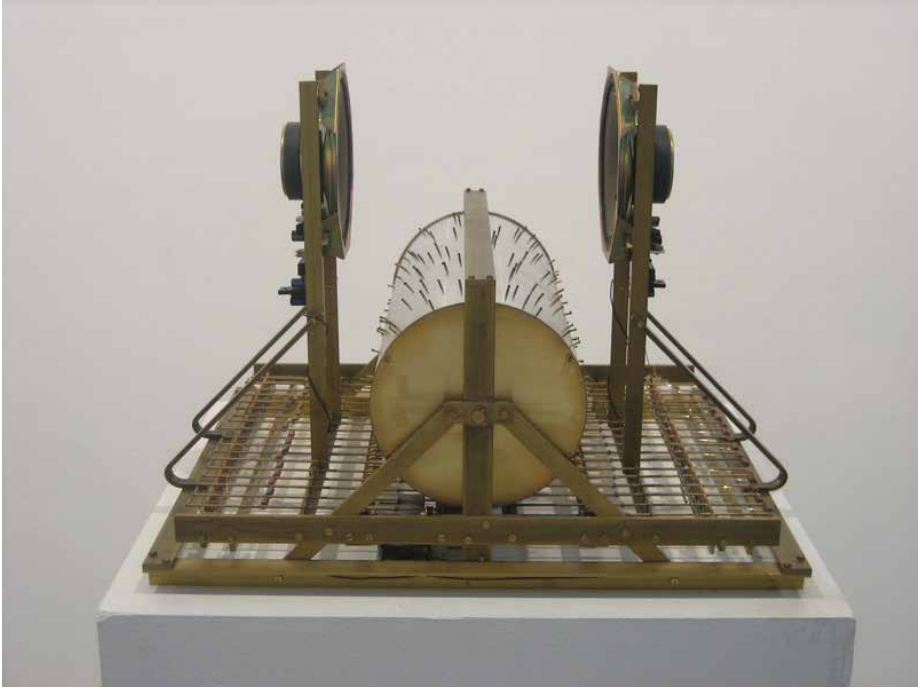
The sculptures by Menné contain the same immense effort and obsessive trait when it comes to putting forces such as gravity and well-known qualities ascribed to conventional materials into play.

The intriguing low tech and analogue character of all works by Henrik Menné make visible the principle on which the individual system of the particular sculpture is organised. Despite this rational transparency, works by Menné almost always appear as logically impossible and tremendously beautiful.



Henrik Menné studied at the The Royal Danish Academy of Fine Arts in Copenhagen.

His work has been shown around the world in exhibitions and biennials a.o: Synthetic Times - Media Art China (2008); National Art Museum of China (Namoc), Beijing; Wood Street Galleries, The Pittsburgh Cultural Trust, (USA); Danish Pavilion at EXPO 2010, Shanghai (China).



Kristoffer Myskja (NO)

# Conspiring Machine

## Machine that Uses a 1000 Years to Shut Itself Down

Myskja's machines are not prosthetic devices, enhancing human capabilities or making human life easier, they are autonomous strange looking machines, just being busy with themselves.

Machines in general express the level of rationalization and efficiency we have achieved as a society. Myskja's works focus on some of the basic characteristics of machines, like temporality, coding, being extensions etc., not merely on their functional aspects. Rather than just being rational mechanical devices, Myskja's machines reveal human experiences like time, memory and instability.

The works of Myskja are conceptual and surprising in what they perform and refer to, reflecting our technology-based culture that is depending on machines of all sorts to function.

These somewhat tender and visually elegant installations also remind us of humankind's consistent and never-ending search for solutions that can extend its scope on all levels.

Kristoffer Myskja lives and works in Oslo, Norway. He graduated from the Art Academy in Oslo in 2008, finishing the BA program he started in Trondheim in 2005. Myskja's works are mainly in the mechanical/kinetic tradition, with an elegant and contemporary touch. He has participated in a large number of exhibitions in Norway and has received several awards. Electrohype 2008 is the first large scale international exhibition presenting his works.

*TOP: Conspiring machine*

*Bottom: Machine that uses a 1000 years to shut itself down*

Michael Najjar (DE)

# High Altitude

Michael Najjar was part of a team that ascended and took photographs of Mount Aconcagua, a sublime experience of nature in Argentina. He was struck by how much the silhouettes of the mountains resembled the recent stock index charts in its extreme behaviour. For a series he calls High Altitude, he digitally altered the mountain's outlines so that they traced market movements over time. He calls his photographs an effort to "rematerialize" financial systems that have become impossible to understand, both mountains and markets have aspects that are larger than our human understanding of them. Being on the mountainside, is comparable to investing, if you focus solely on the summit's glory you might overlook the risks and fall down.

One of the central themes of Michael Najjar's art is the telematic society. Focusing on key components of a society driven and controlled by computer and information technology, his works reflect contemporary developments and create visions and utopias of future social structures emerging from the impact of new technologies. The fusion of realistic elements with fictitious realities is a recurrent hallmark of his photographic productions and video work, which are composed in thematically focused series. Simulation and hyper-reality are the foundations of Najjar's art. In a time of exponential acceleration and transformation, his work as a media artist attempts to sound out the possibilities inherent within the boundaries of the real.

Michael Najjar's work was part of the 2006 Venice Biennale's 10th International Architecture Exhibition, and was included in the 9th Havana Biennale. He participated in the "Future Face" exhibition organized in 2005 by the Science Museum in London. Harald Szeemann exhibited his work in 2004 in "The beauty of failure / The failure of beauty" at the Joan Miró Foundation in Barcelona.

*HIGH ALTITUDE: (From top)  
Dow Jones 80-09, Bovespa 03-09, RTS 05-09.  
OverLeaf: Dax 80-09.*









Michiko Nitta (UK)

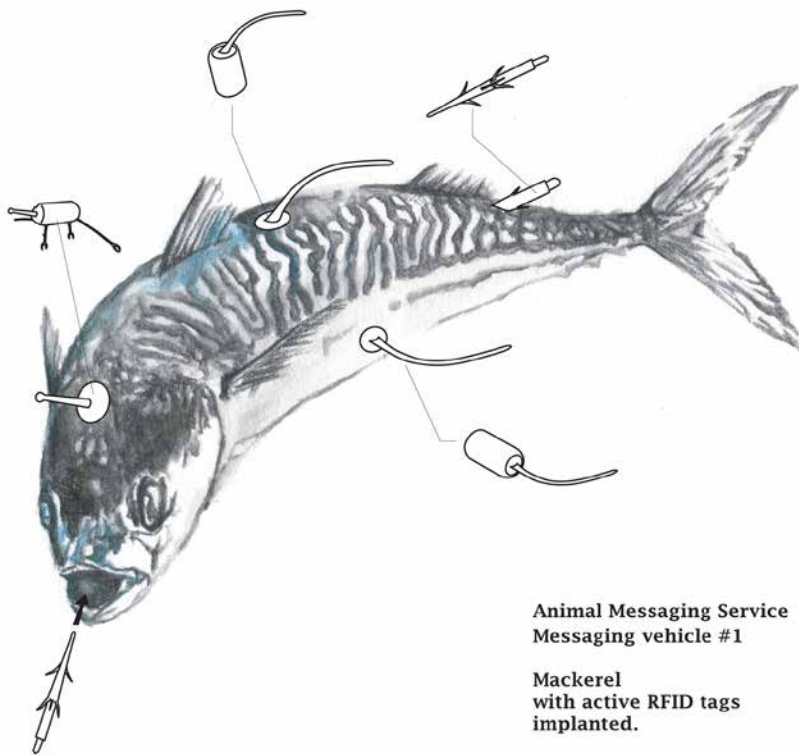
# Extreme Green Guerrillas

Michiko's work focuses on critical thinking to question and engage with the public through meaningful design outcomes. One of the exhibited works, "Extreme Green Guerrillas", gives a critical point of view on the current general green visions, as many green trends are used as a medium of hypocritical consumerism. By illustrating an extreme green scenario through design outcomes, this project converted complex research data into a meaningful installation, so that the public could discover the core problems and think of/debate real solutions. The point of this project is not to say that this is the solution, nor the future. The role of this project is more to provoke with intriguing artworks, have people question their lifestyle and get the debate on green issues going. Over the last few years, she has used the design outcome to workshops and conferences to generate debate on environmental issues.



Michiko Nitta currently works as a service design consultant on commercial projects, and is also collaborating with Dr. Catherin Degnun, a social anthropologist at Newcastle university, on their shared interest in people's relationships (past, present and future) with nature. Together with Susanna Hertrich, she recently won an award for "ÜBER LEBENSKUNST" on their project called Berlin wild life, funded by Kulturstiftung Des Bundes and Haus der Kulturen der Welt | hkw.

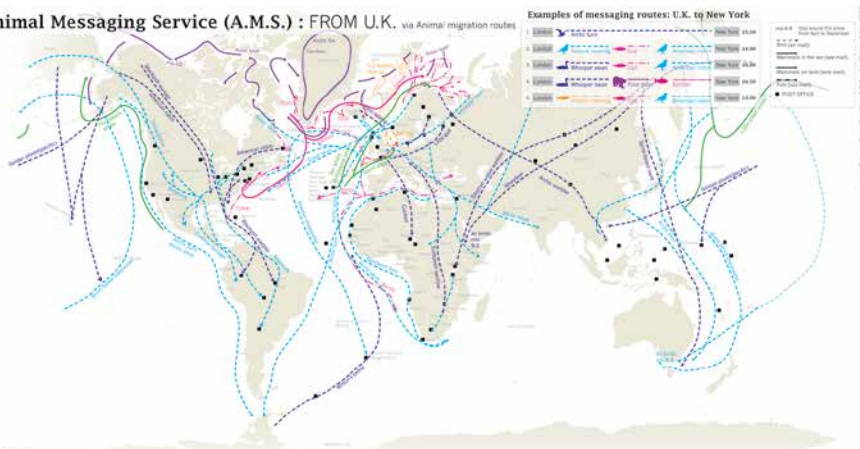
*EXTREME GREEN GUERRILLAS: Piguail (above), Animal Messaging Service (right)*



**Animal Messaging Service  
Messaging vehicle #1**

**Mackerel  
with active RFID tags  
implanted.**

**Animal Messaging Service (A.M.S.) : FROM U.K. via Animal migration routes**



**Price List**

Animal	Price
Blue whale	£1,100
Blue whale (via South Atlantic)	£1,100
Blue whale (via West Africa)	£1,100
Blue whale (via East Africa)	£1,100
Blue whale (via Indian Ocean)	£1,100
Blue whale (via Pacific Ocean)	£1,100
Blue whale (via Arctic Ocean)	£1,100
Blue whale (via Antarctic Ocean)	£1,100

**Michiko Nitta (UK)**

# Plant life and Interventions

Social and cultural research explores the complexity of social life and the richness of cultural experience alongside the paradoxes of inequality and exclusion. The “Interventions” project has been organised by Joe Malia and Monica Moreno Figueroa and has paired six researchers with six designers to explore the possibilities revealed when designers apply their knowledge and approach to the detailed and nuanced research undertaken by social and human scientists.

Nitta worked with Dr. Catherine Dagnun, Lecturer in social anthropology at Newcastle university, whose work focuses on contact with nature through gardening.

Gardening is not simply a neutral set of practices or a past-time, it is a set of practices and form of knowledge that is also embedded in highly significant social, cultural and historical parameters. Celebrating the supposedly mundane, such as gardening, for the rich cultural set of practices that it is, is one way of bringing my the objectives of celebrating everyday expertise and finding ways to explain why social science matters together. “Interventions” is a unique opportunity to collaborate with colleagues who are also interested in horizontal thinking, interested in shifting perspectives, and in engaging with other disciplinary traditions.

## Future of Mood enhancement

Feeling better than good?

“My worry is about anti-depressant such as SSRIs and Prozac. Over 100 million prescriptions for anti-depressant are written every year in U.S.A. These drugs are going generic, they are seeping around the world. Anti-depressant raises the level of serotonin, as well as it suppress the level of dopamine circuit, which is associated to romantic love.... Anti-depressant not only suppress the dopamine level, it also kills the sex-drive.” (Helen Fisher, in TED Talks)

In 2016, the government announced a new regulation called “Statutory Instruments 2016 No. 201, The Control of Maintained psychology Regulations”. This regulation declares that all babies diagnosed with a genetic predisposition to depression are considered as a dangerous breed, therefore their parents were directed to implant “BRAIN AID” into these children for a happier, safer life.

This film is about a relationship between a girl with brain-implant and her boyfriend whose psychology has never been treated, set in 2030, based on the fact that the permanent Brain aid is already used for some patients.

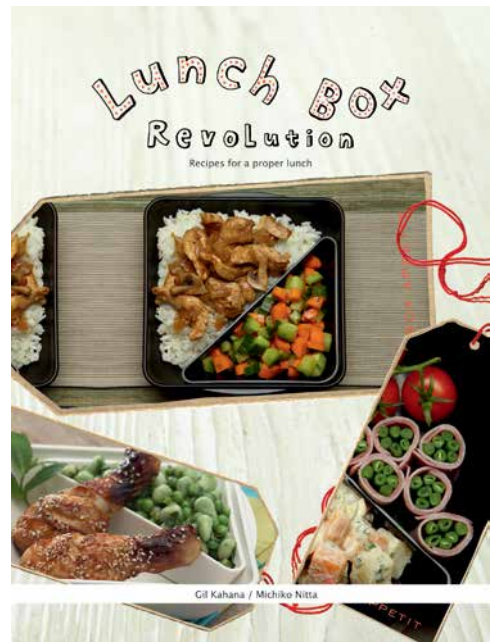
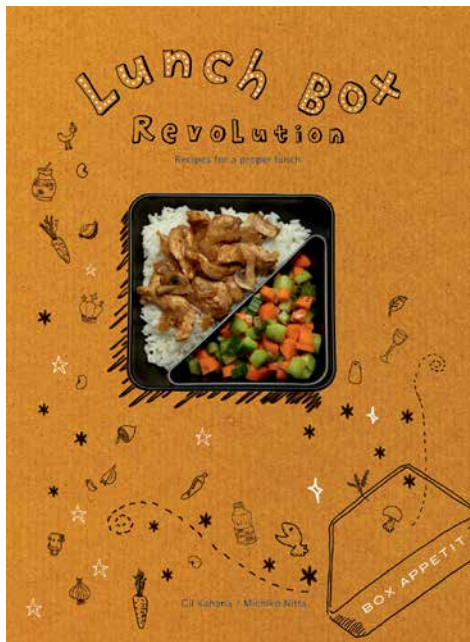
# Status Anxiety



For the middle class fathers in urban society, the balance between work and life has been occupied by work, because of their status anxiety. Can designers not only highlight this problem but also use our talents to make them spend more quality time?

The aquarium is a present from father to children, and they have different responsibilities for growing the fish. The water in the aquarium drips constantly while father is working hard during the day. He has to go home early enough to stop the dripping (to save the children's fish), which automatically leads him to spend more time with his children. This product highlights the relationship between a father and his children and questions him to what is the most important thing in life.

# Lunch Box revolution



**Michiko Nitta (UK)**

# Body modification for Love

Within the capability of In-vitro culture meat, technology, the artist left the field of animal meat production in order to find a way to connect individual memory to the body. The proposal includes a technique for genetically growing selected parts of your beloved person on your skin. Having a nipple of your loved one would be one option, growing a mole of your partner another. It would also be possible to grow a patch of living hair on your arm, reminding you of your mum. It's much like a tattoo, but you would have to shave it for maintenance.

Michiko Nitta is an award winning designer who graduated from the Royal College of Art with an MA RCA in Design Interactions. She has subsequently exhibited her work in the Museum of Modern Art (MOMA) in New York, the Academy Gallery in Utrecht and has lead projects at the Institute of Contemporary Arts in London. Michiko has a number of publications to her name, spoken at conferences in the UK, US and China.



Erik Olofsen (NL)

# Public Figures



The platform of a subway station is turned into a stage uniting public and private matters. The public space, which we perceive as a hectic, vibrant and noisy, is quiesced and suddenly we can perceive minimal gestures and intimate moments, which are normally not visible to the human eye.

By means of a high speed camera and the use of slow motion, Olofsen documents the impression of an arriving train in a subway station: portrayals, relations, reactions. It enables us to receive a very intimate impression of which the protagonists are unaware. Everyday life becomes a theater play, and those who are waiting become actors.

Erik Olofsen studied at the Rietveld Academie and the postgraduate program of the Rijksacademy in Amsterdam. His works have been shown internationally. He has received several international awards such as the prestigious Dutch Prix de Rome with the installation "Remotely Here", The Spanish international prize Vidalife with the work "Divine methods / Hidden motives," The Golden Cube of the Kassel Documentary Film and Video Festival with the installation "Public Figures", best video for "Public Figures" at the Canarias Media Fest in Las Palmas.







BABEL ART SPACE

**Annina Rüst (CH)**

# eRiceCooker

eRiceCooker tracks Internet news about genetically modified rice. Whenever there is a new report about GM rice, a quarter cup of rice is dispensed into the cooker. When the cooker has enough rice for a meal, water is added automatically to the rice and the cooker is switched on. When the rice is done, an e-mail is sent out to inviting people to eat the rice. The more news reports appear, the more rice is cooked, the more often invitations are sent out. The project is designed to create awareness to issues surrounding genetically modified organisms by producing excessive amounts of cooked rice and attempting to feed people with it.

Annina Rüst was born in Switzerland. She holds a diploma in New Media from the School of Art and Design in Zurich and a Master of Fine Arts in Visual Art from the University of California, San Diego. Currently, she is a research assistant in the Computing Culture Group at MIT Media Lab. In 2006 she received the scholarship of Edith-Russ-Site for Media Art.

Chris Salter (US/QC/CA)

# Just Noticeable Difference

in collaboration with Marije Baalman and Harry Smoak

Year of Production: 2010

“Just Noticeable Difference” (JND) is a sensory environment for one person at a time lying in total darkness. The installation is based on Gustav Fechner’s concept of the Just Noticeable Difference: the ability to perceptually detect the smallest changes in sensory stimuli. During a set time period, visitors experience an extraordinarily wide range of visual, auditory and tactile sensations that challenge how we perceive the smallest degrees of change in sensory stimuli over different levels of intensities. “Just Noticeable Difference” explores the gaps in seeing, hearing and feeling, the fluctuation of noise and order and the play between sensation and sense making directly taking place at the level of bodily experience.

**Credits:**

*Concept/Direction:* Chris Salter

*Sound Design:* Marije Baalman/  
Chris Salter

*Sensing/Programming:*

Marije Baalman

*Light:* Harry Smoak

*Production Management/Artistic*

*Assistance:* Brett Bergmann and  
Matthieu Tremblay

*Installation Construction:*

Jan Ohl (Holzwerkstatt,  
Berlin), Duncan Swain and  
Justine Chibuk (Montréal)

*Technical Direction (Europe):*

Thomas Spier, Marije Baalman,  
Bram Giebels

*Management:* Dieta Sixt

Conseil des arts  
et des lettres



Social Sciences and Humanities  
Research Council of Canada

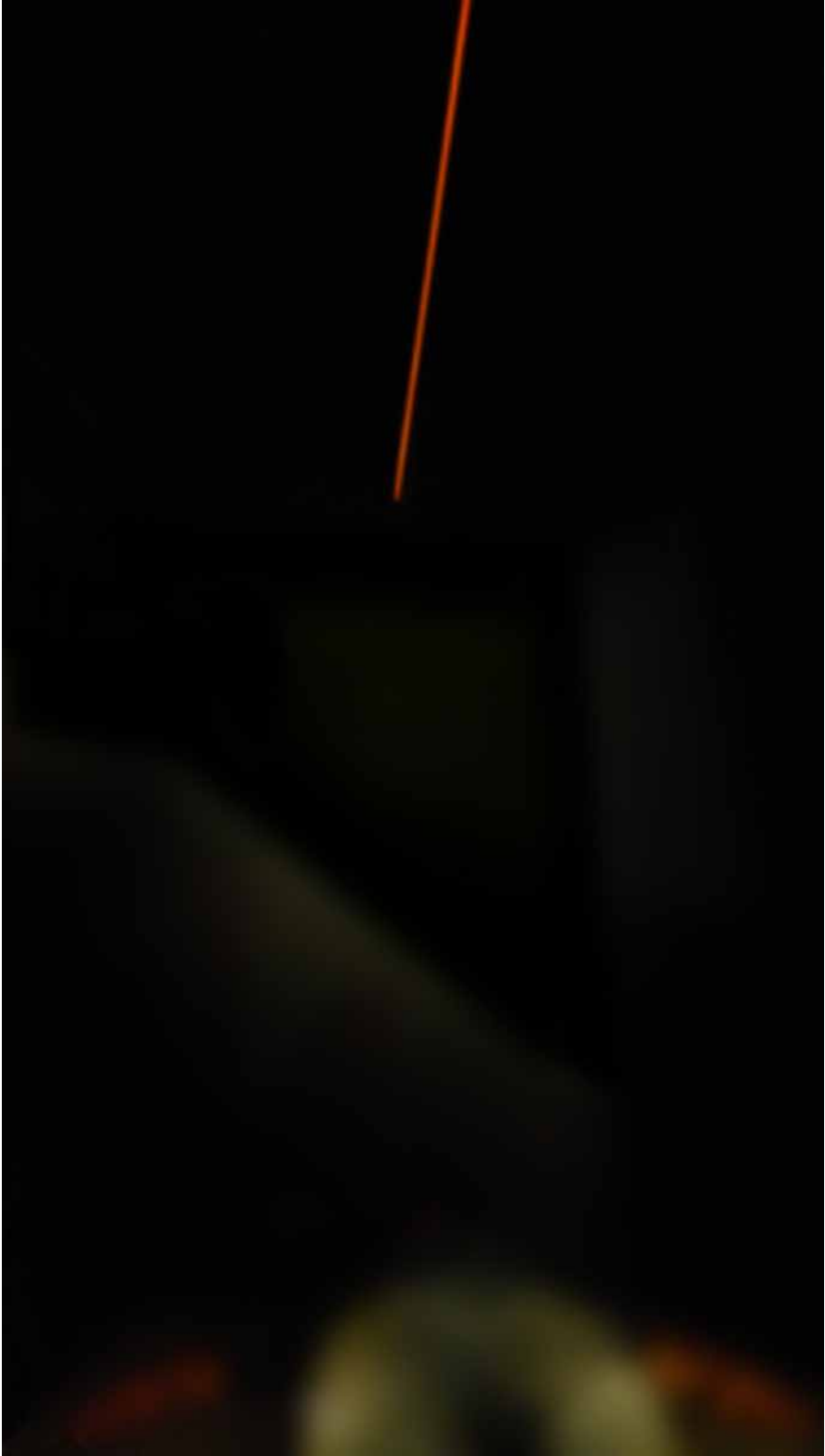
Conseil de recherches en  
sciences humaines du Canada

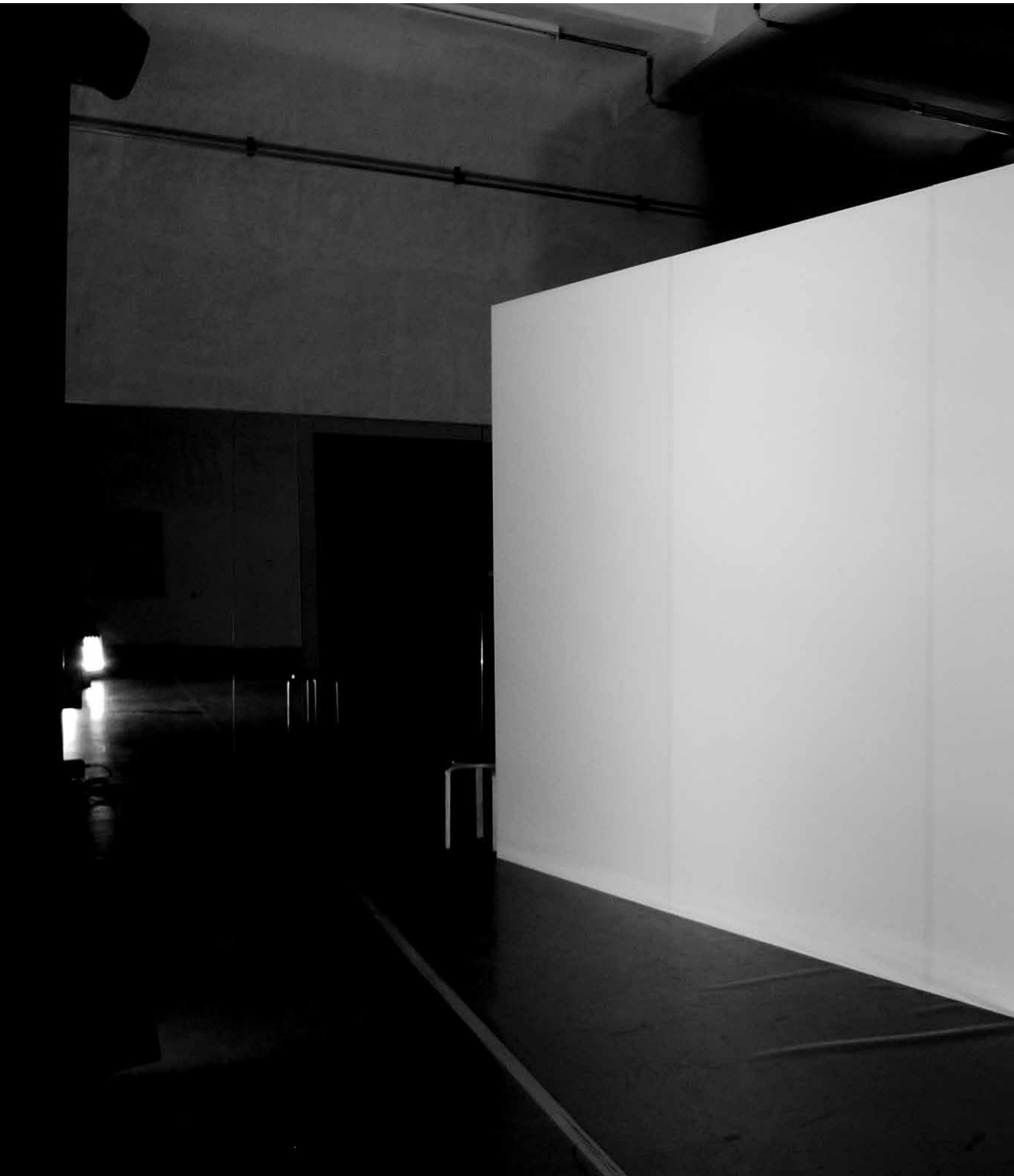


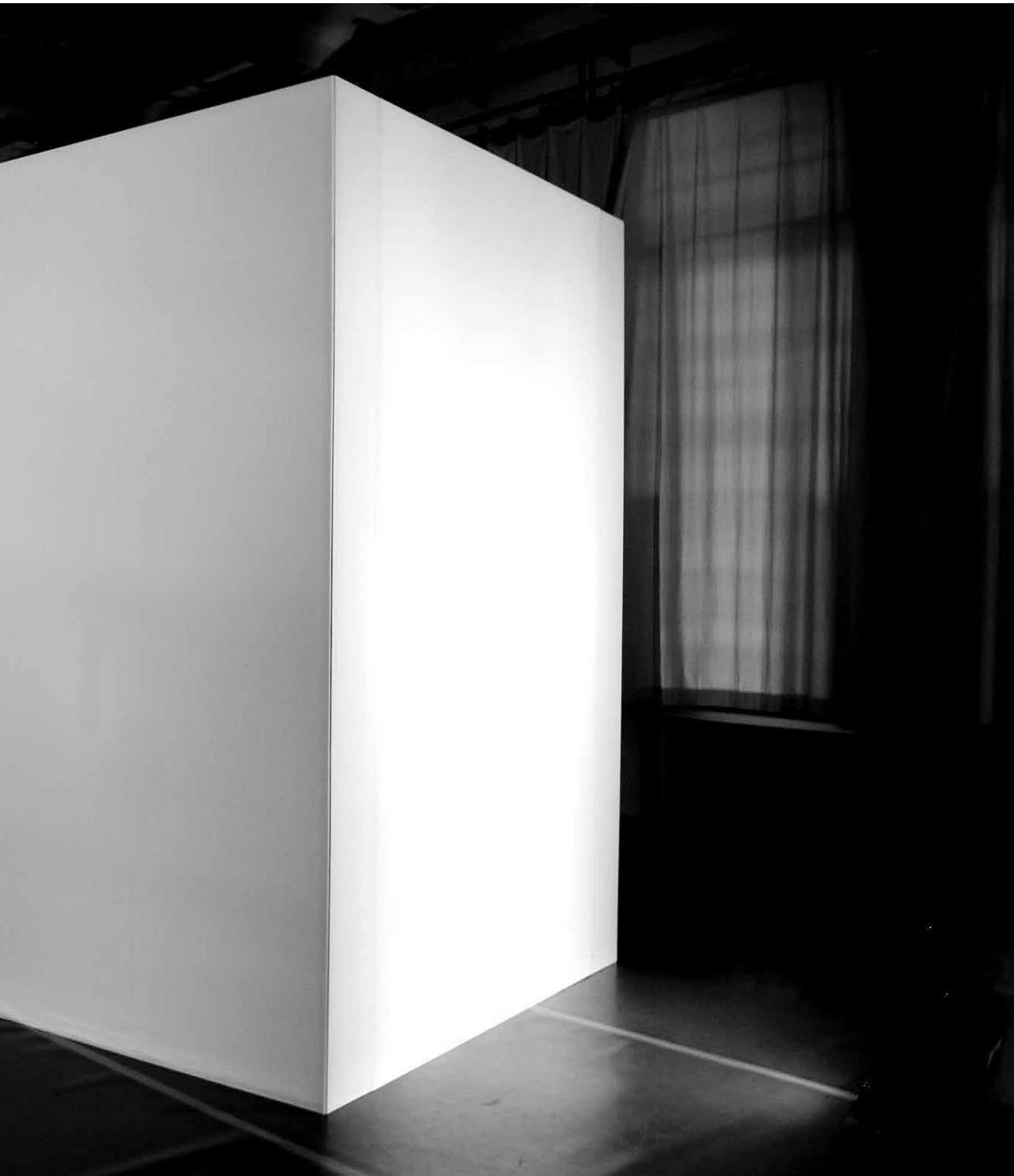
*Funded with support from the Social Sciences and Humanities Research Council of Canada and the Conseil des arts et des Lettres du Québec.*

Chris Salter is an artist based in Montréal and Berlin, whose artistic and research interests center on the development and production of real time, computationally-augmented responsive performance environments that fuse space, sound, image, architectural materials, and sensor-based technologies. After collaborating with Peter Sellars and William Forsythe/Ballett Frankfurt, he co-founded the art and research organization Sponge, which works in the arenas of performance, installation, scientific research, and publications. His work has been shown at such venues as the Venice Architecture Biennale, Ars Electronica (Linz), Villette Numerique (Paris), Transmediale (Berlin), the Shanghai Dance Festival, Dance Theater Workshop (New York), and the Exploratorium (San Francisco). His book *Entangled: Technology and the Transformation of Performance* will be published by MIT Press in 2010. He is currently Assistant Professor in the Department of Design and Computation Arts at Concordia University in Montréal.

**JUST NOTICEABLE DIFFERENCE:**  
*Inside view (left),  
Installation in gallery space  
(overleaf)*







Jonathan Schipper (US)

# A Slow Collision Into the White

Produced by TEKS

This sculpture is a machine that advances a full sized automobile slowly into the wall of the gallery with a speed of 7 mm pr. hour, simulating a head on automobile collision so slow that the movement of the crash is nearly invisible.

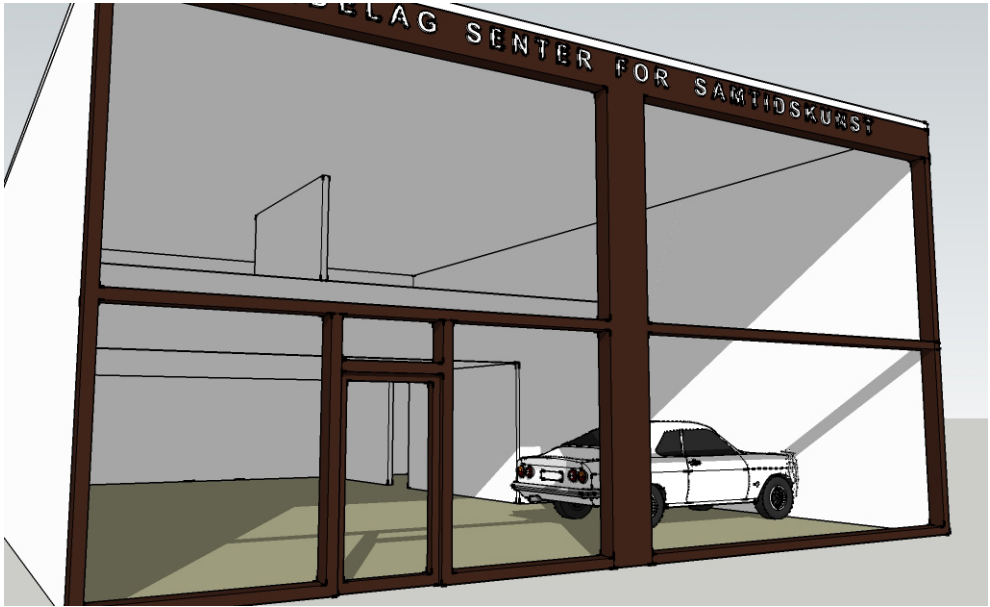
Cars are extensions of our body and our ego. We buy or modify cars that reflect our personalities and egos. When we see an automobile destroyed, in a way we are looking at our own inevitable death. This moment is, because of it's inherent speed, almost invisible. We never get to see the transformation of living breathing car too wreck in its entirety, in detail. This piece offers the viewer the ability to examine in three dimensions the collision of the car in real-time. A moment that might take a fraction of a second in an actual collision will be expanded to take days.

Car wrecks are spectacular moments, they are almost sublime This piece by changing one of the key variables removes and changes the nature of the event. What was life threatening is now rendered safe. What was supremely spectacular is now almost static. The wreck has been broken down to its Newtonian components. We are left to contemplate our own mortality our own Newtonian components.

*Made with engineering by Karl Biewald / Jan Hollås, Eie N A AS / Per Amundsen, Amundsen Sveise og Mek. Verksted AS.*

J. Schipper studied sculpture at the San Francisco Art Institute, San Francisco, CA, and at the Rinehart School of Sculpture, Baltimore, MD and later studied at the Skowhegan School of Painting and Sculpture. He received an honorary mention at Ars Electronica in 2010. He has been exhibiting his work a.o. at Today's Art (NL), the Armory Show (NY and Wood Street gallery in Pittsburgh US).

*A SLOW COLLISION INTO THE WHITE, 3D sketch by Daniel Richards*





TRONDHEIM ART MUSEUM – GRÅMØLNA

Studio Roosegaarde (NL)

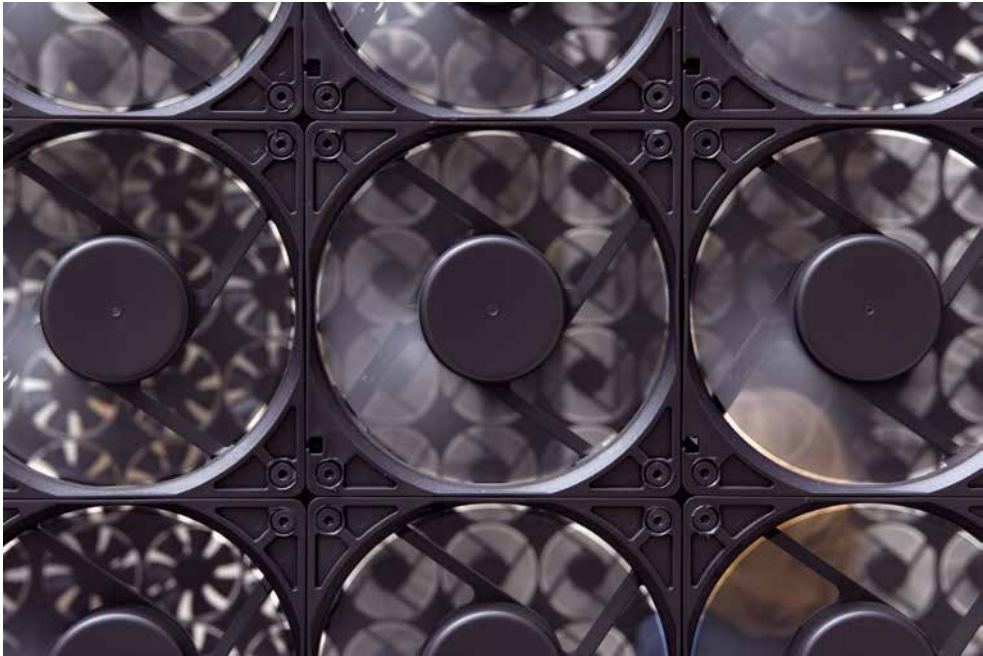
# Flow 5.0



“Flow 5.0” is an interactive landscape made out of hundreds of ventilators which reacts on your sound and motion. By walking and interacting the visitor creates an illusive landscape of transparencies and artificial wind.

Our most recent version creates a mind blowing environment. Moving through “Flow 5.0” the visitor becomes conscious of himself as a collective body, in a dynamic relation with space and technology.

*Credits: Daan Roosegaarde & Studio Roosegaarde. Commissioned by TodaysArt.*



Artist Daan Roosegaarde studied at the Academy of Fine Arts AKI in Enschede and received a Master at the Berlage Institute, a Postgraduate Architecture in Rotterdam. Currently he is the Creative Director of Studio Roosegaarde, an artistic laboratory for interactive projects which won the Dutch Design Award 2009.

Roosegaarde's work explores the dynamic relation between architecture, people and e-culture. In this interaction his sculptures create a situation of "tactile high-tech" where visitor and (public) space become one.

Daan Roosegaarde has been internationally exhibited at V2, Tate Modern, National Art Center Tokyo, Venice Biennale and Victoria & Albert Museum London as well as in public spaces in Rotterdam and Hong Kong.

*FLOW 5.0: all images from City Hall, the Hague. Continued overleaf.*

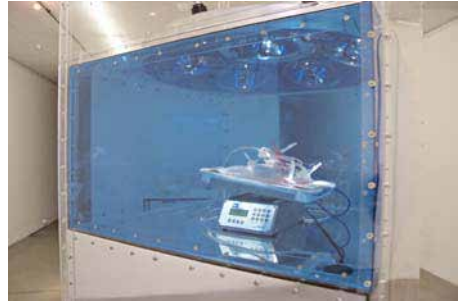




Oron Catts and Ionat Zurr / SymbioticA (AU)

# NoArk II

Co-produced by TEKS



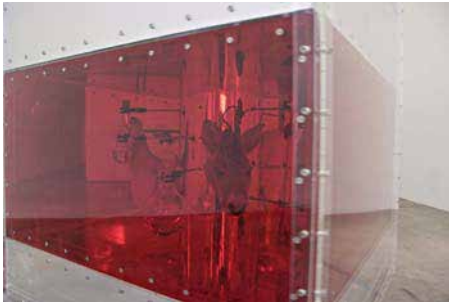
Catts and Zurr, the artists of the Tissue Culture and Art Project, call the biomass that grows in NoArk a bioreactor, a semi-living or sub-life neo-organism. Because of its origin in tissue samples of various kinds, their “chimerical blob” still participates in the vast domain of living things. But it is orphaned, bereft of parentage or kinship, abandoned by the Linnaean classification system that depends on organismic coherence. Yet NoArk’s sub-life is incorporated into a novel dynamic system that becomes its living context: the social body that receives and responds to it.

NoArk consists of a transparent vessel reminiscent of an eighteenth century curiosity cabinet, which houses both the bioreactor and a collection of dead and preserved animal specimens. These components relentlessly expose viewers to the ineffable quality of living cells, whose properties are so imminent to us, yet so elusive. The cell is the basic self-organizing unit of life. Cultured in a medium, abstracted from life as we know it, it is transformed into a synthetic embodiment of life processes and their artificial replication. This technique of abstraction is familiar enough in the science lab – biochemist Stuart Kauffman called it “second life” long before the virtual world of the Internet took up the name – but it is radically new as public display in the cultural domain.

The semi-living thing we see in NoArk is afflicted by an excess of freedom to cross boundaries between definitions and taxonomies, just like the limitless tagging and cross-referencing that characterizes digital information. As long as the semi-living is on life support, its bio-information persists through time and space, and poses the startling question of how such information can be deployed in “first life.”

Oron Catts is co-founder and Artistic Director of SymbioticA – The Art & Science Collaborative Research Laboratory at The School of Anatomy & Human Biology, University of Western Australia. SymbioticA is the winner of the 2007 inaugural Golden Nica for Hybrid Arts in the Prix Ars Electronica. Oron Catts founded the Tissue Culture and Art Project (TC&A) in 1996. Oron is trained in product design (BA Hon), and Visual Art (MA).

Ionat Zurr is artist/researcher of the TC&A, academic coordinator of SymbioticA. Ionat is currently completing her PhD that investigates the philosophies and ethics



of Partial Life. Oron and Ionat are considered to conduct pioneering research in wet biology art practices and in particular the use of living tissue from complex organisms.

Both were Research Fellows at The Tissue Engineering & Organ Fabrication Laboratory, Massachusetts General Hospital, Harvard Medical School (2000–2001). They have exhibited and published internationally.

 **NTNU**  
Faculty of Medicine  
Department of Cancer Research  
and Molecular Medicine

 **NTNU**  
Vitenskapsmuseet

Herwig Weiser (AT)

# lucid phantom M

Installation 2010 / Co-produced by TEKS

In the new piece "lucid phantom M", Weiser digs into the subconsciousness of the physical reality and research the processes that are hidden under the surface of material interaction – subsonic, subliminal, subcutaneous – tickling the levels of perception that go far deeper than those of our daily sensuality.

"lucid phantom M" is an installation, in which materials liberated from a servile function towards representation, become transformed in abstract sculptural painting.

"lucid phantom M" converts ultrasonic waves into a visual spectacle: the vibration – which, if hearable, would damage our ears irreversibly – sets in motion a mixture of materials, that abruptly unite, transform, dissolve in each other and separate again, in an incomprehensible but most fascinating arrangement.

All this in a setting that through cold cobalt UV-lighting and clean plexiglas surface distances us from what we'd love to submerge in. This constant tension between technical and organic, between known and unknown, between systematic analysis and free associations that grow in our brains as if imitating the process we see before us – all these juxtapositions sum up to a most unique experience.

The work is an idiosyncratic reflection on the image culture of our era: since – today's imagery is nothing but plastics, metal and silicon, artists chooses these very techno- materials, to constitute the palette of "lucid phantom M" and take into account this new materiality – and – with (how else?) a help of a machine – makes the most poetic use of them.

*Credits: Work supported by Dr. Wolfgang Hansal, HappyPlating GmbH  
C-Programming: Albert Bleckmann.*

Herwig Weiser (born 1969, Innsbruck/Austria) lives and works in Vienna and Cologne. He studied architecture at the University of Innsbruck and art at the Gerrit Rietveld Academy, Amsterdam and the Academy of Media Arts, Cologne. His works have been shown internationally. Among the awards he has received are the Hermann Claasen Award for Photography and Media Art (Cologne, 1999), Jury Award at the Festival of New Film (Split/Croatia, 2000), Transmediale Award (Berlin, 2001), the Nam June Paik Award (Düsseldorf, 2002), and numerous production grants including Hauptstadtkulturfonds Berlin (2010).

*LUCID PHANTOM M*  
*image overleaf*

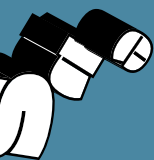








# contents



Thursday October 7, Opening concert @ Dokkhuset

**Tomoko Sauvage (JP/FR)**

# Waterbowl

[www.o-o-o-o.org](http://www.o-o-o-o.org)



Tomoko Sauvage opens Meta.Morf 2010 with a concert based on water filled amplified Chinese waterbowl.

It was at an interestingly combined all-night-long concert in Paris in February 2006, titled "Nuit Indienne" with Terry Riley's "In C" performed by Ictus and Riley himself and groups of Rajasthani music and Carnatic music that Tomoko Sauvage first saw this instrument, jalatharangam, porcelain bowls filled with water hit with bamboo sticks, virtuosio performance with delicate sound by Aanayampatti Ganesan. Impressed by its simple mechanism, she quickly started to hit bowls with kitchen tools at home. She bought more bowls in Chinatown to tune them up in some ragas she was learning. First she was doing improvisation exercises of classical Indian music on these bowls with organ drone notes giving raga's tonality like a tambura, but gradually she was getting more into this instrument's sound itself, waves in water creating particular vibratos, as well as the sensation of touching the water, the element that she had always been attached to. She started to use hydrophones, tiny submarine-like underwater microphones to capture the subtle sound of water drops or waves resonating in porcelain bowls with the musical result of randomness and fluidity. Momus was right when he uttered just after singing at their long performance in Vienna, "... it's the spirit of water ...". Apam Napat: the god of fresh water (Sanskrit).

Tomoko Sauvage is a musician / sound artist working on self-developed instruments with water-filled porcelain bowls and hydrophones for electro-acoustic performances, compositions and installations.

Born in Yokohama, Japan, she grew up with classical then jazz piano education. While searching for her own sound, after she had been influenced by musicians like Terry Riley and Alice Coltrane, she met jalatharangam, a rare, disappearing instrument of traditional South Indian music, porcelain bowls filled with water. Fascinated by its fluid sound material, she has been developing this "electro-aquatic" instrument in exploring sound texture of water.

In her recent performances and compositions, she captures the subtle sound of water waves and drops resonating in porcelain bowls with hydrophones (underwater microphones), then uses simple electronics to weave an aquatic soundscape with this irregular yet lively sound source. She literally plays with water by touching and agitating it or by making water drops fall into the bowls. In this project, her search for musicality develops from a simple attitude of listening to nature in keeping fragile balance between being controlled and uncontrolled, repetitive and transient.

She has made numerous performances internationally and her works have been released on labels such as either/OAR (US) and DOKIDOKI EDITIONS (FR), among others.



Thursday October 7, Opening concert @ Dokkhuset

**Antoine Schmitt (FR) / Jean-Jacques Birgé (FR)**

# **Nabaz' Mob**

**Opera for One Hundred Electronic Rabbits**

[www.nabazmob.free.fr](http://www.nabazmob.free.fr)



100 Nabaztag smart rabbits play together in an opera specially composed by Antoine Schmitt and Jean-Jacques Birgé.

Inviting John Cage, Steve Reich, Conlon Nancarrow and György Ligeti, this musical and choreographic score in three movements, transmitted via wi-fi, plays on the tension between the orchestral ensemble and the individual voices to create a strong and involved showpiece. This opera questions the issues of working together, organization, decision and control, which are increasingly central and difficult in our contemporary world.

Schmitt and Birgé have chosen to twist the industrial object into an artwork in which the choreography of the ears, the play of light and the hundred small loudspeakers hidden in the stomachs of each rabbit create a composition with three voices built on time delay and repetition, programming and disrespect for rules.

Choreography and music by Antoine Schmitt and Jean-Jacques Birgé.

Visual artist and programming engineer, Antoine Schmitt creates artworks in the form of minimal and abstract objects, installations and situations, where movement and action are central. Heir of kinetic and cybernetic art, nourished by philosophy and science-fiction, he reveals and literally manipulates the forces at stake, questioning the modalities of the free being in complex systems of reality. For this, he places programming, a radically new material in art history due to its essence of active matter, at the core of most of his artworks. Antoine Schmitt, alone or through collaborations, has undertaken

a confrontation of this approach with more established artistic fields like music, dance, architecture, literature or cinema, of which he revisits the codes. He has thus collaborated with Vincent Epplay, Jean-Jacques Birgé, Atau Tanaka, Anne Holts et Jean-Marc Matos, Alberto Sorbelli, Joana Preiss, Juha Marsalo.

Jean-Jacques Birgé is an independent French musician and filmmaker, at once music composer (co-founder of Un Drame Musical Instantané which with he records about 30 albums, as well as for movies, theater, dance, radio), film director (La nuit du phoque, Sarajevo a Street Under Siege, The Sniper), multimedia author (Carton, Machiavel, Alphabet), sound designer (exhibitions, CD-Roms, websites, Nabaztag, etc.), founder of record label GRRR. Specialist of the relations between sound and pictures, he has been one of the early synthesizer players and home studio creators in France in 1973, and with Un d.m.i. the initiator of the return of silent movies with live orchestra in 1976. Since 1995, he has become a sound designer in all multimedia areas and interactive composition.

Friday October 8 @ Dokkhuset

Staalplaat Soundsystem (NL) presents

# YOKOMONO

[www.staalplaat.org](http://www.staalplaat.org)



“Delightful wireless symphony” (The Wire 2008)

The present setup for the YOKOMONO live concert version consists of 10 vinyl killers – toy car record players, each customised with its own FM transmitter. The sound will come through a set of radios that receives the signal transmitted by the vinyl killers. You might think Yokomono is just a DJ set with 10 turntables, and in a way that is correct, but in many more ways Yokomono is completely different. First of all; each killer is mono and has poor sound quality, but much more important, Yokomono is very hard to handle, you can not really select a track or make it stop when you want to, it is like putting the needle down blindfolded. The real difference starts when you realise that each killer runs on batteries, meaning that the speed is unstable and will slow down during the concert. The fact that the batteries run out will not only affect the speed, but also the FM frequency that the killer is transmitting too.

The fact that they transmit with ten FM transmitters at the same time means that each transmitter is affecting the other. These interferences and the unstable media that is transmitting makes the whole set unpredictable and hard to control, making Yokomono unique and adventurous.





The initiator of Staalplaat Soundsystem Geert-Jan Hobijn is the founder of Staalplaat , graphic designer, curator and soundartist. Other members are: Carsten Stabenow, the founder of the german Media Art festival garage curating and organising for many different media- and sound art festivals, Carlo Crovato is working as an solo artist also under the pseudonym plastic-electrics and Jens Alexander Ewald software developer and research associate at the Muthesius Academy of Fine Arts and Design in Kiel.

Staalplaat Soundsystem has been showing works at several international festivals, museums, galleries and events like Avanto (Helsinki), Sonar (Barcelona), 798 South Gate space (Beijing), DEAF (Rotterdam), Transmediale (Berlin), Ars Electronica (Linz), Todaysart (Den Haag), MOCA Taipei, Museum Weserburg (Bremen), Townhouse Gallery (Cairo), Steirischer Herbst ( Graz), ZKM (Karlsruhe), Palais de Tokyo (Paris), Khoj International Artists (New Dehli).

Friday October 8 @ Dokkhuset

**Roberto Paci Dalò (IT)**

# **MAGNETICA** – Live Media

[www.giardini.sm](http://www.giardini.sm)



“Magnetica”: a touching journey based on the invisible architecture of sound and electric dust, dealing with the space through resonance, reverbs, echoes. It is a chemical laboratory where thin acoustical textures are developed through revolving layers and abstract forms, moving on the threshold between broken melodies, loops, voice frequencies, soundscapes, and noise. “Magnetica” creates an aural sonic and visual environment every time different and challenging.

Materials of “Magnetica” have been presented in New York City, Linz, Graz, Berlin and Vienna. The work has been premiered in Rimini at the Dal Vivo festival in 2009, with further performance in Rome (Festa dei pirati 2010).

Roberto Paci Dalò is an Italian artist, musician and director. His unconventional work across sound, image, and space has won him international admiration from among others John Cage and Aleksandr Sokurov. Outstanding collaborations include Scanner, Philip Jeck, Kronos Quartet, Maurizio Cattelan, Kurt Hantschläger, Terry Riley, Gerfried Stocker, Hermann Nitsch, Mouse on Mars, Giorgio Agamben and Fred Frith. Roberto has several times been awarded at the Prix Ars Electronica. A pioneer in the use of digital technologies and telecommunication systems in art, he created concerts, live media performances, music-theatre, interactive sound-video installations, radioworks, films presented at Venice Biennale, Kunsthalle Vienna, Ars Electronica Linz, Locarno Film Festival, Mærzmusik Berlin, Strasbourg Musica, Wien Modern, Charlottenborg Copenhagen, Fundació Joan Miró Barcelona, Vienna Opera House, a.o. His work has been presented throughout Europe, Russia, the Middle East, USA, Canada, Mexico, and South America.

Friday October 8 @ Dokkhuset

## AudioVision: Karl Bartos and Mathias Black (DE)

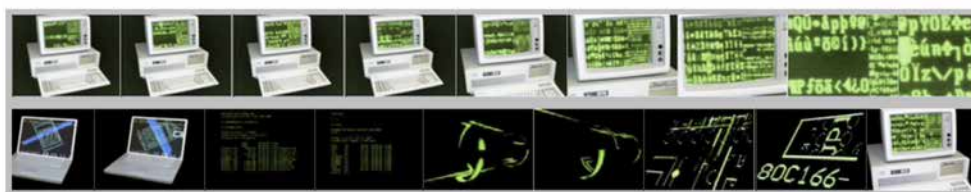
LIVE CINEMA

# Karl Bartos' Rhythmic Screen

[www.karlbartos.com](http://www.karlbartos.com)



**NUMBERS**



**COMPUTER WORLD**



**HOME COMPUTER**

Hardly any other name in pop music is as synonymous with electronic sound as that of Karl Bartos. Originally a classically trained percussionist and keyboarder, he later became a composing member of the legendary German group Kraftwerk.

As a member of KW for more than 15 years, Karl Bartos took part in creating some of modern music's most influential classics like: *Radio-Activity*, *Trans Europe Express*, *The Man Machine*, *Computer World*, *Tour de France*, *Electric Cafe* and *The Mix*; thus, altering our perception of sound. By using film and video, even before the arrival of MTV and its subsequent transformation of the music business, KW had a great influence on forming the language of contemporary art, especially media art.

After having left KW, Bartos' activities as an author and producer lead to globally successful co-operations with Electronic (Bernard Sumner / Johnny Marr), OMD (Andy McCluskey), Information Society (USA), The Mobile Homes (Sweden), and Anthony Rother (Germany), as well as making records for his own project entitled: Electric Music. *Communication*, the first album under his own name, was launched in 2003 at the Institute of Contemporary Arts, London (ICA), and has been successful in twenty different regions, spanning the entire world. In 2004 he co-founded the master program "Sound Studies – Acoustic Communication" at the Berlin University of the Arts where he was a visiting professor teaching Auditory Media Design until 2009.

"Camera Obscura", the first single on Karl Bartos' label AudioVision, was released in 2005. In 2006, he completed the soundtrack to the film *Moebius Redux – A Life in Pictures* – starring the renowned French comic illustrator Jean "Moebius" Giraud. The film was released on January 30, 2007 in Berlin.

Together with other illustrious names, including Lalo Schifrin, Michael Stipe, Bjork, Malcolm McLaren, Ryuichi Sakamoto, Johnny Marr, Courtney Love, Yoko Ono, Kanye West, and Grace Jones, Mr. Bartos was recently invited to collaborate on an issue of the prestigious art & fashion publication *Visionaire*, which is dedicated to "sound".



**I'M THE MESSAGE**



**THE MAN MACHINE**



**INTERVIEW**



**TRANS EUROPE EXPRESS**



**CAMERA OBSCURA**



**PICTOGRAMS**



**THE MODEL**



**POCKET CALCULATOR**



**REALITY**



**15 MINUTES OF FAME**



**THE ROBOTS**

Friday October 8 @ Babel Art Space

Exhibition opening concert

# Sohnified



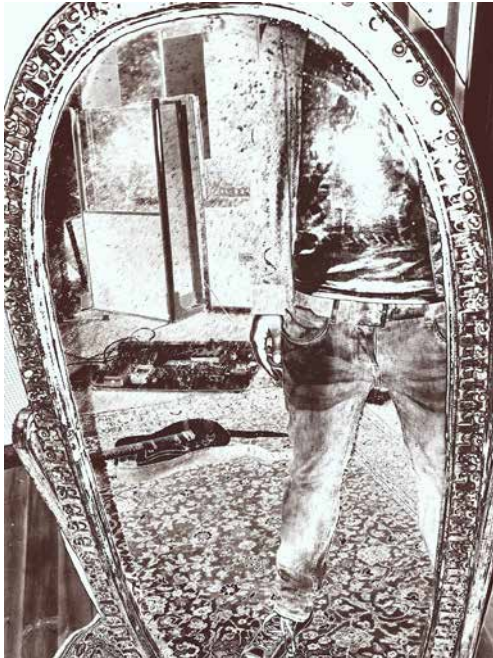
Sohnified is Claus Sohn Andersen. Sohnified sounds somewhat solid. Sounds sum up space, sorbet and sorrow. Some say Sohnified should shut up. Some say some should sit down. Some say.

Saturday 9 October @ Trøndelag Centre for Contemporary Art

## Exhibition opening concert

# KAOS

[www.myspace.com/bjornstr](http://www.myspace.com/bjornstr)



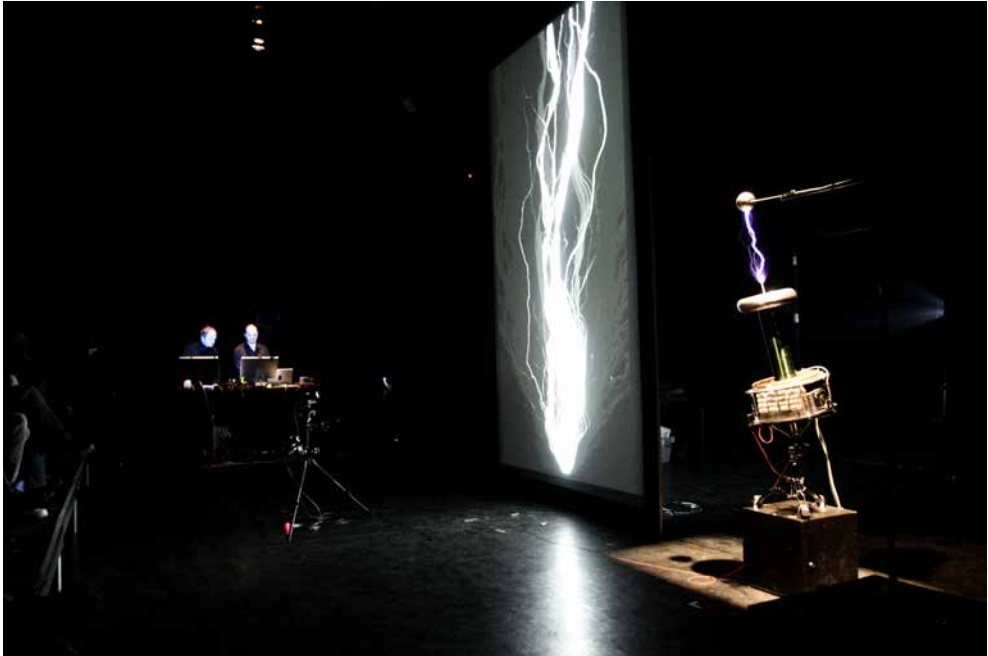
KAOS is the solo project of Bjørn Strand. The music is freely improvised, working with a guitar and a bunch of effect pedals, through several amps. The KAOS expression lies somewhere between jazz, rock and contemporary. Energy, soundscapes and big dynamic contrasts are the main focus in the performance. The music ranges from tender melodic lines to big noise blow outs. Bjørn Strand is inspired by artists such as MoHa!, Stian Westerhus, Special Defects and Øystein Moen. Bjørn himself has recently become educated in the field of musical sciences. He is also involved in the projects Strand/Strand/Ørnes Andersend and 2010. He has done previous work with Gallery, Pepote Rouge, Rhys Marsh and others.

Saturday October 9 @ Dokkhuset

a r t i f i c i e l (CA)

# POWEr

[www.artificiel.org](http://www.artificiel.org)



POWEr is a performance based on high-voltage electromagnetic perturbations, by Alexandre Burton and Julien Roy. Using the audio-modulated Tesla coil, electrical arcs are generated and transformed in an ongoing, real-time audiovisual process. Electricity is used as a subtle yet intense material, manifested as an intrinsically synesthetic phenomenae.

a r t i f i c i e l is a creation studio that is dedicated to producing artworks through digital technologies. The works have different formats, from installation to performance, and are presented as exhibitions, stage-based shows or in-situ interventions. Sound art, visual art, software/hardware design and context are integrated in each project.

Saturday October 9 @ Dokkhuset

**Pierre Bastien (FR)**

# Mecanicum

[www.pierrebastien.com](http://www.pierrebastien.com)

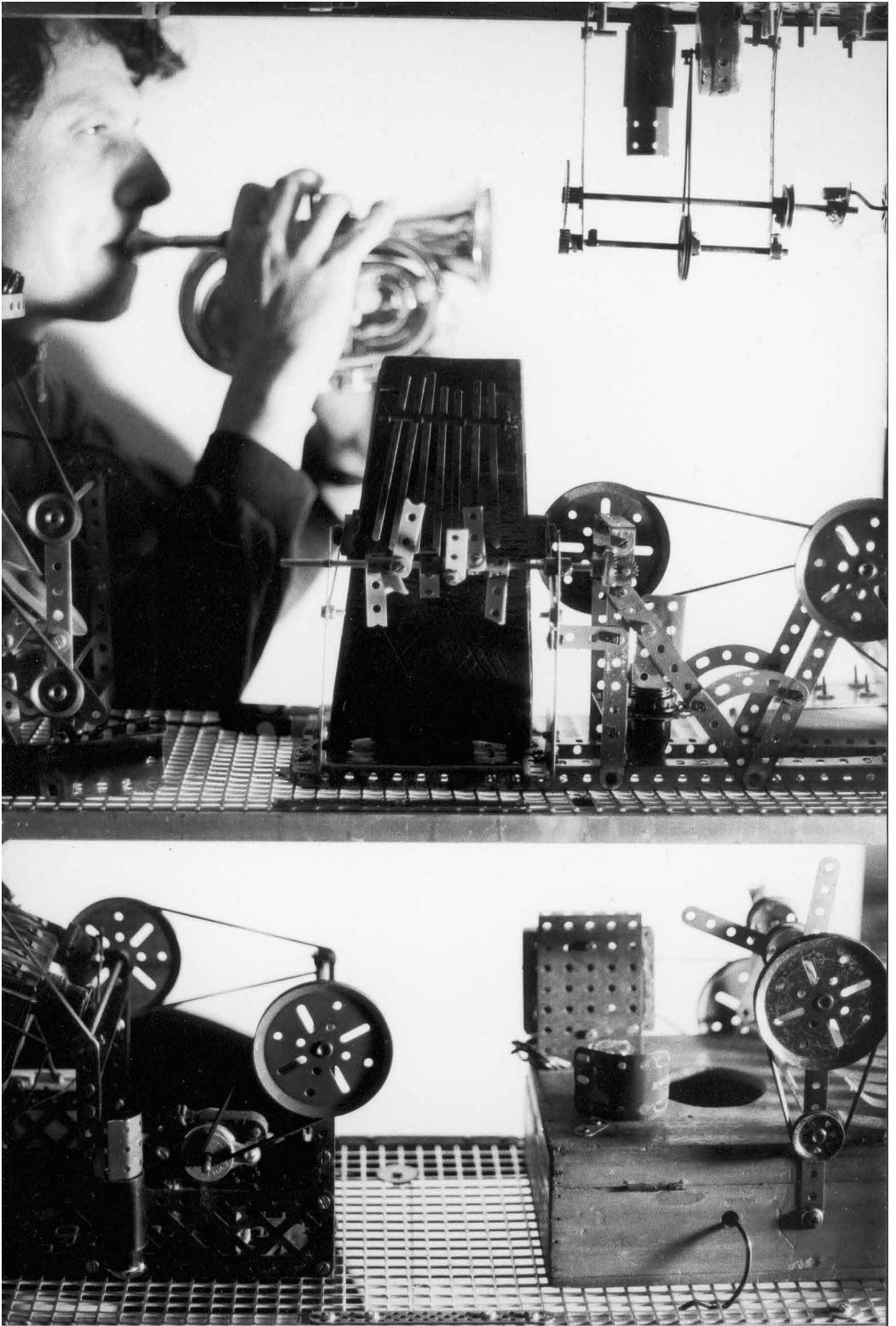
Pierre Bastien is back at Dokkhuset for the third time, visiting TEKS and Trondheim with his crazy lovely analog machine orchestra! For the biennial he has prepared new machines and a whole new set.

“A composer’s dream: a fail-safe orchestra at one’s fingertips obeying ever so gently to his every command: a timeless sounding orchestra, both futuristic and slightly dada, conjuring ancient traditions in its surprisingly sensuous music. This is, in a nutshell what Pierre Bastien’s ‘Mecanium’ is all about, a daydream of sorts that he has successfully pursued since 1976. The musicians of his orchestra are machines. And the idea behind it is simple, efficient and poetic: to have traditional instruments (Chinese lute, Moroccan bendir, Javanese saron, koto, violin, sanza, etc.) played by a mechanical instrument made of meccano pieces and recycled turntable motors. These hybrid and self-playing sound sculptures perform a series of short pieces, charming and hypnotic.” (Michel F. Côté)

Pierre Bastien (born Paris, 1953) post-graduated in eighteenth-century French literature at University Paris-Sorbonne. In 1977 he built his first musical machinery. For the next ten years he has been composing for dance companies and playing with Pascal Comelade. In the meantime he was constantly developing his mechanical orchestra. Since 1987 he concentrates on it through solo performances, sound installations, recordings and collaborations with such artists as Pierrick Sorin, Karel Doing, Jean Weinfeld, Robert Wyatt or Issey Miyake.

*Pierre Bastien MECANICUM,  
image overLeaf.*



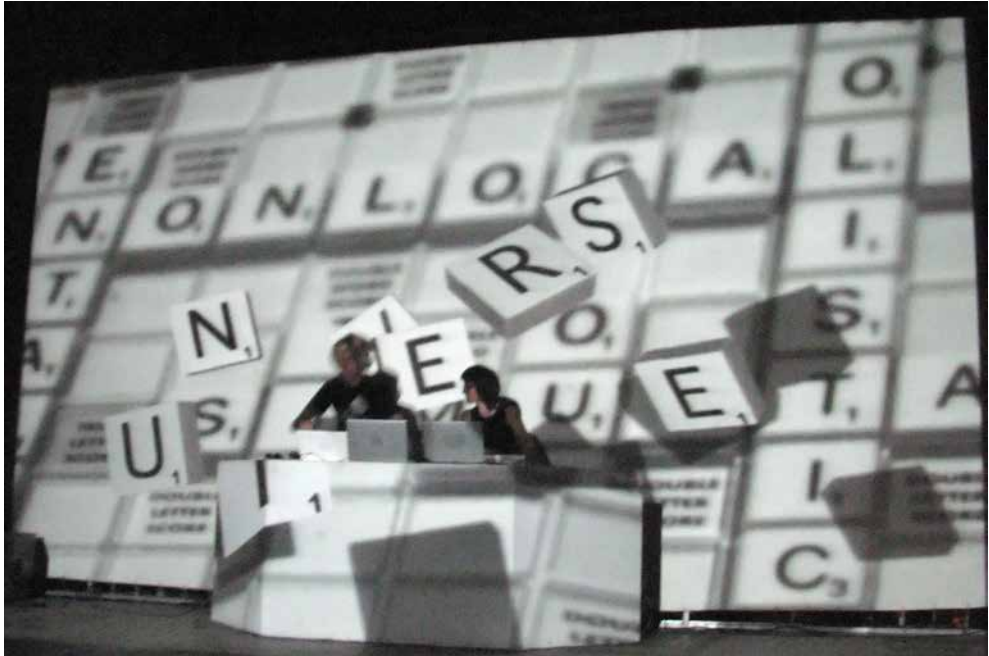


Saturday October 9 @ Dokkhuset

**i n c i t e / (DE)**

# Dualities

[www.incite.framgmentedmedia.org](http://www.incite.framgmentedmedia.org)



i n c i t e / is back to rock your bones!

i n c i t e / is Kera Nagel and André Aspelmeier.

Mixing eye-catching experimental audiovisual art with dynamic distorted IDM grooves, the duo criss-crosses art and club worlds, creating intense experiences for ears and eyes. Fragmented electric junk, fragile bursts of static noise and extra-charged sub-bass-kicks join semi-abstract monochromatic imagery. i n c i t e / plays seriously weird glitch and quasi-danceable grooves in synced conjunction with intense grayscale visuals.

i n c i t e / 's audiovisual creations – from abstract to semi-narrative – deal with subjects between quantum mechanics, urbanity and other aspects of everyday life. The distorted visuals are mostly unrecognizable, hiding the underlying stories – an exciting expedition for the audience.

Live shows are the main focus of incite/. Since April 03 Kera and André have played far more than one hundred gigs: tours in Europe and the US, and gigs in many of the leading international media-art festivals.

Kera (Kerstin) Nagel born 1965 in Lübeck, Germany studied History, Philosophy, German Language, Literature and Education Science in Hamburg works part-time in the educational field (including teaching new media). André Aspelmeier born 1966 in Bielefeld, Germany studied Sociology in Bielefeld and Media Technology in Hamburg works as a Live-Sound-Engineer.

Wednesday October 20, 2010 @ Blåst

Origami Boe / Kai Kobi Mikalsen / Alexander Rishaug

# Origami Republika

celebrates its 20th anniversary!



Origami Boe



Kai Kobi Mikalsen



Alexander Rishaug

In collaboration with Ny Musikk Trondheim.

Friday Oct. 22, 2010 @ Theatercaféen

Tore Bøe with guests from his

# Acoustic Laptop Workshop

during Meta.Morf



See page 109 for more information.

Wednesday November 4, 2010 @ Galleri KIT

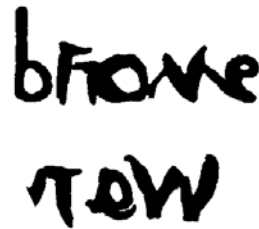
# PIKSEL NIGHT

CONCERT: Píksel soundsystem

Knut Guribye / Elisabeth Nesheim / Anders Gogstad / Gisle Frøysland



Mark Beasley



Wayne Clements

## SCREENING AND INSTALLATION: PíkselSavers

Mark Beasley / Andy Deck / Jim Bizzocchi / Claude Heiland-Allen / Osvaldo Cibils / Ralph Kistler / Yves Degoyon / Wayne Clements / Thomas Thiery

### [PíkselSavers – SCREENSAVERS THAT MAKES A DIFFERENCE!](#)

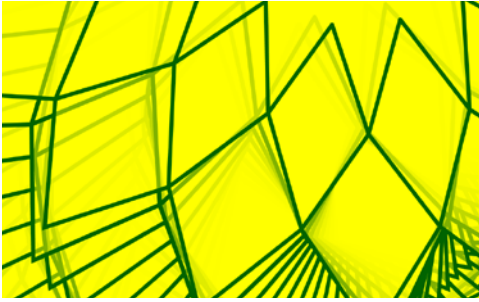
PíkselSavers is a screening programme of short movies and software art specially curated by the Píksel festival in Bergen. The programme was selected based on an open call for participation in conjunction with the biennial for art and technology in Trondheim, Meta.Morf 2010 – New.Brave.World!, arranged by TEKS – Trondheim Electronic Arts Centre.

The result of the call includes ten contributions from artists working in a wide range of digital media and techniques. All works are made using Free/Libre and Open Source Software (FLOSS).

PíkselSavers take the screensaver as a point of departure and inspirational springboard connecting to the main festival theme "New.Brave.World!". There are videos and software based on the screensaver format – short audiovisual (non)narratives made for endless looping. Possible thematic fields includes, but are not limited to; sustainable resource allocation, renewable technologies, energy harvesting, fair trade hardware, free content, open access, DIY economy, shared development.

### [ABOUT PIKSEL](#)

Píksel is an international event for artists and developers working with Free/Libre and Open Source technologies in artistic practice. Part workshop, part festival, it is organised in Bergen, Norway, and involves participants from more than a dozen countries exchanging ideas, coding, presenting art and software projects, doing workshops, performances and discussions on the aesthetics and politics of FLOSS & art.



**Andy Deck**



**Jim Bizzocchi**

## Participants/projects:

### **Mark Beasley**

“Snowstorm” takes a keyword ?= and searches twitter for live results, adding a snowflake for every tweet as it is used. Density depends on the frequency of the word and its current usage on twitter.

<http://duskjacket.com/SNOWSTORM/?=LOL>

“Icemelt” is an arduino and CRT monitor powered off of a 12vdc car battery. The arduino measures the voltage of the battery as it entropies and draws a corresponding ice cube on the CRT. As the battery dies the ice cube melts until the battery loses the capacity to power either device. (Duration 4–8 hours)

<http://mark-beasley.com/work/icemelt/>

Mark is an active member of the chicago arts + new media community. Mark makes software, video, performance, and web art and has participated in exhibitions with organizations like Rhizome.org, Gallery-2 and Links Hall. He is a member of H3X3N, the computer witchcraft club that produces the IX series which has been exhibited internationally. Mark has also lead workshops in python, hardware hacking, micro-controllers, and html/javascript. He is currently a teaching assistant at Marwen, an arts middle/high school for under-served youth and a full-time web developer along with other freelance projects.

### **Andy Deck**

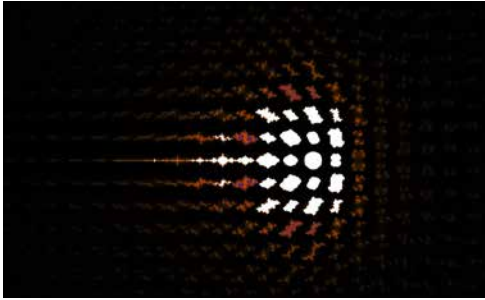
“Spill Cycle” responds to what has been called the United States’ worst ever environmental crisis. Following on the heels of a decidedly unsuccessful round of climate negotiations in Copenhagen, the months of news coverage of oil gushing into the Gulf have provoked widespread unease with business as usual. An oil spill disaster in Santa Barbara helped to establish Earth Day in the late 1960s. But the present crisis in the Gulf of Mexico demonstrates that neglect for the environment is a repetitious problem. As BP attempts to recover its public image and stock value, “Spill Cycle” loops as endlessly as the crude oil spilling in the Gulf.

<http://artcontext.org/act/10/spillCycle/>

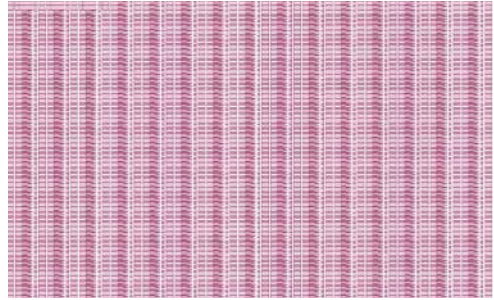
American media artist Andy Deck (b. 1968) lives and works in New York City. Deck is the founder of Artcontext, which aims to develop collaborative process in the context of art and connectivity. He makes public art for the Internet that resists generic categorization: collaborative drawing spaces, game-like search engines, problematic interfaces, informative art. Preempting regular programming, leveraging accidental freedoms, he attempts to demonstrate alternatives for Internet interactivity and interface design. Deck has made art software since 1990, initially using it to produce short films. Since 1994, he has worked with the Web using the sites [Artcontext.org](http://Artcontext.org) and [Andyland.net](http://Andyland.net).

### **Jim Bizzocchi**

“Longfalls” is a video piece was designed to invite reflection and contemplation through the constantly changing movement of the water as it falls, over and over and over, describing the endless cycle of life.



**Claude Heiland-Allen**



**Osvaldo Cibils**

Subtle manipulations of the image create a sense of depth and mystery, sustaining continuous viewing over many loops. <http://www.opencore.org>

Jim Bizzocchi is a moving image artist living in British Columbia, Canada. His Ambient Video series of works (<http://www.ambientvideo.ca>) explores a new genre for high-definition video. The prime characteristic for such work is that it be visually interesting and capable of supporting close viewing at any time. It should change, but not too quickly, and the details of any particular change should not be critical. Ambient video is the “slow-form” reversal of forty years of intense development of the fast-paced television “short-form”. Jim’s work has been exhibited globally, including Vancouver, Durham and Banff in Canada, London UK, Ann Arbor, Houston, Athens and Los Angeles in the USA, Byron Bay, Australia and Three Gorges, China.

At Simon Fraser University, Jim researches the visual poetics of large-scale, high-resolution video display, interactive narrative, game design, and the relationship between new media and innovative learning experience. His publications have appeared in such periodicals as the Journal of Moving Image Studies, Journal of Gaming and Simulation, Crossings Electronic Journal of Art and Technology, and conference proceedings for Creativity and Cognition, International Conference on Entertainment Computing (ICEC), Association for Computing Entertainment (ACE), Digital Games Research Association (DiGRA), among others.

### **Claude Heiland-Allen**

“Mandulia” explores the intimate relationship between the Mandelbrot set and its Julia sets. It zooms in/out/around the Mandelbrot set, plotting Julia sets in its local neighbourhood. The Julia renderer is implemented in C compiled with GCC, the Mandelbrot/Julia viewer is implemented in Haskell compiled with GHC using OpenGL. <http://claudiusmaximus.goto10.org/v/mandulia/manduli>

Claude Heiland-Allen is a digital artist focussing on complex emergent behaviour of simple systems, higher dimensional geometries and hyperspaces, and much more besides. Live performing with Pure-data and custom software since 2005, using free software is a liberation and writing it a means to enlightenment. Member of the international GOT010 collective devoted to the collision of free software and art.

### **Osvaldo Cibils**

“54 dinamic body background”, animation. Online work. Java script, animated gifts and sound. 2006/2010. <http://osvaldocibils.com/54/54.html>

Osvaldo Cibils is a sound creator and visual artist since soooo many errors. He was born in 1961, in Montevideo, Uruguay, and currently lives in Rovereto, Italy.



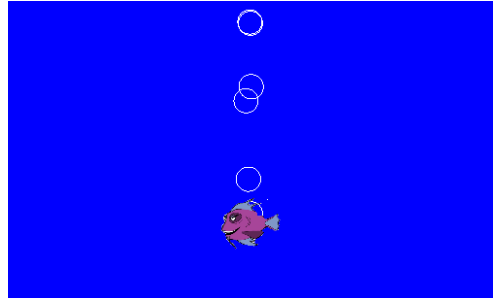
**Ralph Kistler**

**Ralph Kistler**

“Screensaver”: The video shows literally a screen saver. Like in real life, when there is no one in the office any more, the cleaners will start do their job.

<http://www.subtours.com/downloads/videos/screensaverfinalsmall1.ogg>

Ralph Kistler was born in 1969 in Munich, and lives and works as an artist in the Canary Islands and Munich. He has participated in festivals and exhibitions like ARCO07, Madrid; Piksel07/Hello Hackability, 8.1/CAAM, Las Palmas de GranCanaria; paraflows08 UTOPIA, Vienna; and ShadowDance, KadE Kunsthal, Amersfoort (2010).



**Yves Degoyon**

**Yves Degoyon**

“Evil Fish :::” is a little Pure Data patch which illustrates that nature is not always as friendly as it seems, and that the time has arrived to stop spoiling out little planet, otherwise the fish will get even more angry. It also says to not feed the animals because there is a risk that you will change their natural diet.

<http://ydegoyon.free.fr/evil-fish-2.tar.gz>

Yves Degoyon is a musician/performer and an open-source developer working on “collaborative tools for social networks”, a set of interconnected tools connecting media, live activities of the multitude to visible representation on the web. After developing some free software packages for the processing of media within the frame of Pure Data (<http://pure-data.iem.at/>), he worked on the practical use of these tools to help the emergence of free media platforms like GISS (Global Internet Streaming Support) (<http://giss.tv>), which now broadcast more than 300 free permanent radio and video streams for special events.

As a musician, he performed under the name d.R.e.G.S. on his own and also with the collective r3 (bcn), elpueblodechina (<http://www.elpueblodechina.org>), andy bolus (evil moisture) and xname (<http://xname.cc>). His performances tend to disentangle noise soundscape, decompose its elements and reconstruct a new soundscape, some tendencies to self-destructing sounds have also been noticed.

Yves Degoyon was born in 1965 in Epinay sur Seine (1993, France) and lives/works in Barcelona since 2003.

**Wayne Clements** “Brave New World War” is a reversible text (also known as an ambigram). The words “Brave New” reverse to spell “World War”.

[http://www.in-vacua.com/brave-new\\_demo.gif](http://www.in-vacua.com/brave-new_demo.gif)

Wayne Clements is an artist and writer based in London. Most of his work is written in Perl. All of it is free software and he is slowly making it available online, as time allows. Clements has exhibited a lot internationally in the last five years, and gave a talk about his work at “makeart”.

10 minutes

10 Minuten

**Thomas Thiery**

**Thomas Thiery**

The Pure Data program “10 Minutes” will produce 10 pieces of one minute, according to the standards of modern popular music both in production and in terms of the composition. Download the program, set your sound card and build yourself your album.

<http://www.th-th.fr/DOCS/Video/Th-Th-10-minutes-export.ogv>

Thomas Thiery, as an artist, is particularly concerned with the sound medium. After his physics degree, he continued with his studies in sound and image at the Université de Provence. At the same time, he became familiar with graphic programming in general, and the software Pure Data in particular. Equipped with sensors, he worked as a sound programmer for audiovisual installations and dance performances collaborations. With Thierry Coduys, he completed his training at the Kitchen in Paris and worked on graphic scores with the help of Pure Data and Iannix. Since then, he has focused his sound research on new forms of musical writing. To continue his work, he particularly relies on free and open source software which give him more open advantages. In 2006, still willing to explore other sound approaches, he directed himself towards improvisation techniques and created the duo Aide Auditive with Mysth-R. Since 2007, he studies Electroacoustic composition in Marseille. In 2008, he created some open projects like Blank Pages, Larseneurs and How to Make Noise.



Friday Nov. 5, 2010 @ Theatercaféen

# Klubb Kanin

Flymodus / Hands Up Silver Spacesuit / Killing Fields / Lumisokea



## Flymodus

[www.myspace.com/havardvolden](http://www.myspace.com/havardvolden)

**Håvard Volden** – guitar and electronic devices / **Martin Taxt** – tuba and sheng

“Two carnivores slowly approach one another, go in and out of sync. Håvard Volden and Martin Taxt explore the nuances between synchronicity and braiding, free improv and form, tension and moments in love. Your pulse will follow.”



## Hands Up Silver Spacesuit

[www.myspace.com/handsupsilverspacesuit](http://www.myspace.com/handsupsilverspacesuit)

Hands Up Silver Spacesuit works in low-key and often fragile sonic landscapes. Field-recordings and soundcollages meets instruments like the banjo and houseorgan. The sounds are manoeuvred and handled by Joakim Blattmann Moldestad, a masters-student at the Art Academy in Trondheim. The project first appeared sometime early 2010 somewhere between the before mentioned art academy and some cottage-walls further south. The live-presentation is constantly changing, at Meta. Morf the project will be accompanied by Greger Stolt Nilsen on visuals.



## Killing Fields is Thorbjørn Ottersen.

[www.myspace.com/honkobubbe](http://www.myspace.com/honkobubbe)

Killing Fields plays capricious electronic impro in a melodic landscape where short stories plays out and creates the backdrop for frameworks, illusions, social pleasers and diversion. Bob Dylan plays synth, in other words.



**Lumisoeka**

[www.myspace.com/lumisoeka](http://www.myspace.com/lumisoeka)

**Andrea Taeggi (IT)** – elektron monomachine/piano/harmonium/  
percussion

**Koenraad Ecker (BE)** – laptop

Lumisoeka plays semi-composed electronic music: not your usual “I-prepared-30-loops-and-I’m-playing-them-in-random-order” kind of electronic live performance, but two people developing the music in real-time. Through intense onstage communication, Lumisoeka manages to sound like one single meta-instrument, combining the attention to detail and structure of studio-based music with the uncompromising immediacy of improvisation. Adding acoustic layers to their use of digital instruments gives the music a richness in texture rarely found in live performed electronic beat-music. Reflecting its name (“Lumisoeka” means “snowblind” in Finnish), a sense of dark introspection pervades the music, which ranges from minimalistic soundsclptures to beat/drone-based, high-intensity walls of sound.

Saturday November 6, 2010 @ Verkstedhallen

# PNEK NIGHT

Greg Pope

## Light Trap



“Light Trap” is a live performance using four prepared 16 mm projectors to create a voluminous and spatial sound/light sculpture that is in constant flux and explores the raw elements of cinema.

After dabbling in punk rock bands and absurdist performance, Greg Pope (UK) founded the Brighton based Super 8 film collective Situation Cinema in 1986, that later evolved into Loophole Cinema (London 1989-99), which used 16 mm multi-projection techniques. Working collaboratively and individually, Pope has made video installations, live art pieces and single screen film works since 1996. He currently lives in Norway and is active in teaching, projecting and making film.

Bruce McClure

## PIE PELLICANE JESU DOMINAE: And After Several Rapid Strokes of Their Wings

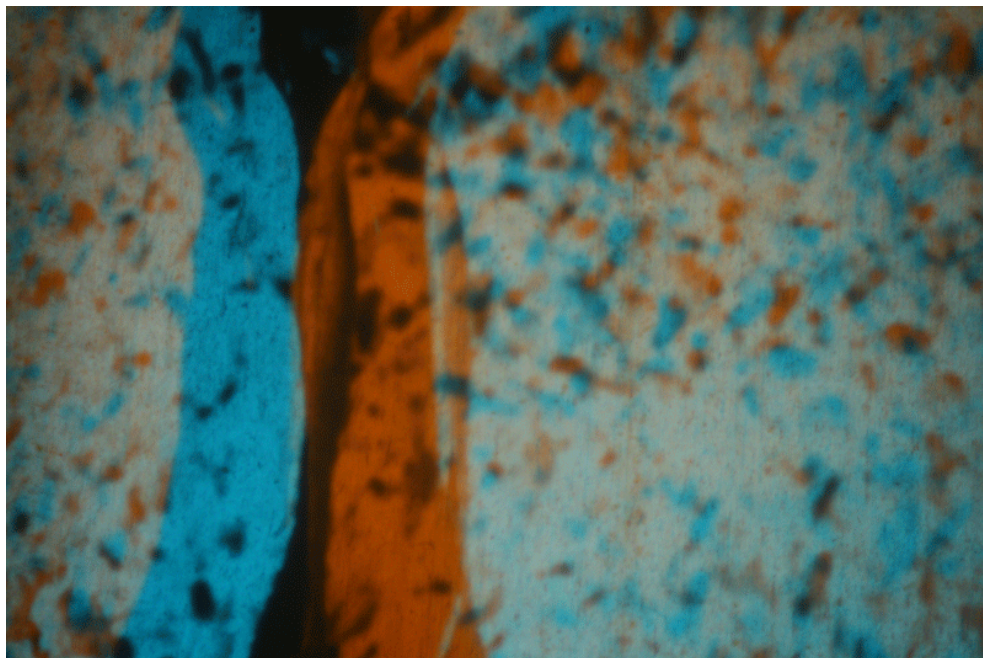


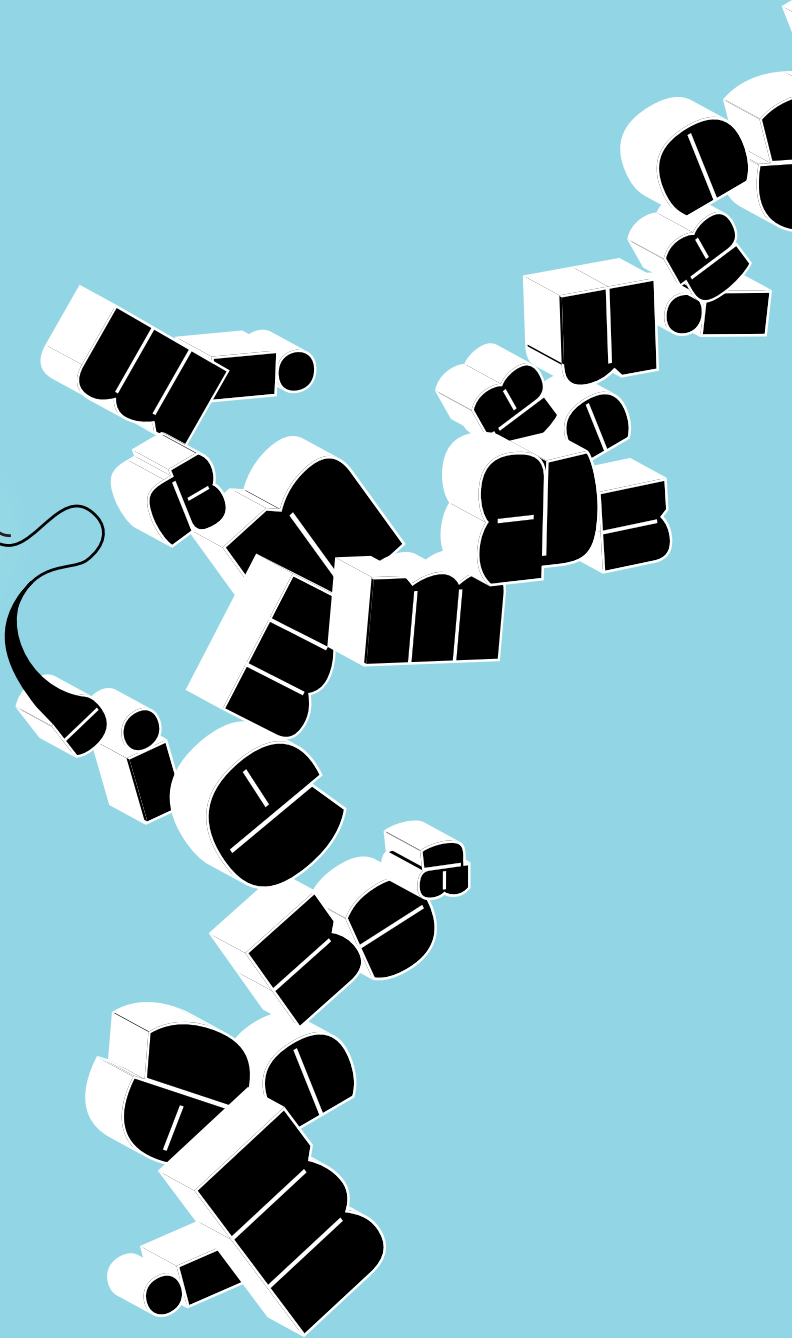
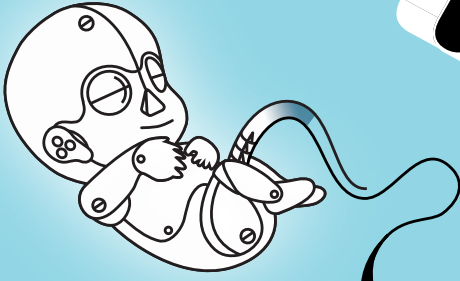
Photo: Robin Martin

As each projector sets bi-packed film loops into motion, achronicity is chronicled away. Footage from *Birds of Northern Places*, a 1950s nature documentary is centrifuged, drawing out sequences in space that evidence time displacement as a primary agent in dimensional perception.

Film-projection artist Bruce McClure (US) works with sound and film technologies such as experimentation with spinning discs. He is best known for his groundbreaking multi-projector performances that interrogate the very substance of film and its mechanical supports.

Bruce McClure has performed extensively in cinemas, festivals and museums in the United States and abroad. Producing a totally sensory experience, McClure's groundbreaking multi-projector performances are informed by the way the brain reacts to light and sound. Using an array of modified 16 mm projectors, film loops, and guitar pedals, his work challenges the very substance of film and its mechanical supports. Film loops patterned with patches of emulsion on a translucent base are combined with an optical soundtrack to create a physically intense adventure.

*The concert is curated by Per Platou. Produced and funded by PNEK – Production network for Electronic arts, Norway.*

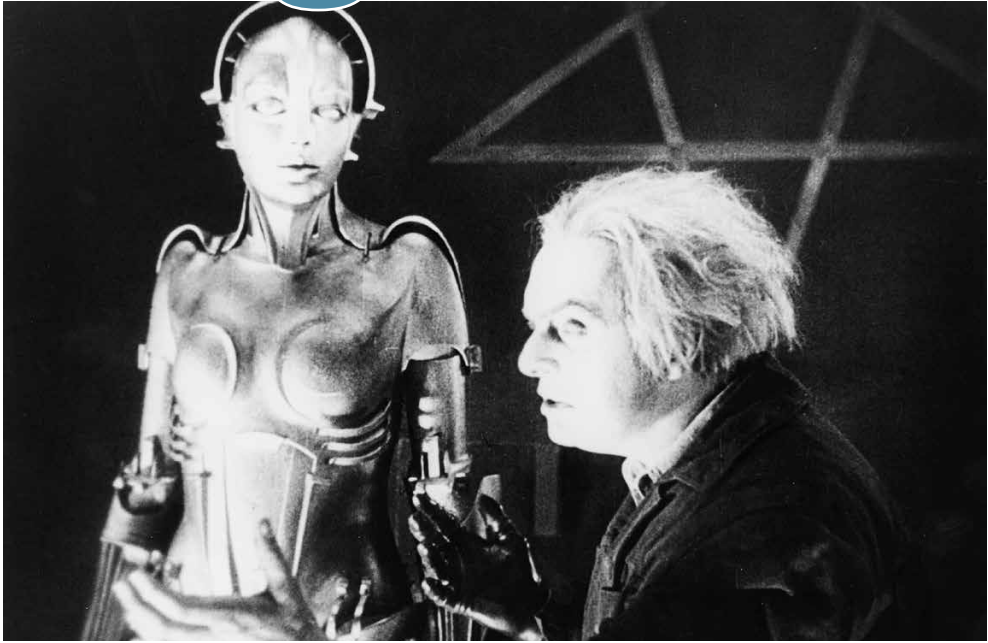




**cinema**

# New.Brave.World!

# cinema program



In collaboration with the TRONDHEIM CINEMATEK and KOSMORAMA film festival.

In the world of cinema, man has been looking outwards more or less from day one, out towards new spheres, searching for new civilizations or looking to establish new orders, new world societies, new existential modes of being. From film pioneer and magician Georges Méliès' *Le voyage dans la lune* (1902) to Duncan Jones' *Moon* (2009), space has been the place for dreams and nightmares, utopias and dystopias. Between these films we find – in what somewhat simplified is known as science fiction – some of cinema's most important, fantastic and groundbreaking works: *Metropolis* (Fritz Lang, 1926), *Things to Come* (William C. Menzies, 1936) and *Blade Runner* (Ridley Scott, 1982) are sharp contemporary critiques dressed up as thrilling and adventurous visions of the future, while *2001: A Space Odyssey* (Stanley Kubrick, 1968) and *Solaris* (Andrei Tarkovsky, 1972) place the small human being in a much, much larger philosophical and existential setting. These films make up the cinematic journey to the new world at Meta.Morf 2010 – New.Brave.World!.

## **Svein Inge Sæter**

Director, Trondheim Cinematek

Curators:

Svein Inge Sæther, Ola Lund Renolen, Jan Wilhelm Andersen, Torbjørn Grav.

Above: *METROPOLIS* © Friedrich-Wilhelm-Murnau-Stiftung

# 2001: A Space Odyssey

USA 1968 Director [Stanley Kubrick](#) Script [Stanley Kubrick](#), [Arthur C. Clarke](#)  
Director of photography [Geoffrey Unsworth](#) Cast [Keir Dullea](#), [Gary Lockwood](#),  
[William Sylvester](#), [Daniel Richter](#), [Leonard Rossiter](#), [Margaret Tyzack](#) 141 min 35mm  
English, no subtitles

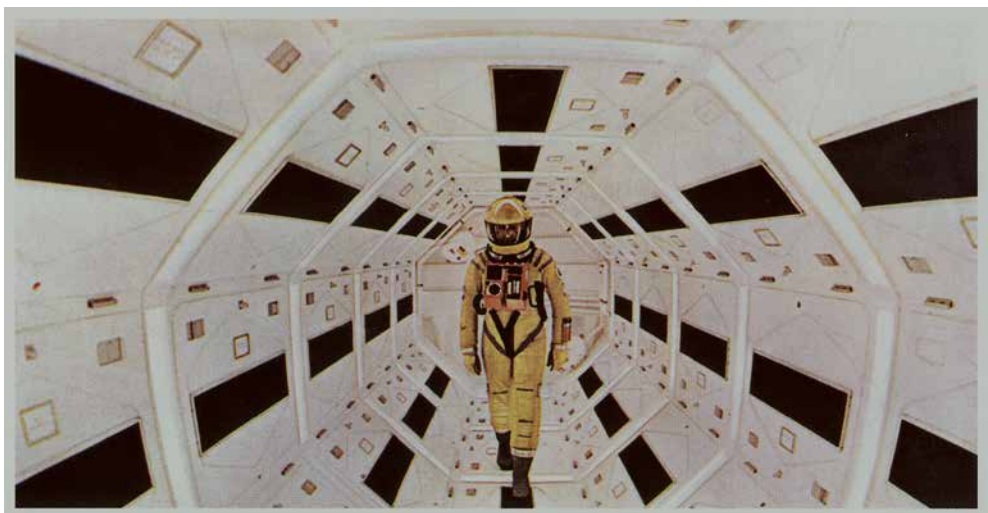
Is there life beyond our own solar system? No one knows for sure, but more and more scientists believe that chances are high – to say the least. In our own galaxy, the Milky Way, the sun is just one of approximately one billion stars. It is very likely that at least a few millions of these are surrounded by inhabitable planets, and why should our sun be the chosen one? Why should there be a gigantic work of creation where just one among several billions of planets has intelligent life?

When Stanley Kubrick asked Arthur C. Clarke to use his imagination and create a draft for a screenplay on the subject, Clark needed no second bidding. Clarke, famous scientist and author who has retired in Sri Lanka, believes it to be both likely and logic that we are not alone. Kubrick was so inspired by Clarke's reasoning that *2001: A Space Odyssey* became a sensation – both cinematographically and philosophically.

The movie debates a number of phenomena connected to our existence, and takes us on an alluring journey in time and space, making the unbelievable achievable. What if the others – highly civilized creatures beyond our solar system – already have communicated their presence? What if they are watching us, right here, right now?

## Fredrik Skagen

[Wednesday October 20, 18.00, Nova 3](#)  
[Thursday October 21, 20.30, Nova 3](#)



2001: A SPACE ODDYSEY © Warner Bros



# Blade Runner

USA 1982/2007 Director [Ridley Scott](#) Script [Hampton Fancher](#) and [David Webb Peoples](#), based on a novel by [Philip K. Dick](#) Director of photography [Jordan Cronenweth](#) Music [Vangelis](#)  
Cast [Harrison Ford](#), [Rutger Hauer](#), [Sean Young](#), [Daryl Hannah](#), [M. Emmet Walsh](#) 117 min DCP  
English, no subtitles



During the last 25 years, since its first release, *Blade Runner's* status has gone from cult movie to undisputable classic. Today it is both a movie title and an adjective. Its dystopian vision of the future is not only prophetic – this vision, and the ideas it represents and manifests, has become a constant point of reference within several fields, from city planning to cultural sociology.

This movie is something so unusual as an entertainment film where form and aesthetics are as essential elements in the overall understanding as the plot itself. The film that Ridley Scott initially wanted to make has not been available to spectators – until now. *Blade Runner – The Final Cut* is what it promises to be: the final word when it comes to the compromised beginning of its existence, as well as the final word on our own just as compromised reality.

**Sindre Kartvedt**/Kosmorama

[Tuesday October 26, 18.30, Nova 2](#)

[Wednesday October 27, 21.00, Nova 2](#)

*BLADE RUNNER* © Warner Bros

# Metropolis

Germany 1927 Director [Fritz Lang](#) Script [Fritz Lang](#) and [Thea Von Harbou](#)  
Director of photography [Karl Freund](#), [Günther Rittau](#), [Walter Ruttmann](#)  
Music [Gottfried Huppertz](#) 145 min DCP silent movie, English title cards

Is there a movie more influential than *Metropolis*? Not only has it created a standard for the entire science fiction film genre, it has also influenced generations in terms of how we think of cities of the future. It has, until the release of *Blade Runner* in 1982, been more or less the only source of inspiration for most futuristic film and visual arts. *Metropolis* is a remarkable film, considering the fact that it was created in 1926, with its gigantic production design built in the German UFA studio. Fritz Lang's classic was influenced visually by the New York skyline, which Lang had recently seen, and thematically by the increasing inhumane industrialization of Germany.

*Metropolis* is set 100 years forth in time (from 1926). The upper classes live in towering skyscrapers and travel in aerodynamic vehicles high above the city, between and through buildings connected with high-level bridges and tunnels. Beneath the earth we find the workers, who struggle to keep the world above running. In frightening sequences we observe how they through their work have become just continuations of their machines. They travel back and forth in impersonal marching masses – without talking – like completely anonymous individuals.

The head of the city Metropolis, Joh Fredersen, worries about dissatisfaction among the workers. The mysterious magician Rotwang suggests that he exchanges manpower with robots. He builds a female robot that is an exact replica of Maria, a peaceful young woman that enjoys the respect of the workers. Rotwang's idea is to get the robot version of Maria to encourage the workers to start a riot, which will be followed by a great flood. But in the meantime, Fredersen's son has set out into the deep to find Maria, whom he loved at first sight.

Fritz Lang's *Metropolis* has throughout the years been presented in a number of dramatically cut versions. Only a few weeks before its opening night, the film was cut by Paramount and UFA to increase the commercial potential. In later versions, several elements in the story have been left out, among the most important is the prehistory of Fredersen and Rotwang, which is essential to the understanding of Rotwang's motivation for constructing the robot that leads to the ruin of Metropolis.

The most recent restoration has to be seen as the final *Metropolis*, even though there are still parts of the original version missing. In 2008, a 16 mm duplicate negative was found in Argentina, containing material that had been considered lost forever, covering among other things the relationship between Fredersen and Rotwang. With this new material in place, and being fully restored, the film is now almost half an hour longer than the 2001 version, and it contains explanatory title cards in the short parts still missing. The film has gone through excellent restoration by the Friedrich Wilhelm Murnau Stiftung and includes the original music by Gottfried Huppertz, conducted by Frank Strobel.

## Editorial

[Tuesday October 12, 18.00, Nova 2](#)

[Wednesday October 13, 20.30, Nova 2](#)

# Moon

UK 2009 Director **Duncan Jones** Script **Nathan Parker and Duncan Jones**  
Director of photography **Gary Shaw** Music **Clint Mansell** Cast **Sam Rockwell, Kevin Spacey, Dominique McElligott, Matt Berry** 97 min DCP English, Norwegian subtitles

Being the feature debut of director Duncan Jones, *Moon* came as quite a surprise for unsuspecting film enthusiasts. This is a science fiction film that is not based on advanced high tech computer animation or third degree close encounters with alien creatures, but rather a story about a human being living in long lasting loneliness.

Sam Bell is an industrial worker or caretaker more than an actual astronaut. He is hired on a three-year contract by Lunar Industries to control and maintain the helium-3 harvesting on the Moon. Helium-3 is the most important energy source on Earth, some time in an undetermined future. He has two weeks left in his contract, and suffers from severe homesickness. His wife Tess is waiting for him with little Eve, who was born just before Sam left Earth. On the lunar station there is nobody to talk to except Gerty the robot, and Lunar have not prioritized fixing the two-ways communication line to Earth, which has been out of order for a long time. Then, at the very closing of his contract, Sam has an accident with one of the harvesting machines. He wakes up in the infirmary without remembering what has happened. Sam soon understands that something is wrong, and when he gets out on the Moon surface, he gets a big surprise at the scene of the accident. His life is about to change radically.

*Moon* director Duncan Jones, who is also known as David Bowie's son Zowie Bowie, has created a film that takes up traditions from *2001: A Space Odyssey*, *Solaris* (both Tarkovskij and Soderbergh's movies), *Silent Running* by Douglas Trumbull, *Alien* (the first one, that is), and even John Carpenter's cult classic *Dark Star*, though *Moon* is in no matter a parody. To Jones it is essential to keep in mind also the humanistic and philosophical aspects of these stories from the future and from space, and his most important source of inspiration is *Blade Runner*, a story that uses the future perspective to look afresh at human qualities. Nevertheless, Jones has by no means ignored the entertainment values in these films. *Moon* is above all a thriller, a thought-provoking mystery and a proper 'mind fuck', which deserves a place among the iconic films of this genre.



**Svein Inge Sæther**

Tuesday October 19, 18.30, Nova 2  
Wednesday October 20, 21.00, Nova 2

Short supporting feature:

## Le voyage dans la lune

France 1902 Director/script [Georges Méliès](#) Director of photography [Lucien Tainguy](#)  
Cast [Victor André](#), [Bleuette Bernon](#), [Depierre Farjoux](#) 14 min 16mm silent movie

Georges Méliès, the father of the trick film, had great success in 1902 with this epic sci-fi story about the space journey of The Astronomy Club. A space capsule is ejected from a gigantic cannon and lands in the eye of the man in the Moon. The astronauts begin their observations, but must escape a snow storm(!), and end up inside the moon. Here they encounter the Selenites, the curious inhabitants of the Moon, who capture them. They manage to escape, get back to the spaceship, and then fall back to Earth and Paris, where they are saluted with pomp and circumstance as true conquerors of the galaxy. *Le voyage dans la lune* is based partially on two popular contemporary novels, *From the Earth to the Moon* by Jules Verne and *The First Men in the Moon* by H.G. Wells, and is a particularly entertaining treasure from the early days of film making.

**Svein Inge Sæther**

# Solaris

The Soviet Union 1972 Director Andrej Tarkovskij Script Andrej Tarkovskij and Friedrich Gorenstein, based on a novel by Stanislav Lem Director of photography Vadim Jusov Music Eduard Artemjev Cast Donatas Banionis, Natalja Bondartsjuk, Jurij Jarvet, Anatolij Solonitsin 165 min 35mm Russian, Norwegian subtitles



© Actionfilm

*Solaris* is set in outer space in the future, but the film is above all a story about the human mind. Rather than categorizing the film as science fiction, Tarkovskij called *Solaris* “ethical fiction”. We are confronted not with the possibilities of science, but with its limitations. The director points out the meaninglessness in our striving to explore our surroundings without having any real foundation. What good does it do to man to conquer the universe if he doesn’t know his own soul? A tiny step closer to self-knowledge will multiply our understanding of our surroundings. The main character in *Solaris*, Kris Kelvin, is, not surprisingly, a psychologist.

Kelvin’s assignment is to find out what is happening to the crew on the space station Solaris. There have been reports on deaths, and alarming indications that the planet Solaris, which the space station orbits, communicates with the scientists on the station. The mysterious surface atmosphere causes misleading hallucinations. It seems as though the ocean-like mass can materialize the dreams and subconscious fantasies of the crew-members.

Though *Solaris* is his most accessible film and the one that flirts the most with science fiction themes, it is undoubtedly Tarkovskij. His existential problems are just as present here as in his other films. The following quote, from his next film *Stalker*, says something about the continuity in his work: “Future used to be somewhere far away, beyond the horizon. Today, the future and the present are melted together.”

## Cinematket USF

Wednesday October 27, 18.00, Nova 3

Thursday October 28, 20.45, Nova 3

# Things to Come

UK 1936 Director William Cameron Menzies Script H.G. Wells, an adaptation of his own novel Director of photography Georges Perinal Music Arthur Bliss Cast Raymond Massey, Ralph Richardson, Sophie Stewart, Marguretta Scott 100 min 35mm English, no subtitles



Predictions about future societies have always been a dear subject for creators of film, and as the film technology has developed, their depictions have become more advanced and “trustworthy”. The sci-fi genre has a long tradition in the history of film, and *Things to Come* from 1936 is one of the milestones. It is set in Everytown, and its predictions start only four years after the release of the movie, in 1940. On Christmas Eve begins a war that will go on into the 1960s. The city is now reduced to a bombed out ruin, people have become barbarians, and the world is dominated by war and distress. The rescue comes from outside, when a group of Airmen kills the dictatorial and belligerent leader. They seize the power in order to create a new and scientifically dominated world, and in the year 2036, Everytown has become a city colored by advanced technology and fast progression. The first Moon landing is near.

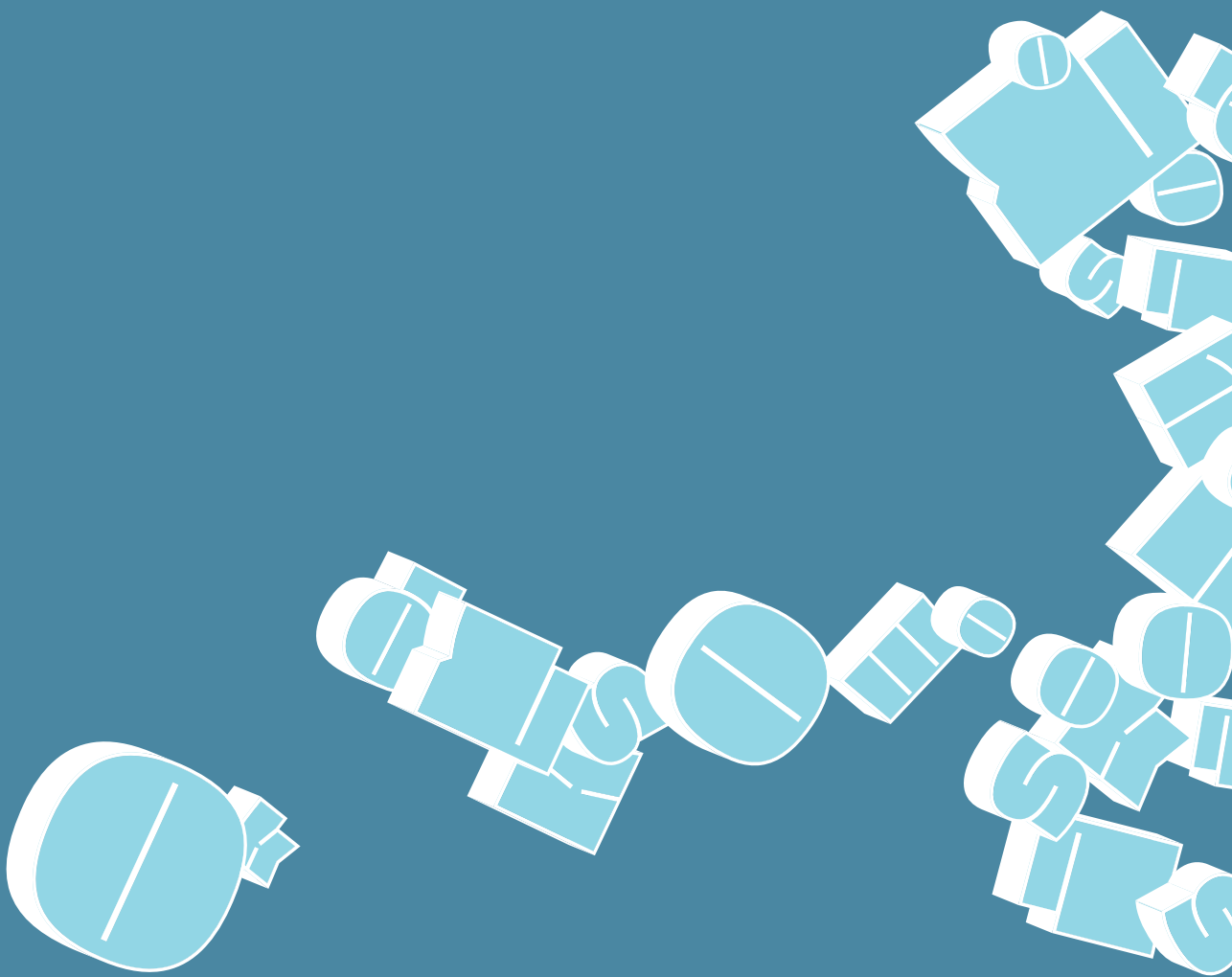
The story is written by H.G. Wells, one of the foremost writers of sci-fi. Like most sci-fi writers, Wells thought that a leadership based on science and scientists was the best means to achieve a healthy world. He assumed that a film could communicate his ideas to a wider class of society, and therefore took on the challenge to adapt his own novel *The Shape of Things to Come* to the screen. *Things to Come* became a groundbreaking example of how science fiction could be presented in film, and an impressive presentation of Wells' predictions for the future.

## Cinematket USF

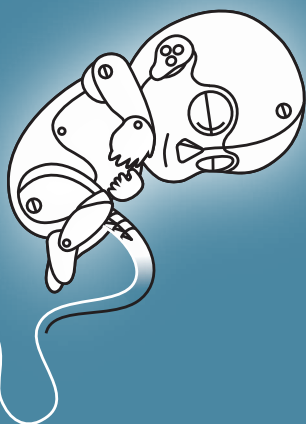
Wednesday October 13, 18.30, Nova 3

Thursday October 14, 20.30, Nova 3

THINGS TO COME © Park Circus



# workshops





October 4 – 6, 2010 @ Remida

**Staalplaat Soundsystem**

# **TRONDHEIM PHILHARMECHANIC COBRA YOUTH ORCHESTRA**

**Workshop for children**



In their workshop, the Staalplaat Soundsystem will show participating kids that fancy Japanese devices or expensive instruments are not at all needed to make great music – instead they will demonstrate that all you really need can easily be found in everyone’s own kitchen or cellar, if combined with a little bit of research and some playful modification.

During their performances and installations, usually featuring odd machine orchestras constructed from a plethora of found objects, Staalplaat Soundsystem noticed early on that children were fascinated by their way of playfully misusing everyday household utilities. On the invitation of Avanto Festival in Helsinki, they consequently developed their first instrument building workshop for children in the year 2005, and have been refining their concept and approach ever since. At the core of the workshop is the idea of avoiding the “copy” or “rebuild” of what already exists, and instead embarking with the children on a “research quest” for new sound sources and noise-making devices – quite similar to the Soundsystem’s regular working methods: play, experiment, test, trial and error.

Guided by the members of the Soundsystem, the kids will work together in small groups and help each other with their ideas. The end of the workshop will see a joint performance of the young participants together with the Staalplaat Soundsystem in the form of a variation of John Zorn’s “Cobra” concept.

The workshop is arranged in cooperation with the ReMida Center in Trondheim.



October 11 – 16 @ ReMida

# Komputer + Kunst = Kreativitet (K+K=K)

**Workshop for children**

**Organized by ArTe/ prof. Letizia Jaccheri, Dep. of Computer and Information Science, NTNU.**

[www.artentnu.com](http://www.artentnu.com)

## RESEARCH CONTEXT

K+K=K is grounded in the research project ArTe, [www.artentnu.com](http://www.artentnu.com), which aims at enhancing the state of knowledge at the interdisciplinary intersection of Information Technology and the arts. The focus is on creativity, cooperation, and openness of processes and content. The principal objective of the research project is to develop knowledge on the interdisciplinary nature of software production in which the software process interacts with artistic process during the creation of heavily software-dependent artworks. Particular attention in the research project is given to open source software. Results of the projects are published in international conferences, journals, book chapters, and as master and PhD theses.

Moreover, ArTe has the objective to increase the interest for information technology through art. ArTe has organized a set of workshops targeted at pupils, at their teachers, and other actors such as decision makers, to contribute to increase the understanding of Information Technology and its creativity possibilities. These are documented at the project website. There is focus on open source software technology, like for example Arduino. The technology focus is balanced and enriched with the artistic perspective. The artistic perspective aims at linking the proposed workshops to larger contexts, like Researcher Days, Meta.Morf, Vitensenteret, ReMida center, and the "Kulturelle skolesekken".

## WORKSHOPS AT META.MORF

In the framework of Meta.Morf, ReMida Center and the Norwegian University of Science and Technology (NTNU) offers a workshop program for children. Participants will explore a new (homemade) electronic world with the use of recycled materials and Open Source Software. Workshop days for school classes are offered in week 41 (from October 11 to October 15) and an open workshop is offered to all interested on Saturday November 6 from 10.30 a.m. to 4.00 p.m.

## SEMINAR ABOUT ART AND INFORMATION TECHNOLOGY (IT) AND ITS DISSEMINATION TO CHILDREN AND YOUTH

In addition to the workshop program, there will be a seminar focused on the theme of art and Information Technology and its dissemination to children and youth. The seminar is targeted toward artists, art mediators, and teachers. The seminar is organized in collaboration with Reggio Emilia Network Norway and NTNU.

## META.MORF CHILDREN'S PRIZE

As a part of the ArTe project, a children's jury will award the best artwork of the biennial. The price of NOK 30,000 will on behalf of the prize winner be donated to the initiative "One Laptop per Child". The prize is founded by the local IT community and is awarded in cooperation with NTNU. Information about the prize is available at [www.artentnu.com](http://www.artentnu.com)

Information about workshops, seminar, and prize is available at [artentnu.com](http://artentnu.com)

*Partners: ReMida Centre Trondheim, NTNU, Kulturbyrået Mesén, TEKS.*

The workshop is arranged in cooperation with the ReMida Center in Trondheim.  
Supported by Arts Council Norway.



October 18 – 22 @ ReMida.

# Acoustic Laptop Workshop

Workshop conducted by Tore Bøe



## A] FIRST ASPECT; NO PASSWORD NECESSARY

### PASS THE WORD; THERE ARE NO SECRETS

the acoustic laptops IS | a simple wood box with numerous tiny sound objects attached inside | made to amuse and enthuse | fun | or to reveal musical mysteries | amplified by cheap microphones | boosting the volume | connecting to the marrow of sound and otherness of being | a cool gadget for social training | a focus for intimate unwinding | a tool for emotional response with no plastic keys between fingertips and the sound | no other keys necessary | no screen between you and the object of choice | no other screen needed to communicate as it works best offline | objectively; what you touch is what you hear | subjectively; how you listen is up to you ...

## B] SECOND ASPECT; UNLIMITED RAM INSTALLED

### DOWN MEMORY LANE; DRAWING CRAZY PATTERNS IN THE AIR

trivial sounds are public domain | wanted or not | the sound of a needle falling is an illusion | then it lands | return to zeros and ones of reality | it be fingers fickling something | unconscious and unnecessary ritual | momentary lapse into the exploration of sound properties (not always nervous tapping) | nanodips into otherworlds | or reality glitches from surroundings | plastic wrapping during music performance | pencil on paper | underwater in bathtub | pouring soda over icecube in glass | newspaper page turning | milk on cereals | emptying ketchup bottle | raincoat hood in stereo | blink-blink after turning on neon lights | fade-out after shutting off tv | bee buzzing around in frantic surround | magic realism in wheening window washing ...

## C] THIRD ASPECT; SET LANGUAGE PLATFORM: [OPEN

### CHALLENGE; A LESS ANNOYING COMMUNICATIVE TOOL

we don't need to invent a new language | or erase esperantic attempts | aware of both wheel and microchip | history is what WAS | prima materia for all that IS | there are no claims to originality or trademarks | even

some media-people now know that all these sounds have been used as artistic material | kenyan witchcraft music based on flicking one string repeatedly (minimalism) | cape verdian tin-can percussion | stomp | angstmusik | earcandy composition | far-out rock intros | we are in this together | the analog landscape that unfolds along the digital highway | add to the specter of dialects, sociolects and slangs | develop your own box | or play with someone who has one | don't worry; perfection leaves nothing to be desired | abstract poetic expression IS basic human urge | music is not that important | art as neutral descriptive verb ...

#### D] FOURTH ASPECT; UNFORMATTED, SYSTEM REQUIREMENTS

##### TARGET; BRUKSKUNST OG NY TEKNOLOGI

the art of motivation | participation | potential | meeting fluxus-criteria numero uno; "art should be for anyone..." | the closest you will get becoming a tormented artist is a tiny cut in your fingertip | sound objects/instruments? electric/digital? acoustic/analog? the degree of aesthetic design necessary for them to be artified? a pun on the current musthaves? iconography of contemporary consumer culture? | no hurry; all can be discussed over a glass of wine after the first-hand experience of playing them | but fact remains; the acoustic laptops are easily made and played by anyone anywhere knowing to have a good time reconnecting with something tangible.

The workshop is arranged in cooperation with the ReMida Center in Trondheim.

October 29 – November 3 @ TEKS

# iPhone/iPad Developer Workshop

In cooperation with CIANT – International Centre for Art and New Technologies, Prague

[www.ciant.cz](http://www.ciant.cz)



The iPhone/iPad Developer workshop is lead by **Matěj Sychra** (evangelist, UI/UX designer and developer) and **Luděk Dolejský** (senior developer).

## WORKSHOP DESCRIPTION

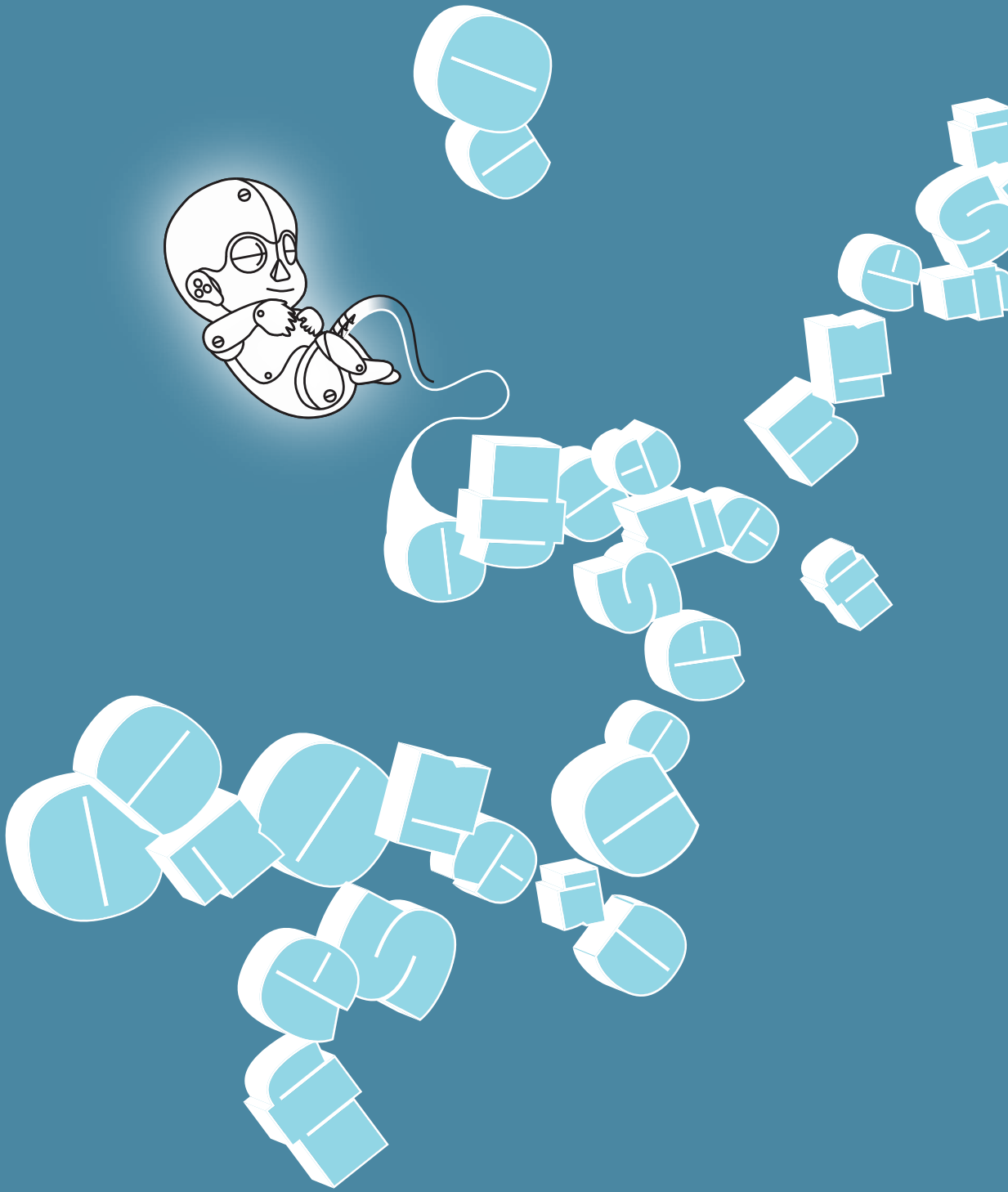
The first three days will introduce the iOS platform and its main features, AppStore and iTunes from the publisher's point of view and, of course, the Xcode developer environment and Objective-C programming language.

The Second part will be focused on all the fun that comes with mastering basics of Objective-C and Cocoa for both OS X and iOS, connecting to the developer community and using various external frameworks speeding-up the development process.

The workshop is aimed at Mac owners with just basic programming skills in any kind of C-type programming language who want to write own apps for their iPhone/iPod/iPads.

## WORKSHOP WILL COVER FOLLOWING TOPICS:

- DOs and DON'Ts in planning your application
- developer interfaces (Xcode and others)
- monetization and application life-cycle
- beginner's guide to iOS memory management
- using accelerometer, gyroscope, location information and MapKit
- working with external devices
- submitting to the AppStore





# conferences



# NEW.BRAVE.WORLD!

**Theoretical and curatorial concept by Angelica D. Schmitt**  
**Moderated by Michel F. van Dartel**

Progress of science and technology is regarded as guarantor of a widely distributed social wealth which serves to maintain the needs and requirements of modern, division-of-labour based, “man”. And still a modernist narrative persists according to which the liberty and autonomy of the individual go hand in hand with high technology and the global interconnectedness of our societies. So how does this optimistic view relate to the catastrophic scenarios we seem to be faced with almost every day in this cataclysmic age of ours?

Today, enormous environmental problems, climate change, famines, pandemics, war and international terrorism, to name but a few of the seemingly endless list of calamities, threaten not just the lives of people but also the very planet itself. At the same time, the limits of the growth dynamics of individual economic systems become clearly recognizable, being thrown into stark relief against an increasing exploitation of natural and human resources. The threat of a destabilization of the global financial system, which appears to be linked to this process, becomes more and more pronounced. A systemic collapse, one might even argue, holds not only the potential to shake asunder our libertarian democratic societies, but would also endanger the prevailing peace in large sections of the globe.

In Aldous Huxley’s vision of a “Brave New World”, as outlined in his dystopian novel of 1937, the author projected the model of a society, where the communication of values, such as stability, liberty and peace ensured a lasting psychological and mental indoctrination. Beyond that, people were already being physically manipulated at the fetal stage, combined with an imprinting of the toddlers in line with the requirements of the castes they would ultimately be expected to belong to. A common characteristic of all these castes in the book was the conditioning of sexual urge and the administration of a drug called Soma, ensuring that the members of this society lost any need or interest to seriously scrutinize their particular world order. The government of that world was provided by so-called controllers, who were venerated by the people of that society as veritable idols.

Less than a century later, viewing our own world against the kind of background created by Huxley, we may well wonder to what extent science, technology and media are capable of creating and developing approaches and techniques that would engender just such a scenario – or create a more desirable type of future.

Does the technology of our present era hold true to the promise of fulfilling the fundamental humanist ideals, which the founders of the modern age once set out with, the intent to create a new sovereign class of citizens – a society made up of self-determined, truly just and equal individuals?

And what role can art play in all of this?

Looking at today’s artistic production, there hardly exists a common practice, or a unified understanding of contemporary Art. During the last decennia artists have expanded their activities into all domains of society, sometimes approaching a point of near-vaporizing as any material, even social life itself can nowadays be the subject of art.

How can we understand the approaches, ideas and options offered by contemporary artistic practices, reflecting and shaping our technological culture?

The distinctions between the arts and the sciences have become blurred again. While the natural sciences are opening themselves up to humanities-related questions, the “laboratory” as a scientific model has

been remodelled by artists as the place for interdisciplinary research, experimentation and the production of works of art.

Artists today are working with the complexity of life and its interrelationships with technological systems. They are researching and questioning the “life of forms” as well as the “forms of life” and their intrinsic conditions.

It is within this spectrum that Meta.Morf conference is bringing together artists, designers, theorists and scientists from different backgrounds to present concepts, ideas and projects that are engaging and reflecting our contemporary conditions within their personal artistic practices.

**Angelica D. Schmitt**, Berlin, 2010

ANGELICA D. SCHMITT (DE) see biographical note p. 17

MICHEL F. VAN DARTEL, (PhD) is curator and project manager at V2\_, Institute for the Unstable Media. As a curator he coordinates the events series Test\_Lab - a demonstration and discussion platform for artistic research and development - and organizes various other national and international events on electronic art.

As project manager he mediates between artists and developers in artistic productions. Prior to his current appointments, he worked as a cognitive scientist at Maastricht University, where he investigated knowledge representation in robot models. Michel holds an MSc in Cognitive Psychology and a PhD in Artificial Intelligence. He also is a skateboard veteran, founding member of music group The Rose Frustrates, and DJ.

## Conference Speakers

**Espen Gangvik** director TEKS / **Alex Adriaansens** Meta.Morf curator /

**Angelica D. Schmitt** Theoretical concept / **Michel F. van Dartel** Conference moderator /

Meta.Morf exhibitors: **Oron Catts** / **Henrik Menné** / **Herwig Weiser** / **Jonathan Schipper** /

**Jose Manuel Berenguer** / **Andy Gracie** / **Chris Salter** / **Michiko Nitta** / **Annina Rüst**

Saturday October 9 @ Dokkhuset

## Territories, Temporalities, Transmissions: Art, Technology & the Public Sphere

Conference moderated and curated by prof. Jeremy Welsh

The symposium will consider a number of ways in which contemporary art practices, “new” technologies and the question of public space interact to produce a cultural sphere in which significant social, political, aesthetic and philosophical issues confronting contemporary society may be discussed and examined. Discussions will range from the critical and theoretical to the pragmatic and practical, taking up a discussion of ways in which artistic strategies based upon networks, technological developments and collaboration can determine our understanding of contemporaneity; looking at specific aesthetic strategies employed by artists in projects developed for public spaces; considering the challenges faced by producers and curators in staging complex, temporary artworks in public or semi-public locations. The keywords employed in the symposium title indicate some of the major questions to be raised: What are the territories of contemporary art practice? In what way does the question of temporality shape and determine an art practice framed by an engagement with technologies and with the Public Sphere? If the art under discussion is concerned with transmission (of information, of aesthetic experience, of embodied knowledge), then what are the channels for transmission, in what way are they employed and how are they controlled?

### Jeremy Welsh, 2010

Jeremy Welsh is a visual artist and Professor/MA coordinator at Bergen Academy of The Arts. During the 1980s he was involved as exhibition organizer with the pioneering media arts organization London Video Arts (now known as The Lux) and he later established The Film and Video Umbrella together with film theorist Michael O’Pray. From 1990–2001 he was Professor of Intermedia at Trondheim Academy of Art and in 1997, together with Espen Gangvik, he curated and produced Screens, a festival of electronic art for the city of Trondheim 1000 year jubilee. He has been chairman of the Art & technology panel for the Norwegian Arts Council, a board member of Trondheim Electronic Art Centre and Bergen Centre for Electronic Arts, and has published widely on art and new media. He has recently completed two large public commissioned works in Norway in collaboration with painter Jon Arne Mogstad.

## Conference Speakers

**Espen Gangvik / Jeremy Welsh** Conference moderator / **Terry Smith** keynote lecture / **Ina Blom** keynote lecture / Panel 1: Artistic strategies: **Brandon LaBelle / Stanza / Vibeke Jensen / Anne Hilde Neset** keynote lecture / Panel 2: Production challenges: **Jon Bewley / Rob LaFrenais / Stacey Spiegel** /

**Terry Smith**

## **Transmedia, Contemporaneity, Worlding: An Art Critical / Art Historical Hypothesis**

ABSTRACT: If interaction between art and technology during in the 1960s and 1970s generated some of the most interesting, even eccentric, hybrids of those combustible, wildly experimental decades, such ardor cooled noticeably in the years that followed. During the 1980s and 1990s the most prominent tendencies in international contemporary art embraced the globalizing image-world of consumerist culture but retreated to a distance – sometimes critical, at others conservative – from the new technologies that drove this culture. Artists committed to working within these technologies shared few of the values of the new economic order, or bracketed out such questions. Instead, they tended to privilege the technologies as a new medium, aping thereby the medium-specificity of the traditional mediums, and thus ghettoized themselves (remember Net.art?) at a time when art everywhere was becoming transmedial in its modes. Art begins to change during the 1990s because – against the hegemonic closures desired by globalization, narrow nationalism and the fundamentalisms – it is called upon to become an art of the world (in all of its antinomic diversity), and for the planet (to help stave off catastrophe). In response, many artists are using electronic mediums, among and alongside others. It is, however, their response to the demands of contemporaneity, rather than the medium(s) that they use, that makes them contemporary artists.

If this is so, then recent, anxious efforts to develop a discourse that joins mainstream contemporary art and aesthetics with new media art and theory might be mistaking one current of contemporary art (its spectacular, expensive forms) for all of it, and at the same time confining “new media art” to a past that it has already left behind. As the examples discussed in this lecture reveal, the field is in advance of its art critical/historical interpretation. Nevertheless, much remains problematic in current practice, many challenges remain, and more will arise. To artists exploring interactivity, for example, spectacle-induced interpassivity is a problem that, as yet, has rarely been solved (although it can be beautifully staged). In contemporary conditions, “territories, temporalities and transmissions” have morphed into a strange, unprecedented spatiality, and understanding their interaction has assumed a special urgency.

Terry Smith is Andrew W Mellon Professor of Contemporary Art History and Theory at the Henry Clay Frick Department of the History of Art and Architecture, University of Pittsburgh. He is author of several books including *The Architecture of Aftermath* (2006, Chicago Press) and *What is Contemporary Art?* (2009, Chicago Press). He was formerly a founding board member of the Museum of Contemporary Art, Sydney and is currently a member of the board of The Warhol Museum, Pittsburgh. He is currently developing a conference & publication programme on the theme of “Critical Languages for New Media Arts”.

**Ina Blom**

## **On Videosociality**

ABSTRACT: In this lecture I will discuss certain fundamental questions concerning an artistic medium that was generally understood as a new image-medium but whose early practice tells a somewhat different story: the story of the medium as a social machine, invested in a fundamental reconfiguration of the

very idea of social relations. The point of departure is the specific production of sociality taking place in a 1972/73 collaborative video project by Lynda Benglis and Robert Morris. In this project, the question of sociality is framed in terms of a critical encounter between various pictorial conventions related to the history of Western art and new signal-based sound and image technologies. Essentially, the work opens onto a different understanding of the so-called “social” art practices of the 1960s and 70s.

Ina Blom is Professor at the Institute of Philosophy, Classics, History of Art and Ideas at the University of Oslo. Her fields of research and teaching are modernism/avant-garde studies and contemporary art and aesthetics, with a particular focus on media aesthetics and interdisciplinary practices. A former music critic and radio DJ, she has also worked extensively as an art critic and curator. She has been senior curator at the National Museum of Contemporary Art in Oslo (2000), and curator of the Fluxus/Inter-media Archive at the Henie Onstad Art Centre in Oslo (1988–1993). She has been an editor of *Samtiden* and of *NU:The Nordic Art Review* and she contributes to *Frieze*, *Artforum*, *Parkett*, *Afterall* and *Texte zur Kunst*. Recent books: *Joseph Beuys* (Gyldendal, 2001), *The Name of the Game. Ray Johnson’s Postal Performance* (Oslo/Kassel/Sittard, 2003), *On the Style Site. Art, Sociality, and Media Culture* (Sternberg Press, 2007).

**Brandon LaBelle**

## Lost in the Crowd

ABSTRACT:

The one who is standing apart – *or wishing to leave*

To face the other – *who is that over there*

Or to disappear – *is this the way to the park*

As Vito Acconci states: “public space is full of private bodies.” Where then does the private body end and the public one begin? At one point does the art work become less private and more public, and what is at stake in seeking the other, as an imagined public? I will explore such questions, showing various projects that circle in and around publicness, and that also seek out their own dissolution into the crowd.

Brandon LaBelle is a Berlin-based artist and author, and a professor at Bergen Academy of The Arts, specializing in sound and media arts. His work has been exhibited extensively throughout the world and he is the author of several books, including *Background Noise; Perspectives on Sound Art* (2006, Continuum) and *Acoustic Territories / Sound Culture and Everyday Life* (2010, Continuum). His work often involves collaboration with other artists and musicians and he is a member of the international sound art collective “Freq Out” initiated by Karl Michael von Hausswolf.

**Stanza**

## **Stanza Creates Real Time Visual Artworks Informed by Critical Analysis of City Spaces.**

ABSTRACT: Stanza is an internationally recognised artist, who has been exhibiting worldwide since 1984. His artworks have won prestigious painting prizes and ten first prize art awards including: Vidalife 6.0 First Prize. SeNef Grand Prix. Videobrasil First Prize. Stanza's art has also been rewarded with a prestigious Nesta Dreamtime Award, an Arts Humanities Creative Fellowship and a Clarks bursary award.

Stanza has made a series of modular artworks that express the possibilities for our data-mediated future. There are three strands to his working process; this involves collecting the data, visualizing the data, and then displaying the data.

The outputs from the online interfaces and online visualizations have been realized as real time dynamic artworks as diverse as installations, and real objects, made out of new display materials re-located back in physical space. In all his artwork he tries to exploit the changing dynamics of city life as a source for creativity to create meaningful artistic metaphors. Stanza utilizes new technologies and integrates new media artworks into the public domain as part of this ongoing research into the visualization of city space. In essence he is researching data as a medium for creativity and how new experiences of our cities may result.

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His work has focused on new technologies and their relationship to urban space. In recent years he has spent time researching sensors, motes, CCTV, display technologies and interactive architectures. The body of work, "The Emergent City" incorporates investigations into movements of people, the pollution in the air, the vibrations and sounds of city spaces. The archives of this data are controlled via bespoke online interfaces which have been re-formed and recounted into real time experiences, making emergent artworks.

By investigating these data structures Stanza creates new metaphors relevant to the real time experience of the city and the environment. The patterns we make, the visual and imaginative interpretations we give to real world events, are already being networked into retrievable data structures that can be re-imagined and source for information. These patterns disclose new ways of seeing the world. The value of gathering and re-presenting this data in artistic form, and then analyzing its impact and influence, lies in making meaning accessible to a wider audience.

Stanza will present a few of his artworks and projects from [www.stanza.co.uk](http://www.stanza.co.uk)

*Stanza is a London-based artist working across a broad range of media, including painting, digital installations, generative net-based art and works for public space. Thematically his work addresses issues including the uses of surveillance, the urban landscape and alienation in the city. He recently took part in Decode, a survey of digital, code-based art at the Victoria and Albert Museum, London, and was winner of an international*

competition to devise a public digital artwork for The Nova Cinema, Folkets Hus, Trondheim, a project that is under development.

### **Vibeke Jensen**

ABSTRACT: In this presentation Vibeke Jensen will talk about her installations and their relationship to technology and public space. "Trigger", her commission for electronic art at the new IT-building at the University in Oslo is almost completed. Here she works with surveillance technology and interactive light sculptures that reflect the building's function and identity and emphasize its users. Cameras detect people's movement in public areas and map their presence and absence in the building by causing a network of lights to change behavior. The colors of visitors' clothing influence the color and movement of other light sculptures.

Prior to this work, Jensen completed a temporary work for the Trondheim municipality: "Site Investigation." She was invited to comment on fear, crime and the right to public space in connection with a public hearing in the WW2 bunker DORA. Her text-based interventions in public space included two Equation Shields, the electronic billboard on the main square, posters on bus stands and a video projection on a public urinal. Legal terms and mass media language were combined to form unusual equations questioning how language is used to keep some in and others out. This project is the starting point for a new public art project by Jensen in Oslo this fall. Here the theme is migration, and the Equation Shields will be made interactive and the public can contribute with equations by SMS and the www.

Other projects include "Blue Wall of Silence" on Vaterland in Oslo where the 3 meter tall walls of her pentagon sculpture completely dissolved during the three weeks it was up. In "Night Watch", a mobile video projection of an eye looked down at passers-by from urban landmarks in Shanghai and New York.

Jensen's work uses a mixture of low-tech and high-tech components, tactile and sculptural qualities in a direct and confrontational interaction with the public. She aims at provoking a reaction, and to stimulate a thought process that enables the public to see things from multiple points of view.

Vibeke Jensen is a Norwegian artist based in New York. She works primarily with themes of surveillance and control, particularly in regards to public space. Confronting and exposing the ideologies of monitoring systems, Jensen creates temporary and transitory installations and more permanent works that explore issues of power, control and poetic expression of conflict, complexity and heterogeneity. Jensen is currently a visiting professor at Bergen School of Architecture. She has a degree in architecture from the University of Trondheim and a Graduate Design Diploma from the Architectural Association in London. She works internationally and has been exhibited in galleries and museums in New York, Beijing, London, Vienna, Bogotá, Mexico City and Norway. Her public art projects have been realized in Shanghai, New York, Oslo, Trondheim and Vienna. Jensen is the winner of international competitions and residencies, and she lectures and presents her work at art institutions and conferences. She is trained as an architect at NTH, Trondheim and The Architectural Association, London and has worked as a visual artist since the early nineties. She divides her time between her base in New York and Norway, where she teaches at Bergen School of Architecture and is currently completing a large commissioned work for the Computer Sciences building at The University of Oslo. Her works

have been exhibited internationally since the mid-nineties and have often been realized in collaboration with other artists, programmers and designers. Together with Norman Douglas, as i.e. (individual electric) she was one of the commissioned artists for the 1997 Trondheim 1000 year Jubilee exhibition "Screens".

### **Anne Hilde Neset**

ABSTRACT: The 60s and 70s saw a series of large scale interdisciplinary projects with a utopian impulse to expand humanity's knowledge base and create an artistic experience previously unheard of: The Philips Pavilion (Brussels, 1958), The Expo 70 (Kyoto, 1970), 9 Evenings (New York, 1966), are some examples of this leakage of creativity from one area to the next with a free flow of information between composition, film, technology, choreography and architecture. Have the ideas that these utopian experiments present been explored fully? We talk glowingly about cross pollination between genres and cross artform collaborations but is such work fostered by institutions and funders today? In my lecture I will touch upon some factors which have served to separate the artforms and point to areas where they converge, such as The Morning Line (Matthew Ritchie and Arlanda/Lasch 2009–10), a sound producing, travelling sound sculpture currently situated in Istanbul, and the work of Marina Rosenfeld and Nico Vascellari amongst others.

Anne Hilde Neset is a Deputy editor of The Wire magazine, curator and lecturer. In 2005 she co-founded Electra, a curatorial agency based in London, and was curator for "Her Noise", an exhibition of sound art and contemporary music by women artists, performers and composers. She devised and delivered a series of lectures on Sound & the 20th Century Avant Garde for the Tate Modern and has also lectured at OCA, Oslo and at Bergen Academy of the Arts.

### **Jon Bewley**

## **Ghost Ship / 2005**

ABSTRACT: Ghost Ship is a major public art project by internationally renowned artist Chris Burden commissioned by Locus+ as part of the events to coincide with The Tall Ships' Races 2005. Ghost Ship involves a crewless voyage of a self-navigating boat from Fair Isle, Scotland due south along the eastern shores of the British Isles to Newcastle upon Tyne.

Ghost Ship arrived on schedule on the River Tyne on 28.07.05 and sailed up river in the wake of the departure of the Tall Ships and went under the Millenium Bridge at 3:15PM

Ghost Ship takes the form of a traditional Shetland sailing boat, a Sixareen, and has been especially hand-built on Fair Isle by Ian Best. Loaded with technology and equipment that enables independent navigation, Ghost Ship will embarked on its maiden and only voyage from Fair Isle, set to arrive in Newcastle as the Tall Ships prepare to leave on the final leg of the race to Fredrikstad, Norway. Whilst the Tall Ships festival commemorates a traditional pedigree of sailing vessels with their inherent bravado of scale, uniformity and manpower, Ghost Ship instead professes the remote modesty of an unmanned boat, uniquely laden with advanced technologies. Whilst 1 million people gather around the banks of the Tyne to bid their goodbyes to the Tall Ships, Ghost Ship will embark on the final leg of its journey up the river in the wake of their departure.



Jon Bewley is director of Locus+, a curatorial, production and development agency for public, site-specific and temporary art projects, based in Newcastle upon Tyne. Bewley studied Fine Art at Newcastle Polytechnic, where he became involved with the pioneering artist-run space The Basement Group, which later evolved into Projects UK. Locus+ has worked with a broad range of international artists within a variety of different contexts and has also published numerous books and catalogues. Bewley has considerable knowledge and experience within the field of contemporary art production, ranging from small-scale one-off events to major public commissions.

**Rob LaFrenais**

## **The Arts Catalyst**

The Arts Catalyst commissions contemporary art that experimentally and critically engages with science. It produces provocative, playful, risk-taking artists' projects to spark dynamic conversations about our changing world.

Since 1993, The Arts Catalyst has worked nationally and internationally to promote understanding and cooperation between people from different disciplines and cultures. It seeks new ways to involve artists, scientists and the wider public in a discourse about the direction and impact of science in society, and to explore new ideas and possibilities. It explores, generates and shares ideas through contemporary art – exhibitions, events, workshops, residencies, conferences, publishing, research, and learning and participatory projects.

The primary focus of these activities is the commissioning and presentation of new artists' projects. The Arts Catalyst works closely with artists, enabling them to realise their visions. The commissions and events are presented in a range of venues: art galleries, museums and other public spaces. The Arts Catalyst aims to attract and engage a large and diverse audience in its activities and investigations.

Through its programme, The Arts Catalyst aims to enable and empower curious minds to have stimulating, social and thought-provoking experiences, encounters and learning opportunities that transcend traditional boundaries of art and science, encouraging exploration and experimentation, developing creative and artistic skills, and helping to deepen understanding of the relationship between science, culture and society.

Rob LaFrenais has been curator of The Arts Catalyst since 1997. He is a curator and critic who has curated and produced interdisciplinary and visual art projects since 1987. Before joining The Arts Catalyst, he was a freelance curator and organiser working in a European context in various countries, including being the Chief Executive of the Edge Biennale Trust in London and Madrid and the Artistic Director of the Belluard-Bollwerk International in Switzerland. In 1979 Rob founded the groundbreaking Performance Magazine, which continued as an authoritative cultural voice in Europe until 1992. He has a PhD in curatorial practice across disciplines and is an honorary Doctor of Arts at Dartington College of Arts.

**Stacey Spiegel**

## **Real but Abstract / Abstract but Real**

ABSTRACT: This presentation will focus on a path of discovery where art, technologies and the public sphere have come together, avoiding (overtly) the making of “techno-public-art”. What are the requirements of the art-technocrat who must keep the sluice gates open ... always monitoring the flow. A flow that has to be directed, if not towards a prescribed outcome, then to a “sphere” in which ... as was our goal ... “learning happens.” At the same time in parallel always moving to the unknown – the unpredictable.

Human behaviour can be like that. So ... in Marshall McLuhan’s terms – the example of Rockheim helps demonstrate how the artist without declaring the primacy of art-making, can be a social navigator with new technologies.

Stacey Spiegel is a Canadian artist, designer and producer who has recently been chief designer for Rockheim, the National Museum for Pop and Rock Music in Trondheim, where he has created a series of large scale, immersive media environments that tell the story of popular music in Norway. He has previously worked at the MIT Media Lab and has been a professor at The University of Toronto. He is currently an adjunct professor in Software Engineering and Games Design at McMaster University. He has designed and developed a series of interactive and immersive media environments for museums and other institutions in North America, Europe and Asia, as well as exhibiting artworks at festivals including Ars Electronica, Multimediale and DEAF (Dutch Electronic Arts Festival).

November 4, 5 & 6, 2010 @ Scandic Hotel Solsiden

**The 11th Annual International Research Conference,  
Consciousness Reframed: Art and consciousness in  
the post-biological era,  
MAKING REALITY REALLY REAL**

**Moderated by artist and author Roy Ascott**

[www.realities.no](http://www.realities.no)

**3 days - 20 nations - 60 speakers!**

TEKS – Trondheim Electronic Arts Centre - is proud to host the 11th Consciousness Reframed Conference, Making Reality Really Real, in conjunction with Meta.Morf 2010. The conference is arranged in cooperation with the Planetary Collegium, University of Plymouth, England.

TEKS's very first biennial with the subtitle New.Brave.World!, is amongst other things looking into research projects and art practices that question with an open mind the state of the modern world. This year's Consciousness Reframed Conference fully complements the biennial's aims.

With the title Making Reality Really Real, Consciousness Reframed picks up where New.Brave.World! leaves off. The more than 60 conference papers, many by leading researchers, artists and writers, investigate a wide range of definitions of the concept of reality, presenting theories, conceptual ideas, new researches and art projects, that aim, as their driving force, to bring the realities of the really real closer to our hearts, and minds.

Consciousness Reframed 11 – Making Reality Really Real, concludes Meta.Morf 2010.

**Espen Gangvik**

This biennial catalog presents you with abstracts from all Consciousness Reframed authors. For full papers, TEKS is publishing the conference's articles as a paperback, with the title MAKING REALITY REALLY REAL. (ISBN 978-82-998211-2-4)

Observation • participation • interaction • transformation

## REALITY IS CONSTRUCTED | MEANING IS NEGOTIATED

*"I am at one with my Taoist and Buddhist friends in believing that, at a more nearly ultimate level of experience, it is found that all matter, animate or otherwise, is mind. It is because we cling blindly to the seeming facts reported by our senses – despite all the denials of their ultimate validity voiced by scientists and mystics alike – that we fail to perceive, much less accept, this truth".*

John Bloefield

**Werner Heisenberg**

**Ross Ashby**

**Heinz von Foerster**

**Paul Watzlawick**

**Richard Feynman**

**David Bohm**

*write a theory of a brain ... a theory of the brain ... has to account for the writing of this theory ... the writer of this theory has to account for her or himself ... the cybernetician, by entering his own domain, has to account for his or her own activity. Cybernetics then becomes cybernetics of cybernetics, or second-order cybernetics".*

Heinz von Foerster

Roy Ascott 2010

*"... a brain is required to*

### INTRODUCTION

The status of our reality is uncertain. The solid objective world of our everyday experience is a representation of an oscillating immateriality that we recognise, at another level of resolution, as constituting quantum phenomena. It's not that matter doesn't matter anymore, so much perhaps as the idea that matter isn't matter anymore. Can we not reasonably ask whether there is a reality beyond what quantum mechanics describes, even closer to the really real? If our material, everyday world depends on our consciousness, what existed in the world before human consciousness had evolved, and how will the world look if our consciousness evolves still further? For many who live largely online, cyberspace accommodates a vivid and consequential normality that renders the material world less relevant to their lives. Until recently, we adapted our sensibilities to fit into separate boxes, variously identified as real, virtual, spiritual, and so on, which we saw as being served by separate ontologies. That separation has now merged into a flowing continuity, in which telecommunications, computing, nanotechnology, bioengineering and pharmacology play significant roles. The binary opposition between real and virtual realities no longer holds, and the Western conception of the individual human brain creating its own isolated mind may be giving way to the recognition of a connected intelligence seeking fuller access to a primordial field of universal consciousness. What might be the role of the artist in all of this? Can a trans-disciplinary art practice contribute to strategies for making the real really real?

### CONFERENCE

These issues form the background to a conference of artists, scholars, scientists, and engineers that will constitute the 11th Annual International Research Conference, Consciousness Reframed: Art and consciousness in the post-biological era, MAKING REALITY REALLY REAL, convened by Espen Gangvik of TEKS - Trondheim Electronic Arts Centre, and co-directed by Roy Ascott, president of the Planetary Collegium. Previously, the conference has taken place in Australia, Austria, China, Germany, and the United Kingdom.

**Roy Ascott, 2010**

**The Consciousness Reframed** conference series was founded by Roy Ascott at the University of Wales in 1997. Consciousness Reframed is a forum for trans-disciplinary inquiry into art, science, technology, design and consciousness, drawing upon the expertise and insights of artists, designers, architects, performers, musicians, writers, scientists, and scholars, usually from at least 20 countries.

**The Planetary Collegium** aims to produce new knowledge in the context of the arts, through transdisciplinary inquiry, radical practice, and critical discourse, with special reference to technoetic research, and advances in science and technology. Based in Plymouth UK it has nodes in Zurich and Milan. There are currently 60 registered PhD candidates and 30 doctoral graduates. Roy Ascott founded the Collegium (originally as CAiiA – the Centre for Advanced Inquiry in the Interactive Arts) at the University of Wales in 1994.

Roy Ascott is an artist whose work is invested in cybernetics, technoetics, and telematics. He is President of the Planetary Collegium, based at Plymouth University, Honorary Professor at Aalborg University, Copenhagen and Thames Valley University, London, and has held senior academic positions in North America, Europe and the UK. His international exhibitions range from the Venice Biennale to Ars Electronica, from North America to Korea. His theoretical work is widely published and extensively translated. He has advised media art institutions in Europe, Australia, North and South America, and the Far East. He edits *Technoetic Arts: a journal of speculative research* (Intellect) and is Honorary Editor of *Leonardo* (MIT Press).

## Conference Speakers

**Julietta Aguilera**

### An Evolving Thought

ABSTRACT: Access to imagery from new sources, the increasing amount and complexity of visual data, and novel data processing techniques which are now in human reach are stretching our understanding to the point where we need to make sense of interdependent visual patterns which correspond to living systems and dynamic phenomena at multiple pattern and time scales. Fragments from human experience such as visual perception can all be described as patterns we can notice and recognize. In this presentation I will survey occurrences of overlapping patterns in visual representation and highlight their significance on immersive visualization.

Julietta Aguilera has been interested in how we navigate space visually since she studied Design at the School of Architecture, Universidad Católica de Valparaíso, Chile. She later earned a Master of Fine Arts (MFA) from the University of Notre Dame, where she studied Design and Virtual Reality. Julieta Aguilera holds a second MFA in Electronic Visualization from the University of Illinois, Chicago, where she was part of the Electronic Visualization Laboratory (EVL) collaborative program in Art and Computer Science. At EVL, she studied real-time stereo networked virtual environments, computer graphics, games, knots and higher dimensions. She is member of the Space Visualization

Laboratory at the Adler Planetarium in Chicago since 2007, and a PhD candidate at the Planetary Collegium (CAiiA), Plymouth, since 2010.

**Inês Albuquerque and Rosa Oliveira**

## **Art as Knowledge: Internet Art**

**ABSTRACT:** The development of new virtual spaces changed our individual perception about the world in which we are living. The Internet (or cyberspace) with its ability to communicate in large scale, in real time and with global reach, turned the world into the global village that McLuhan had already predicted in the middle of last century. Art has a key role in understanding the reality that shapes our daily life, and artists are responsible for amplifying our awareness by creating artworks that alter the role of the public and allow us to think about our position in the contemporary world. Internet art, existing in the cross between art, science and technology, allowed some changes in the observer's role: the observer is now an active participant in the work of art. The characteristics and aesthetic of net art face the public with the recognition of its central position on the process of understanding their real and virtual environment, creating a parallel and continuity between these two environments. By exploring languages, themes and aesthetical proposals that go beyond traditional art, Internet art present us with a new perspective about our world and ourselves, opening new theoretical approaches that focus on the particularities of the centrality of the individual in the aesthetic process.

Inês Albuquerque is a researcher and PhD Student in Art Studies at the Department of Communication and Art, University of Aveiro, Portugal. Her research is focused on Contemporary Art and Art, Science and Technology.

Rosa Oliveira is Professor at the Department of Communication and Art, University of Aveiro, Portugal, and a researcher of the ID+ Research Institute for Design Media and Culture ([www.idmais.org](http://www.idmais.org)). Her research is focused on Contemporary Art, Art and Science and Art Education.

**Hava Aldouby**

## **Virtual Reality Turns Biological: The Case of David Cronenberg's *eXistenZ***

**ABSTRACT:** *eXistenZ*, by David Cronenberg (1999), revolves around a game of immersive virtual reality. To the end, the film does not afford an easy distinction between objective reality and the virtual universe of the game. Unlike other films of this genre, most conspicuously *The Matrix* (1999), Cronenberg's film presents a "biological turn", introducing sexually suggestive, throbbing and bleeding "fleshware" into the familiar hi tech platform of VR systems. The game is operated via biomorphic "pods" made up of animal tissue and neural systems, which plug right into the players' lower spine via "umby-cords". The film is overdetermined in terms of biological imagery. Flesh, blood, bone, and viscera form the core of Cronenberg's visual vocabulary.

The present paper will consider Cronenberg's strong emphasis on flesh and biological imagery in a wider context, pointing out a similar inclination in the art of the electronic age, manifesting a strong attraction to "flesh and blood" imagery. The last four decades have seen recurring employment of bodily substances (urine, blood, hair, or nails), extreme close ups that blow up body parts and skin pores, or starkly realistic morgue imagery, which at times arouse quite an uncomfortable "shock of the real".

Cronenberg introduces his "fleshware", complete with surgery-like procedures that replace the electronic lab, into the heart of the ultimate new technology, VR. It is precisely here, it will be argued, at the height of the digital turn, that contemporary art needs to cling to the flesh, as a sort of last resort in an otherwise virtualized existence. While Teresa de Lauretis reads Cronenberg's film as the ultimate acknowledgement of the loss of reality in postmodernity, the present paper will argue to the contrary. When considered against the biological bias underlying contemporary art, Cronenberg's insistent focus on "flesh and blood" imagery gives rise to a dialectic of the simulated versus the real. Cronenberg's insistent focus on biology may thus be seen as a desperate invocation of the real, or the "really real", in the face of postmodern anxiety.

Dr. Hava Aldoby lectures on film as visual art at the Hebrew University of Jerusalem, Faculty of Humanities - School of the Arts. She is currently completing a book on Federico Fellini under the working title: *Painting In Film, Painting On Film*. The book reveals the elaborate art-historical matrix underlying Fellini's middle period films, and his conception of painting as origin. Her current research interests include the film-painting interface, relations between electronic (or digital) art and painting, and the various intermedial hybrids that ensue. Particular interest is given in her research to the quest for the real in the visual arts of the postmodern era.

**Peter Anders**

## Transcribing the Impossible

ABSTRACT: As one of the world's oldest performance arts, conjuring combines artistry, technique, and keen psychological insight. The conjurer's craft undermines observers' "reality" by exploiting lapses of attention, unfounded assumptions, and the illusion of temporal continuity. For this reason conjuring has become a focus of inquiry among neurologists and behavioral psychologists. Reciprocally, there has been an increasing interest among magicians in the psychological roots of their profession.

This paper will lay out some of the issues and interests shared by conjurers and scientists, discussing the implications of this as it relates to human consciousness. In the paper's presentation the author will illustrate some of these principles using conjuring techniques. Finally the paper will present a system of notation for transcribing magical performances. This system – a work in progress – has been informed by on-going dialog with performing conjurers and scientific researchers. The potential applications of this system will be discussed, including notational interpretation, recording of method and effect, and projecting new performances of magic. The author hopes this will become a useful tool for both conjurers and researchers interested in the psychological issues underlying magical performance.

Peter Anders (USA) is an architect, educator, and information design theorist. He is Planning and Development director of the Planetary Collegium, Design Director at Dow

Howell Gilmore Associates, Architects, Michigan, the Officer – Secretary of ISEA International (Inter-Society for Electronic Arts), and Advisory Board Vice-Chair of Alden B. Dow Museum of Science and Art, Midland, Michigan. He has published widely on the architecture of cyberspace and is the author of *Envisioning Cyberspace* (1998, McGraw Hill), which presents design principles for on-line spatial environments. Anders received his degrees from the University of Michigan (BS 1976), Columbia University (MA 1982), and the University of Plymouth (PhD, 2004). He was a principle in an architectural firm in New York City until 1994 when he formed MindSpace.net, an architectural practice specializing in media/information environments. He has received numerous design awards for his work and has taught graduate level design studios and computer-aided design at universities, including the New Jersey Institute of Technology, University of Detroit-Mercy, and the University of Michigan. His work has been featured in professional journals and he has presented his research on the architecture of cyberspace in several international venues, including The New York Architectural League, Xerox PARC, ISEA, CAiiA, Cyberconf, ACADIA, AEC, ACM-Multimedia, InterSymp and the World Future Society.

**Kęstutis Andrašiunas**

## **Formalisation of Language and Artistic Code**

**– *You Can Imitate a Duck, but You Can't Imitate the Logic***

ABSTRACT: Transformation of artificial language to imperative machine language will be explored in this text. The idea to create artificial language has a long history. There were many attempts to create artificial language for aesthetic or metaphysical or even mystical purposes, but finally formal language flourished with the age of electronic machines.

Artificial formal language was impossible without notations. Notations or symbols can help us to think about the order of things without dependence on contextual meanings. But as history demonstrated, the task to build symbolic systems was not a trivial one. Greek, Roman and Muslim mathematical systems weren't able to transgress the boundaries of their notational systems. Just a formalisation of language of thought in XIX century done by G. Frege (following Leibnitz' ideas on rational calculus) stimulated the development of formal

structures to a new level. The formal language was cleaned from the context of reality and allowed us to manipulate abstract terms, create sophisticated formal collocations, formally correct possible worlds.

The invention of the electronic machine changed the state of things essentially, artificial language became more instrumental than it was ever before. The invention of the electronic machine, able to translate and execute the artificial language, transformed artificial language into an imperative one. It is unlikely, that we will be able to analyse programming without a machine, but it is even more impossible to imagine the results of complex code. On the other hand, the machine, invented in XX century, and able to execute imperative code, hid away the logic of the code – for many, the computer behaves like the mechanical duck of Vaucanson.

But the culture of open code has had a big impact on what is now called artistic code or electronic art. It became possible to use algorithms, classes and advanced programming tools not for academia or the



corporate world only. Before the computer was invented, artists were interested in aesthetic possibilities of *ars combinatoria* or imitating automatons, but now they explore automatons constructed with artificial languages.

Kęstutis Andrašiūnas was born in 1973. He studied philosophy at Vilnius University and sculpture at Vilnius Academy of Art. He is working in digital arts, Internet, programming art. He co-founded Institutio Media (o-o.lt) in Vilnius in 1998 – a virtual space; it is an attempt to transfer the structure of an institution to the Internet and study its functioning. The work of Kęstutis Andrašiūnas has been exhibited in London, Helsinki, at the Hannover Expo and in Vilnius, Lithuania.

**Kathrine Anker**

## **On Light – and the Flux of Informative Events in Nature and Technologies**

ABSTRACT: The aim of this paper is to make a thought experiment, that investigates the possible relation between light and human knowledge. I will present a syncretic approach in which I address the subject from several angles, that extend from the explanations of physical science into the aesthetic communication of technoetic art, and philosophical speculation. I will relate the idea of light as part of a constant electromagnetic, dynamic exchange (Richard Feynmann) at the quantum level of nature, to the *Space Resonance Theory of Milo Wolf* (2008). Light is, according to Wolf, a sign of energy exchange. It is closely tied to typical wave behaviour (oscillation, resonance, frequency adjustment, etc.), and characterized by being in constant process. The energy exchange (involving absorption and emission of light by electrons) can, combined with the idea of enfolded and outfolded orders of physicist David Bohm (1980), be seen as an act of communication, that happens at many scales of spacetime, and which forms a possible connection between realms of “the virtually real” (not the digital virtual) and the “real real”. I will relate my theoretical observations to readings of two technoetic artworks: “Phototrophy” (1997) by Christa Sommerer and Laurent Mignonneau, in which a flashlight is the navigation tool that connects the real world of the user with the digital virtual, evolutionary A-life scenario of the screen projection. I will primarily focus upon the symbolic levels of this work. “Speed of Light” (exhibited in London, April, 2010) by the London based artist collaborative, UVA, stages a different use of light. “Speed of Light” has been designed to let users become acquainted with the fiberoptic technologies used in broadband Internet connections. It involves a set of installations that address the relation between artificial light, communication technologies and user interactions. The setup in an empty warehouse stages a relation between light, communication and space that can – besides from letting users physically experience their own interference with light, be examined for its appeal to higher-order levels of contemplation. Kathrine Anker will connect these observations with particular elements of the biophysical theory of Mae Wan Ho (2003), that are concerned with properties of biophotons in the living organism.

Kathrine Elizabeth Anker is a cultural theorist, and an independent researcher. She holds a Master in Modern Culture and Cultural Communication from the University of Copenhagen, and is a PhD student at the CAiiA-Hub, Planetary Collegium, Plymouth University. Her current project is concerned with questions on how artistic augmented reality interfaces can be seen as communicational forms that appeal to transformed ways

of understanding the human subject. Her work is transdisciplinary, philosophical and speculative. Kathrine is also educated as a Pedagogue of Music and Movement, with a special emphasis on the relation between sensory-motor skill, perception and intellectual processes in learning situations.

### Artist

## Neurospace Consciousness

ABSTRACT: Cyberspace reality (Internet, Second Life or MMORPG) is part of our life; interactive and immersive digital technologies in their future applications, converge on a matrix which could be compared to shamanism. Rather than considering shamanism as a primary archaism, couldn't it be a sophisticated, dreamlike and cognitive technology? A culture medium, offering conceptual models, transposable in the evolution of "cyberspace" reality?

Today, "telepathy" assisted by computer belongs to reality. Prof. Kevin Warwick's researches on neuronal implants move in this direction. We'll soon play cyberspace network games connected by thought. In a near future, our consciousness will be directly interfaced with data banks and network cyberspace universes. This paradigm is very close to shamanism. It becomes fascinating to imagine how shamanic and cyberspace universes could mingle in the same reality. A shaman or a psychonaut could be in connection, through a universal imaginal form of consciousness, and at the same time, be connected with the global Internet matrix, transferring information from one universe to another. Our work is keen on keeping close with this process. It's the reason, we use the pinoline, or other endogens beta-carbolines. They are neuro-mediators of the central nervous system, which is closely linked with dream and modified states of consciousness, and considered to be vehicles, mediators of other realities. We then spread our work into/through the Internet network. We activate the premises of a bridge between realities to create a unified cognitive environment. By participating in "Making Reality Really Real", we want to present our body of work & to talk about, to confront it to different visions/angle, and also to be introduced to a network of people sharing the same interests.

### ARTIFIST:

Caroline Cottereau: licenced in art and philosophy. Art school Montpellier (dao, photography, drawing) France (1989-93). Self-taught tattoo artist with 20 years of practice; painter. Interested in sign and symbol, rites and psychology in tattooing (shamanic process).

Gaëtan Meurée-Cottereau: licenced in biology; self-taught in Ethno-pharmacology and Art. Shamanic and psychonautic therapist.

Valery Meurée: BA (hons.) Mixed Media Art, University of Westminster, London (1997-2001); BA (hons.) New Genre (candidat), SFAI, San Francisco (1996-1997). Video Editor and Photographer.



© Artist

**Elif Ayiter**

## **Constructing Transformations: <ground-c> A Learning Strategy for the Metaverse**

ABSTRACT: This text will attempt to delineate the premises of an immersive learning approach relating to the creative fields. This proposed strategy is specifically designed for implementation in online, three dimensional synthetic builder's worlds, also known as the Metaverse. Deviating from the prevalent practice of replicating physical art studio teaching strategies within a virtual environment, the author proposes instead to apply the fundamental principles of the "Groundcourse", developed and taught by Roy Ascott during the 1960s in England. While the educational philosophy of the Groundcourse does provide the backbone of the author's proposition; further aggregations of Ascott's cybernetic approach with educational strategies such as Jack Mezirow's Transformative Learning is also deliberated upon.

Elif Ayiter (Turkey), aka. Alpha Auer in Second Life, is an artist, designer and researcher specializing in the development and implementation of hybrid educational methodologies between art & design, and computer science. She is an Associate Professor at Sabanci University in Istanbul, Turkey. Her research interests include data visualization and the development of Kinesthetic/Somatic/Biological interfaces for the metaverse, in collaboration with teams of computer scientists. She has presented creative as well as research output at conferences including Siggraph, Consciousness Reframed, Creativity and Cognition, ICALT and Computational Aesthetics (Eurographics). She is currently undertaking doctoral research at the CAiiA-Hub of the Planetary Collegium at the University of Plymouth. Alpha Auer is a totally irreverent, mischievous, politically incorrect, frivolous, fashion victim, avatar in Second Life, whose blog entries can be viewed at <http://alphaauer.wordpress.com>.

**Marco Bischof**

## **Man as a Cosmic Resonator - Re-Imagining Human Existence in the Field Picture**

ABSTRACT: Science and the arts have a common task: re-imagining reality, pointing out possibilities, directing attention to hitherto unconscious potentialities, creating new sensitivities which then may become social and physical realities. The field aspect of reality and human existence has long been eclipsed by the predominant view of reality and our existence as solid objects. More recently, however, the field imaginations have shifted from a marginal to a more prominent place in public awareness. The rise of the field view may well transform our society, and change not only our picture of reality and human existence, but transform social life and human relationships. Methods for training awareness of interpersonal fields and cultivating the sensitivity for the "space in between", self-cultivating techniques by means of which every person can regulate their own bodily, emotional and mental states and constantly fashion themselves as living "Gesamtkunstwerke" may take a central place in society.

Marco Bischof (Germany), is an independent scholar, science writer and consultant in frontier areas of science, based in Berlin. He has a diploma as a breathing therapist and teacher (Prof. Ilse Middendorf, Berlin) and has studied cultural and medical anthropology, comparative religion and psychology in Zurich. He is one of the leading scholars in the field of the frontier areas of the sciences and holistic medicine in the German speaking world. Marco Bischof is a member of the board of directors of the International Institute of Biophysics, Neuss, Germany, a board member of German Association for Space Energy (GASE) and of the German Transpersonal Society, Berlin, and the Scientific Advisory board of the Inter-university Master-Course for Complementary, Psychosocial and Integrative Health Promotion (Graz, Austria), and the Monterey Institute for the Study of Healing Arts. He is on the Editorial Board of Consciousness and Physical Reality (St. Petersburg), and former editor of Bioenergetik (International Society for Kirlian Photography and Bioelectrical Diagnosis and Therapy, Energetik-Verlag, Bruchsal). He co-founded the Research Laboratory for Biophysical Balneology, Zurzach, Switzerland. 1992 visiting scholar, Center for Frontier Sciences, Temple University, Philadelphia. 1996-1998 scientific consultant of the Patient Information for Complementary Medicine, Berlin, Germany. 2001-2002 visiting lecturer and member of the Working Group for Agriculture and Social Ecology at the Humboldt-University, Berlin, Institute for the Economics and Social Sciences of Agriculture. <http://www.marcobischof.com/en/person/index.html>

**Pier Luigi Capucci**

## **The Sensible Reality Between Obviousness and Uncertainty**

ABSTRACT: According to the official science we perceive through the senses, which are usually considered as being five: sight, hearing, smell, taste and touch. Through the senses we detect and perceive what is "outside the body", the so called phenomenal reality, and we get in touch with the world, we can evaluate matter, energy and information in order to survive. Considering the senses as separate elements is pointless, while considering them as a continuum with the ability to perceive the information at distance, proximity and contact, can show some interesting features. The sensory system can't detect many kinds of information and matter generated by the natural processes and by the human activities. All these phenomena simply overcome our sensory faculties. And although we invented technologies, devices and machines which can expand our sensory capabilities there are many entities which still escape our detection (for instance the dark matter and energy in the universe).

The simulation of reality or of the way the senses perceive reality becomes a common practice, from Parrhasius' competition with Zeuxis – narrated by Pliny the Elder in his *Natural History* in the first century of the Common Era – to the contemporary virtual images, from the Baroque *trompe l'oeil* representations to the cinema's simulation of the movement, to the holographic "realities"... This in turn applies, with relevant differences in the substance of the information and in the technologies involved, in the sound, the smell, the taste and the touch realms ...

So, basically, we define what reality is through the senses, naked or expanded, and we build new realities tricking the senses, which are as real as the real they want to represent. Through the senses we build

models of the world, in a turnover of models which arise, become dominant and fall, replaced by new ones seemingly better suited to explain the world, which spring out from the culture of the age they are born in. Our senses filter what our evolution selected to filter. Moreover many cultural filters limit our vision further. So “reality” escapes ...

Since the early 1980s Pier Luigi Capucci has been concerned with communications studies, new media and new art forms, and with the relations among arts, sciences and technologies. Currently he is professor at the University of Urbino, at the NABA - Milan, and other institutions. He is supervisor of the M-Node PhD Program of the Planetary Collegium, University of Plymouth. In 1994 he founded and directed the first Italian online magazine, NetMagazine, later MagNet, and a research project on the relations between culture and technologies made in conjunction with the universities of Bologna and Rome: “La Sapienza”. He is founder and director of Noema ([www.noemalab.org](http://www.noemalab.org)), a website devoted to culture/new technologies interrelations and influences (since 2000). He is founder and director of <mediaversi> ([www.mediaversi.it](http://www.mediaversi.it)) since 2004; a book series focused on new media and society, with an international Scientific Committee.

**Claudia Cardoso-Fleck**

## **Cyberperception, Technoetic Aesthetics & Consciousness in “Mixing Realities”: Theory into Practice**

ABSTRACT: Electronic devices that facilitate new means of interaction with the world appear almost daily. Human communications are being mediated by the cyber world: cell phones, Internet, e-books, digital x-rays, virtual reality environments, etc. This phenomenon may seem at first glance to evoke alienation and loss of perception towards the self. Many media theorists predict a dystopian outcome to our society due to the loss of self influenced by technological tools. Artists should be conscious about this possibility, not rejecting the computer-mediated world but using it to create awareness of the self. Cyberperception can induce a positive impact on interactive processes, generating technoetic aesthetics to develop mind-matter integration.

Claudia Cardoso-Fleck is an independent artist and PhD candidate & researcher at the CAiiA-Hub, Planetary Collegium, based in Plymouth, UK, with an MFA in Computer Art from the School of Visual Arts, NY. She holds a senior adjunct position at SUNY Westchester Community College, Valhalla NY, and is a principal at Cardoso-Fleck Graphic Design Inc.

**Aleksander Ćetković**

## **Use of Technology to Create a View: An Analysis of Le Corbusier's Penthouse Charles de Beistegui and Diller+Scofidios "Slow House"**

ABSTRACT: From 1929 to 1931 Le Corbusier built a penthouse for Charles de Beistegui in an existing building on the Champs-Élysée. The apartment, intended for parties and to receive visitors, was designed more to the taste of the host in a surrealist style. At the same time Le Corbusier was fascinated by the technological aspects of the apartment. While it had only candle lighting (the only to give a living light – Beistegui), there was great deal of electronic technology built in the house to achieve many special effects, above all to control the (outer and inner) scenery. Although the house is situated in one of the most prominent parts of Paris, the view to the surroundings was deliberately prevented by a tall wall. Only the towering icons of Paris – Eiffel Tower, Arc de Triomphe and Sacré-Coeur could be anticipated or partially seen over the seam. Push-button movable hedges and a periscope were part of the technology used to orchestrate the view to the surroundings. For this reason the apartment is an ideal example to analyse Le Corbusier's thoughts and ideas about the view.

Sixty years later, in 1989, Diller+Scofidio designed a weekend retreat on the Long Island waterfront for a Japanese art investor. The clients request for "a house with a view" provoked the architects to question the term view and to ask why is "architecture a technology that creates a view"? The outcome of the research was a design for an (un-built) retreat consisting a window-framed view coupled with a video monitor that replicated the same view.

Alexander Ćetković is a multidisciplinary architect and computer scientist. With a master's degree in both disciplines, he worked as software engineer on major projects and as architect on many designs and contests. For seven years he taught at the Faculty of New Media, University of Arts and Design in Zürich, Switzerland, in the fields of Urban Media, Perception of Space, Information Spaces and Programming Techniques. At the moment he is working on multidisciplinary projects challenging his wide range of knowledge, like the ideas-contest "ETH-World" and the platform "Archivio Fluidio". He is a PhD Candidate at the Planetary Collegium.

**Jacques Chueke**

## **Beyond Digital Interfaces: Novel Features Besides Mouse & Keyboard**

ABSTRACT: This paper investigates new forms of interaction within digital interfaces. It examines the assumption that advances in embodied and direct interaction computing will improve the field of user-machine interface, bringing features to users that allow a more direct and natural manipulation of digital interfaces and devices (eye gazing, touch screen, voice and gesture recognition). As Dourish suggests (2004: 27), interaction with screen and keyboard tends to demand our direct attention; we have to look at

the screen to see what we're doing, which involves looking away from whatever other elements are in our environment, including other people. The computer sits on the desk and ties us to the desk, too. Embodied computing aims to make user-machine interaction more organic, i.e. integrating computer technology with natural actions and behaviours from a user, regardless of characteristics, limitations, intelligence or culture.

An interactive digital installation was created in order to investigate the sociological aspects of the experience that takes place between the beholder and the reactive environment. All interaction occurred with movement and sound emitted by the observer. The curiosity that emerged when coming across an unusual situation and the response, the action that arises in a phenomenological context were subjects of this research/installation.

Jaques Chueke graduated in Design/Visual Communication (1998), specialized in Interface Usability in 2002 and holds a Master in Design (2005) from PUC-Rio. For the last ten years he has been working on developing projects for Internet and Software. Recently he has been Digital Media Supervisor in Quality Software (RJ-Brazil), coordinating a design team on several projects for large companies. He is teaching Interface Usability (post-graduate course) at PUC-Rio, among other institutes. He is also an adjunct teacher in Digital Image (vector and bitmap) undergraduate studies at PUC-Rio. In 2009 he started a PhD in i-DAT, Faculty of Arts, University of Plymouth.

**Geoff Cox**

## **Over-identifying with Really Existing Social Media**

ABSTRACT: Social media are changing the face of the representational political process. This is partly evident in the apparent success of various campaigns that hope to influence the outcomes of elections and in the rise of services that offer effective participation in the political process. The tactics of dissent have changed too. For instance, *Seppukoo* (2009), a recent hack of Facebook by the imaginary Italian art group Les Liens Invisibles (LLI), provides an example where users were able to commit virtual suicide (from the Japanese word "seppuku" for stomach-cutting) in a ritualistic removal of their virtual identity. Yet, as LLI point out, Facebook does not allow its users this facility at all, as accounts are merely deactivated. In such examples, it can be seen how platforms operate a friendly network power and individuals actively imagine their participation in what is arguably part of their subjugation. The *Causes* Facebook 'app' is another good example of spurious participation, providing the ability to create petitions of friends in support of a particular cause. In their recent project "Repetitionr" (2010), commissioned by Arnolfini, LLI use the tactic of *over-identification* to respond to such tendencies. In an age of over-mediated democracy, "Repetitionr" provides a platform for activism with minimal effort, an online petition service with a difference; offering advanced web 2.0 technologies to make participatory democracy a truly user-centered experience. The success of every campaign is guaranteed as just one click is all it takes to generate a whole campaign with up to a million automatic fake signatures. The project reflects the acknowledged need for new institutional forms that challenge existing systems of governance and representational structures, as a blatant expression of *non-representational* democracy – in other words, a form of democracy uncoupled from sovereign power. The approach challenges the limits of representational democracy and the discourse of neo-liberalism in general, offering a means to rethink politics within network cultures. If "Repetitionr" is an example of over-identification with *real existing* participatory democracy, then the provocation is that we need to develop far better strategies and techniques of organisation.



Dr. Geoff Cox is currently a Researcher in Digital Aesthetics as part of the Digital Urban Living Research Centre at Aarhus University (DK). He is also an occasional artist, writer, and Associate Curator of Online Projects, Arnolfini, Bristol (UK), adjunct faculty, Transart Institute, Berlin/New York (DE/US), and Associate Professor, University of Plymouth (UK) where he is part of KURATOR/Art and Social Technologies Research group. Amongst other things, he is a founding editor for the DATA Browser book series (published by Autonomedia, New York), and co-edited *Economising Culture* (2004), *Engineering Culture* (2005) and *Creating Insecurity* (2009).

**Blanka Earhart**

## The Cloudy Self and the Evolution of Consciousness

ABSTRACT: One way to look at the technological landscape today is to see past the borders described by conventional nomenclature and our formal understanding of reality. On a basic level, the world around us can be conceptualized as a play of different intensities and densities. These can be understood in terms of relationships of units or larger coherent entities united by agency as exemplified respectively by particles or a human sense of self.

Instead of discussing our experience of the world as real or virtual, I propose to move away from such dichotomies and imagine a world that is continuous, united by human experience. We can begin to conceptualize this approach by integrating the technology with our sense of self instead of understanding it as our shadow. There is a tremendous, not fully realized potential in localizing an additional human organ on the intersection of our body and software. This way of thinking goes beyond understanding technology as an extension and presupposes it as an innate human growth.

The types of agency that we thus gain follow a different trajectory than our capabilities in everyday life. Online technology, for example, enables not only looking, hearing and touching further. It is a functionality of humans to distribute themselves – a vehicle for our Self. In using this technology, we create clouds of presence and agency. This augmentation takes us a step further in human development. For the first time, we are conscious of and able to shape our own evolution. Now, that we have moved beyond the border of our skin, we are floating in conceptually cloudy and undetermined space. This is a very fertile ground for artwork that explores ways, in which to organize the cloud around a coherent self that is capable of conscious evolution. What does it mean to be in the driver seat of your own development? The challenge is to conceptually process the new capabilities in ways meaningful to humans and to integrate the expanded self into our self-image.

Blanka Earhart is a cultural producer based in Los Angeles, California. She is an internationally exhibited artist and writer, occasionally teaching and speaking on art and visual culture. Blanka is an owner of a multimedia company specializing in media-rich solutions existing on the intersection of web, television and games. Her work and writing oscillates around issues concerning the perception and role of self vis a vis technology, human agency and its limits, social media, and other human exploits seen through the lens of phenomenology. Blanka received her MFA from the department of Art Theory and Practice at Northwestern University Evanston, Illinois in 2003 and her BFA from the School of the Art Institute of Chicago in 1999. She was a recipient of the University Fellowship in the Graduate School at Northwestern University in 2001 and 2002.

Heinrich Falk

## Constructing realities through fictionalisation

ABSTRACT: Generally, art pieces are seen to communicate by means of constructing realities that “are not” (fiction). In order to be able to engage with art, we need to suspend our inherent “academic” disbelief. Academic disciplines in contrast want to get hold of an always already existing reality (truth). During the recent decades though, many artists have been collaborating with scientists in creating art-works that confound historically defined purposes and ontological definitions. Bio-art and social art strategies render obvious realities by constructing performative possibility spaces of interaction and creation.

These art/science projects reveal important perspectives, not on the notion of the reality of fiction, but rather on the construction of realities as “make believe” ones. This advances the hypothesis that many art-science projects elicit a shift in reception from academic “suspension of disbelief” (Coleridge) towards performatively created belief.

This paper’s argumentation will be accomplished through two steps: First, the collaboration between science and art and its main methodological point of convergence is the process of “fictionalisation”. Art projects construct a framework within which fictionalisation is made possible. Based on W. Iser’s definition of fiction as a transition program between two realities, fictionalisation will be defined as a bracketing of discourses and objectives that gives rise to performative domain for both the artist and art participant. Inspired by Ricoer’s three-folded notion of mimesis, the paper explains the artistic transformational process of fictionalisation as being a form of realization of physical and social realities. The second part of this paper re-visits and argues against the notion of “suspension of disbelief” and proposes instead the “creation of belief”, not as a priori for art reception but as the result of a performative engagement with art projects. The theoretical foundations for this argument is firstly the performative aspects of rituals as described by R. Schechner, V. Turner and others; and secondly A. Gell’s notion of art works as prototypes, which serve as mediators in performative encounters. The paper concludes with the question: Could the intersection between art, science and distributed sociality be understood as a dimension of religiousness, as a kind of “reversed modernity”?

Heinrich Falk, PhD is Associate Professor at Aalborg University, Denmark. He is affiliated with the research group and educational program “Art and Technology”. He teaches digital aesthetics, interactive dramaturgy and artistic methodology. He has worked as an actor and theatre director, and his theoretical investigation continues to develop in close relation to practical, artistic work. His current research interest is “performative aesthetics”, and his work – focusing on notions of affect, presence, beauty and communication – attempts to create bridges between certain discourses in the human sciences, sociology, engineering, and neuro-science. He is author of the book *Interaktiv digital installationskunst – teori og analyse* (2008).

**Maria Luiza Fragoso**

## **Art, Technology and Native Traditional Cultures - Transcultural Experiences in Multimedia**

**ABSTRACT:** The paper is a descriptive and illustrative document about the last six years of artistic research involving expressive interactive computer installations and traditional native indigenous cultures from Kuikuro, Atikum, Pankará, Potiguara nations from Brazil. The project was developed by the REDE Laboratory at the University of Brasília between 2004 and 2008 and is now being developed in new formats at the University of Rio de Janeiro (UFRJ). It is a transdisciplinary group with contributions from different areas such as arts (music, fine arts, multimedia, performing arts, video, computer graphics, animation, etc.), design, medicine, computer science, and native cultures, integrating field research and lab research. We propose the presentation of this research, still at its first stages, in the understanding that all reality converges into one common nature, a single ontology, experienced within different stages of consciousness all accessed on a daily basis, with or without the influence of special technology (natural or artificial). We believe that, by studying these cultures and experiencing through/with them unique stages of sensibility and consciousness we may be able to express symbolically this context of unity and convergence. During the last four years, the group has focused the research on the healing ritualistic celebration called *Toré*, shared by different nations located at the northeast region of Brazil. We are working directly with Josinaldo da Silva Atikum, an indigenous student in the School of Medicine. Its an ongoing project which intends to promote transcultural knowledge and symbolic representations in artistic, academic and scientific fields, exploring the possibilities of innovative systems that may provoke unthinkable or unexperienced aesthetics. The art work is currently being developed for multimedia interactive installations that were shown as prototypes during the 7th (2008) and 8th (2009) International Meeting on Art and Technology (Encontro Internacional de Arte e Tecnologia) and the National Science and Technology Fair at Brasília.

[Maria Luiza Fragoso, multimedia artist from Rio de Janeiro, professor at University of Brasília from 1993 to 2009, professor at Federal University of Rio de Janeiro since February 2009. Coordinates the research group REDE since 2004. Organized and published \*Computer Art in Brazil \(Arte Computacional no Brasil\)\* in 2005, papers published in artistic journals and participations in national and international exhibits.](#)

**Martha Gabriel**

## **Mobile Tagging as Tool for Mixed Realities**

**ABSTRACT:** The objective of this paper is to describe the potentialities of Mobile Tagging as a tool for increasing and spreading the effects of Mixed Realities in Art. In this sense, we will start introducing the main concepts and some examples of Mixed Realities followed by the concepts and examples of Mobile Tagging, showing that they are connected and benefit each other. Mixed Reality (or MR) refers to the fusion of the physical and virtual worlds to produce new environments and visualizations where physical and digital objects co-exist and interact in real time. On the other hand, mobile tagging is the process of reading a 2D barcode using a mobile device camera. Allowing the encryption of URLs in the barcodes, the mobile tagging can add a digital and/or online layer to any physical object, thus providing several levels of mixed realities related to that object.

The uses of these levels of mixed realities have applications in several areas going from medicine and engineering to arts. Although mixed realities technologies have existed for decades, they were expensive and usually confined in labs. Nowadays mobile devices (cellphones, smartphones, PDAs) can be used as tools for mixed realities and due to their pervasiveness and low costs, their potentiality for increasing the dissemination of mixed realities is enormous and can be leveraged by mobile tagging as described next.

There are many types of mobile tags (2D-barcodes), the QR Codes and Datamatrix being the most popular formats. It is possible to encrypt many kinds of data into them: texts, contact information and URLs. Since the mobile tags are simple inexpensive printed tags that can be placed in virtually any physical object or person, added to the fact that the cell phones with cameras have become a very popular and pervasive device, the mobile tagging process can be seen as one of the easiest and simplest ways of creating mixed realities and one of the ways of contributing to the Internet of things. In other words, Mobile Tags work like physical links to the web, thus allowing that virtually anything can be part of an expanded mixed reality environment.

Martha Gabriel is professor and leader of the e-learning program “Widening Boarders” at University Anhembi Morumbi. She is Professor of the MBA courses at BSP Business School São Paulo and Federal University of Parana, Brazil; curator of Upgrade! São Paulo ([www.upgradesaopaulo.com.br](http://www.upgradesaopaulo.com.br)); reviewer for LEA Leonardo Electronic Almanac in 2005, and for Networked Book, Turbulence.org, 2009; engineer; postgraduate in Marketing and in Graphics Design; Master’s Degree in Art; pursuing her doctorate degree at USP (University of São Paulo) researching cross-media art. As Artist and Speaker, she has presented artworks and papers in events like Consciousness Reframed (Beijing, Plymouth, Vienna); SIGGRAPH (2005, 2006 & 2009); CHI; INTERACT; ELO Electronic Literature Conference; ISEA (2008 & 2009); Chain Reaction; Campus Party Brazil; SCANZ; Mobilefest; Florence Biennale 2009 (awarded); Technarte 2010; among others. Author of two books and several papers and articles in art & technology magazines, including Leonardo, Transactions, April 2008, Vol. 41, No. 2, Pages 114–115.

**Luis Gustavo Bueno Geraldo**

## **Cyberflâneur – Between the Virtual and the Real Worlds**

ABSTRACT: This paper presents a new view about the concept of the cyberflâneur, which appeared in several texts during the last decade of the past century and is still used today by some researchers of the new mediums. The idea of the cyberflâneur combines the figure of the flâneur, the stroller of the great cities, described in the nineteenth century by writers as Baudelaire, Balzac and others, with the concept of the cyberspace. Thus, the cyberflâneur was a conceptual figure created to describe individuals that use to stroll in the virtual world, apparently with no defined objectives, in the same way as the original flâneur used to do in the streets.

However, most of the texts in which the cyberflâneur appears show a rigid separation between the physical reality, in which the flâneur used to live, and the virtual reality, the home of this new type of flâneur. We think that this separation does not attend to the emerging context of hybrid realities, in which the borders of virtual and real worlds cannot be defined in a clear way. The aim of this paper is to show that this gap

that exists in the main descriptions of the concept of the cyberflaneur may be considered in a more relative way. We intend to show some works and experiences that may be treated as examples of cyberflanerie, that cross the borders of virtual and physical worlds. One of these experiences is the weblog named “Ciberflânerie”, created by the Brazilian researcher André Lemos. The blog reunites Lemos’ pathways in different cities of the world, tracked by a GPS tracker and uploaded to the blog using the technology of Google Maps. Another work analyzed is the series of photographs made by the Canadian experimental photographer Cheryl Sourkes. Sourkes works with images appropriated from private webcam sites, manipulating and transforming them into panels, which are exhibited in physical galleries. Projects like these show that the dualism between real and virtual, city space and cyberspace, tends to make less sense in the contemporary context.

Luis Gustavo Bueno Geraldo is a teacher at the Technology College of São Paulo (Fatec-SP) in São Paulo, Brazil. He graduated in Graphic Design at the University of the State of São Paulo and holds a Master in Visual Arts from the University of São Paulo. Besides his teaching occupations, he works with graphic design, electronic art and urban interventions. He is also member of the Digital Poetics Research Group, University of São Paulo.

**James K. Gimzewski**

## What Art can do for Science: Learning to Learn

ABSTRACT: Roy Ascott posed an interesting question: “Ask not what science can do for art but what art can do for science?” Perhaps Gordon Pask his mentor and guru partially answered that question decades before: a new form of education proposing that we learn to learn. In this paper I provide an answer to his question. Although provocative, in no way do I imply diminishing the magnificent progress of science and technology over the past several hundred years or the relevance of the “scientific method”. However I believe it’s an opportune moment to reevaluate the very basic tenants behind the process of science in today’s complex and human environment.

Dr. James Gimzewski is Distinguished Professor of Chemistry at the University of California, Los Angeles; Director of the Nano & Pico Characterization Core Facility of the California NanoSystems Institute; Scientific Director of the Art|Sci Center and Principal Investigator and Satellites Co-Director of the WPI Center for Materials NanoArchitectonics (MANA) in Japan. He was formerly a group leader at IBM Zurich Research Laboratory, researching in nanoscale science and technology for more than 18 years. Dr. Gimzewski pioneered research on mechanical and electrical contacts with single atoms and molecules using scanning tunneling microscopy (STM) and was one of the first persons to image molecules with STM. His accomplishments include the first STM-based fabrication of molecular suprastructures at room temperature using mechanical forces to push molecules across surfaces, the discovery of single molecule rotors and the development of new micromechanical sensors based on nanotechnology, which explore ultimate limits of sensitivity and measurement. This approach was recently used to convert biochemical recognition into Nanomechanics. His current interests are in the nanomechanics of cells and bacteria where he collaborates with the UCLA Medical and Dental Schools. He is involved in projects that range from the operation of X-rays, ions and nuclear fusion using pyroelectric

crystals, direct deposition of carbon nanotubes and single molecule DNA profiling. Dr. Gimzewski is also involved in numerous art-science collaborative projects that have been exhibited in museums throughout the world.  
<http://www.chem.ucla.edu/dept/Faculty/gimzewski/>

**Luis Girao**

## **Integrative Art – the Wonders of Bioelectromagnetic Modulation**

**ABSTRACT:** When Álvaro Pascual-Leone, from the Beth Israel Deaconess Medical Center, Harvard Medical School, presented the footage of one of his patients suffering from Parkinson Syndrome, before and after undertaking a rTMS treatment, the audience was amazed. The gentlemen on the video, that could not walk more than a few steps at a time, due to the effects of a specific neuromodulation technique, was walking at a fast pace immediately after the treatment. An experience of this sort, even that it does not last more than a few dozen of minutes, is surely not considered by the subject to be a simulation. It is something that really happened. Something really real.

The integration of experiences in daily life that transform consciousness have been pursued by artists for a long time. The old Fluxus' saying: "Life is Art, Art is Life" is a good example of that. Bioelectromagnetic techniques applied for artistic expression allow for the birth of Integrative Art: a sort of artistic practice that is non-representational, non-simulatory and in its extreme form might become non-mediated. This paper reports on the latest developments in the research of bioelectromagnetism as integrative art form and brings into discussion instrumental concepts for the transformation of a philosophical approach to consciousness. Ideas such as transsynaptic phenomena, stochastic magnetic modulation, bioelectromagnetic entrainment and argumental interaction contribute to strengthen the thesis of Panpsychism.

Luis Miguel Girão is a transdisciplinary artist and researcher in the application of technology as a tool for artistic expression, at the moment focusing on bioelectromagnetics. In 2007, he was awarded the Bolsa Ernesto de Sousa prize. Along with Gehlhaar and Paulo Maria Rodrigues, he formed the UnoDuoTrio ensemble and developed the Cyber-Lieder project. He founded Artshare, an art tech research company and collaborates with several artists and institutions such as Casa da Música – Porto, iDAT – Plymouth (UK) and Companhia de Música Teatral – Lisbon. He was assistant curator and technical director of the Electronics Art Lab at the Bienal Internacional de Cerveira, Portugal and collaborated with the Academia das Artes Digitais of the Aveiro Digital Programme, also in Portugal. He collaborated with several artists and his work has been presented in countries such as USA, Canada, Germany, Denmark and China. He is a PhD candidate at The Planetary Collegium; fellow at the Foundation for Science and Technology, Lisbon; and fellow at CESEM, Universidade Nova, Lisbon.

**Jane Grant**

## **Noise: Networks, Sensation, Experience**

ABSTRACT: What we experience as consciousness occurs at many different cortical locations and timescales. In Eugene M. Izhikevich's "Polychronization: Computation with Spikes" he claims that it is this combination of possible firing patterns that enables us to have so much processing power. Izhikevich goes on to propose that these clusters or groups across the cortex give rise to the beginning of simple thought and memory. However, when stimulus is not present, the artificial cortex driven by noisy currents, re-visits some of these firing clusters, following the formation of pathways previously established through external and internal stimulation. In a sense it could be said, that the brain or cortex re-lives previous experiences.

The Ganzfeld "entire or total field" experiment of the 1930s sought to explore extra-sensory perception using mild sensory deprivation, white light and "noise", in order to negate defined external stimulation. Regardless of the findings in ESP, what became apparent, was that the unstimulated or sensorially deprived visual cortex begins to conjure vague images or impressions of scenes.

Brian Massumi, in his chapter "Chaos in the Total Field of Vision" in *Parables for the Virtual*, argues that the Ganzfeld experiment produces a vacuum of vision caused by the deprivation of stimulus – "It is chaos. Pure vision, the simplest, fullest empirical conditions of vision, is visual chaos".

Jane Grant is an artist who works with moving image, sound, installation and drawing. Her work often draws on scientific ideas, both contemporary and historical. Solo exhibitions have included "Memento Mori", at Spacex Gallery, Exeter, "Still at Chapter", Cardiff, "Aufstiegen", a site specific work in Germany and "Leaving Earth" at Peninsula Arts Gallery, University of Plymouth. Her collaborative work with scientists, musicians, composers and designers have resulted in award winning projects, including "The Fragmented Orchestra" with John Matthias and Nick Ryan, which was winner of the PRSF New Music Award and received an Honorary Mention at Prix Ars Electronica 2009. She is currently working on a number of NeuroArts projects, including the development of "The Fragmented Orchestra". Her forthcoming individual projects include new works on the effects of the sun's forthcoming solar storm in 2012 and an artist's film regarding dark matter. Jane Grant is Associate Professor (Reader) in Digital Arts at University of Plymouth, UK.

**Dew Harrison**

## **Real-ising the Virtual**

ABSTRACT: Scientists have developed our understanding of atomic particles over the last two centuries but there is little evidence of a mapping of the atomic onto an art practice until the early 1900s. Artists, such as Marcel Duchamp, began to take an interest in the new findings of nuclear physicists articulating ideas of the 4th dimension in order to respond to the Modern world and move art on from the traditional. The era of the worldwide web and global hypermobility gave rise to new ways of perceiving human space to where Postmodern practice includes the digital and such art can translocate from the material (real) human space to the 4D of earlier interest – now realized as cyberspace.

The virtual worlds of the new century are the playgrounds for artists to explore space and time, the digital objects created here are experienced by avatar, without the full range of sensory perceptions we use when confronting the real world. To experience the virtual as a reality we need sensors connected to our physical bodies to simulate real-world sensations. In order to further engage viewers as participants in their work contemporary artists are exploring ways of synthesizing the material physical real world with that of the virtual.

This paper will explore two projects currently underway at the University of Wolverhampton that example ways of presenting the virtual as an alternative real. The first, "Kritical Works in SL", uncovers a move towards materializing the virtual from within the SL platform to question notions of identity and "real", the second, "Shift-Life", is a virtual world of Darwinian fantasy creatures which respond to the physical actions of visitors causing upheavals in their environment. In the first, an avatar, solidified into material form, stands frozen on a gallery plinth, a dead signifier to the living creature in SL. In the second the real world encroaches upon the virtual causing a life-and-death struggle to an artificial life form. This second project was directly influenced by earlier works concerning Duchamp's "Large Glass", where AI behaviors were given to Duchampian objects to amplify their familial relations.

Dew Harrison is a researcher and practitioner in digital and computer mediated art. Currently working as the Associate Dean for Research and Postgraduate Studies at the School of Art & Design, University of Wolverhampton, where she is the Director of the CADRE Research Centre (Centre for Art and Design Research and Experimentation). She is also a co-director of Labculture Ltd, PVA MediaLab, Dorset UK, which is an artist-led organisation initiating and supporting exploratory work as good practice in creative new media. Within her own practice she undertakes a critical exploration of Conceptual Art, the non-linear thought trails permissible in semantic media, and intuitive interfaces. She often works collaboratively and considers curation a form of virtual media art practice. Dew has both Science and Art Masters Degrees and a PhD from CAiiA in Interactive Art, with over 40 publications to date she continues to show her work both nationally and internationally.

**Jung A Huh**

## **Real Buddha vs. Virtual Buddha**

ABSTRACT: In Nam June Paik's <TV Buddha> the statue of the buddha and the buddha in the TV face each other. Which one of the two is real and which virtual? What differentiates the real from the virtual? Both buddhas are virtual and simultaneously real because both of them are not buddhas themselves but become real according to the relative relationship they have with each other. What Paik's <TV Buddha> ultimately expresses is not the binary antinomy of the real and the virtual, but that the two buddhas form a relationship through the act of looking at the other. The real and the virtual come from our binary antinomy of reality, and are two sides of the same coin. This article examines the makings of real reality as well as the meaning and function of "kong" (empty) in East Asian painting.

In East Asian painting "saek" (color, form, reality) was not seen as "saek" but as "kong" (empty, non-form, virtual). The absence of shadowing in a painting derives from the understanding that the image functions as "kong." In East Asian aesthetics, "kong" always harbors the potential to become "saek." In this context, the painting is virtual reality and in this virtuality, "kong" is not different from "saek." The theory of "Yuangi"



(genesis, karmic causation), the founding pillar of Buddhist thought, offers the possibility of how “kong” can converge into “saek.” “Yuangi” is the key to understanding “Saek is Kong and Kong is Saek” (Form is emptiness and emptiness is form). The two can converge, relying on mutual dependence. One example that embodies this function is <Drawing the Eye in the Dragon Painting>. The dragon image represents “kong.” Yet, by drawing the eye, the dragon is actualized into the real. The anecdote of a bird colliding into Solguh’s (5-6th c AD) painting of a pine tree, on perceiving the pine tree as real also reflects the relationship between “kong” and “saek” in that the bird makes the virtual image real by constructing a relationship with it.

The underlying concept of avatar, the replica of myself in virtual reality, can be seen in same perspective of the relationship-making in <Drawing the Eye in the Dragon Painting> and the anecdote of Solguh’s pine tree. When the avatar, composed of 0 and 1 bits, forms a relationship with “I,” it becomes real. Here we question what reality, material, and life are. “Yuangi” illuminates the fact that the universe is found not in existence, but in relations, and that life is a composite of relationships. In East Asian painting, the real and the virtual are mutually convergeable and thus reversable. This convergeability and reversability can also be applied to the mutual functioning of the virtual and the real in the digital universe.

Jung A Huh is a professor at the Institute of Media Arts at Yonsei University in Seoul, South Korea. She is also the supervising manager for the Humanities Korea Project “Imagination and Technology” and organized the International Media Art Exhibition (2004) as executive producer. She is consultant for the “Asian Culture Hub City Project” in the Ministry of Culture, Sports, and Tourism as well as for the “Transdisciplinary Robot Forum” in the Ministry of Knowledge Economy.

**Salvatore Iaconesi and Luca Simeone**

## **Crossing the Boundaries of Sacred Worlds**

### **An Augmented Reality Application Attempting to Visualize Other Orders of Reality**

ABSTRACT: In traditional Kongo society religious and medical experts, called *banganga*, perform a variety of rituals of protection and healing using potent artifacts called *nkisi* (plural *minkisi*). Minkisi are considered power figures capable of the inheriting qualities of dead people through a ritual sometimes performed at their grave. The nkisi becomes the recipient of the deceased’s soul (*mooyo*) and in particular of his/her personal qualities, based on the reputation he/she had while still alive (e.g. physical strength, hunting prowess, or sexual attractiveness). The minkisi embody the deceased’s personal characteristics and the banganga then pass them onto their clients who need them.

The minkisi act as the material embodiment of invisible, strong powers: imagined worlds or multiple worlds constituted by the historically situated imaginations of people or by phenomena pertaining to different levels of reality. Some banganga say you should never buy a nkisi unless you know exactly what it is. It is possible that the one for sale is useless, discharged and harmless but it is equally possible that it is still inhabited, uncontrollable by you and dangerous when not attended to properly.

This paper presents a prototype for an augmented-reality application, that will allow the use of existing physical components of the Minkisi as triggers to retrieve and experience new orders of information.

When the nkisi is placed under the webcam (or the camera of a mobile phone), a pre-trained 3D feature recognition system scans the entire figure, trying to identify some specific components.

The preparation of the recognition system (the selection of the 3D features to be recognized) and of the content is done with the objective of enhancing the emotional/traditional/belief-based attributes of the physical objects and, thus, contents accessible from the nkisi can take many forms including texts, videos and pictures, but also spatialized soundscapes from sacred rituals, interviews, and visual tracing of the ritual gestures performed by the banganga on the artifacts, describing a digital aura representing and making accessible the mystical/religious/philosophical domains that create the artifact's cultural and spiritual value.

Luca Simeone is a design anthropologist and a contemporary entrepreneur. He leads projects in which solutions are designed through ethnographic research methods. His past experiences include the production of award-winning websites and cross-medial interaction design projects for clients ranging from international brands to museums and institutions. Luca has an extensive academic history, featuring participation in scientific and commercial publications and teaching and R&D experience in several universities in Rome, Naples, Milan and New Delhi, on the subjects of Cultural Anthropology, Interaction Design, Innovation, Psychology of Emotions, Experience Design.

Salvatore Iaconesi is an artist, a hacker, an electronic musician, and an expert in technologies for mobile devices, wearable and ubiquitous computing, robotics, artificial intelligence, interactive devices, interfaces and environments, information systems and geographic, location based systems. Salvatore creates interactive experiences, breakthrough technological services and interactive systems, for art, communications, entertainment, design, utilities. A focus on ethics, sustainability, ecology, multi-cultural tolerance and on the values and opportunities created by differences are a constant focus of all of his work. Salvatore teaches Digital Cultures, Interaction Design, Innovation, Electronic Engineering, in several universities (Rome, Milan, Denmark, Mexico).

**Eiko Ikegami and Edward Colin Ruggero**

## **Social and Political Activism in Second Life**

ABSTRACT: Within the virtual world of Second Life (SL), there exists a wide variety of social and political activism. Importantly, these are not simply virtual versions of real life organizations; groups like the Second Life Democratic Movement, Second Life Left Unity, and Four Bridges are wholly indigenous. Curiously, this virtual world activism (VWA) is frequently conflated with 2D forms of cyberactivism found elsewhere on the Internet. However, VWA is fundamentally different. VWA's unique forms of actor integration, distinct mechanisms of movement cohesion and mobilization, and activists' use of the surreal and unreal in political contention serve to blur and transcend the virtual/real ontological divide that is emblematic of cyberactivism scholarship.

This paper seeks to highlight the uniqueness of VWA, arguing it represents a challenge to common characterizations of cyberactivism. We begin with a discussion of cyberactivism, noting the concept's under-determination, whereby all online political action is grouped together, collapsing 2D and 3D under a single label. However, rather than attempting to carve a niche for VWA within cyberactivism scholarship, we aim

to transcend the literature, seeing VWA as an example of an entirely new field of social action. Indeed, SL activists frequently claim they make no distinction between their political action inworld and in real life, integrating and blending the virtual world as a part of their reality. This is a crucial point because cyberactivism on the whole is frequently disparaged in light of a supposed “loss of self” experienced by users moving from a 3D reality into a 2D cyberspace. However, SL’s highly immersive and malleable 3D environment not only encourages users to (re)create their identity, it all but requires it. Indeed, interactions within SL – avatars physically interacting: speaking, dancing, playing – mirror real life interactions, a process that actually *develops* users’ sense of self. Thus, we aim to develop a framework for conceptualizing VWA that accounts for these unique properties. This framework is presented not only as a more nuanced tool for studying VWA, but also of political and social activism more broadly, on either side of the increasingly dim virtual/real divide.

Eiko Ikegami is Professor and Chair of the Department of Sociology, New School for Social Research in New York. (PhD Sociology, Harvard University) She is currently leading a group of virtual ethnographers who study organizational and cultural dynamics of various communities of avatars in Second Life. Ikegami’s Project, “Virtual Civility, Trust and Avatars: Ethnology in Second Life” is supported by National Science Foundation (IIS 0942997). Her publications include *Bonds of Civility: Aesthetic Publics and the Political Origins of Japanese Culture* (2005: Cambridge University Press), which won five book awards.

Edward Colin Ruggero received his master’s degree from the University of Delaware’s Center for Energy and Environmental Policy in 2009, writing a thesis titled “Radical Green Populism: Environmental Values in DIY/Punk Communities.” He is currently an M.A. candidate in the Sociology department at the New School for Social Research. Colin is involved in numerous political and social activism initiatives.

**Margarete Jahrmann**

## **Ludic Chindogus as Erotic Toys**

ABSTRACT: This paper introduces a number of conceptual key terms around the art and politics of play, as Jouissance, Playsure Politics, Ludic Chindogu Interfaces and Ludics. The joyful and even erotic play with the technological “Chindogu” (Kawakami 1995) as an artefact is understood as a way to gain an immaterial perspective on Ludic Interfaces as political tools, which can be identified as seminal practice for the development of a critical consciousness through play. Jouissance – as discussed by Julia Kristeva (1984) and Slavoj Žižek (2005) – is useful as technical term from cultural studies and in particular from the perspective of political theories, in order to emphasise the quality of enjoyment and erotic attraction in the agency dimension of play with an object. The contemporary slave and master relation of players in everyday life and their relation to their technological objects can be identified throughout the paper as related to concepts of play and desire as driving forces for social agency in everyday life that really matters! The emergence of Ludics as artform is informed by the practice-based research in the Internet of Things, expressed in *Urban Games and Gamefashion* by the artist Margarete Jahrmann. The methodological activist practice of *Ludics* was academically discussed in the author’s doctoral thesis, submitted at the Centre for Advanced Inquiry in Integrative Arts, University of Plymouth, UK. A selected number of case studies of activist interventions and exemplary activist artworks of the genre of *game arts* give evidence for the anthropomorphisation of political Ludic Interfaces of everyday life in a contemporary ubiquitous Ludic Society.

Dr Margarete Jahrmann is an artist, Professor for Game Design at the University of Arts Zurich and researcher on the HERA project Pervasive Prosumer Plays / FLOW at the University of Art dieAngewandte Vienna. As an internationally renowned artist, she has been exhibited worldwide over the last ten years (2010 Digital art weeks, Xian; Space Invaders, FACT Liverpool / game.Art, NEMK Amsterdam; 2009 Tales of Play, Alta Tecnología Andina Lima; Enter\_Act, Kunstmuseum Aaros; 2008 Arco/Laboral Gijon, SESC / File Sau Paolo; 2007 DIGRA Tokyo) and received major media arts awards, such as the distinction in interactive arts, PrixArsElectronica 2003; and software arts award, Transmediale, Berlin 2004. In 2006 she founded the international arts research association Ludic Society, and since then edits the LS magazine. In 2010 she submitted her doctoral thesis on “Ludics – The Art and Politics of Play” at the University of Plymouth, CAiiA Centre for Advanced Inquiry in Integrative Arts. Her research focus lies on Play as research method, political activism and subversion and hybrid forms of intervention by arts. She frequently curates and publishes in the field of electronic network arts and critical culture.

**Katerina Karoussos**

## **St. Anna’s Boolean Garden**

**ABSTRACT:** This paper traces back to the early period of imagery as a conceptual activity and explores its relationship to communication and technology. It is based on an alternative definition of visual mechanism and instead of pointing towards the future to where technology is supposed to be blossomed, it points backwards in time where forgotten visual novelties are awaiting in suspended animation. This reversion seeks to assess the values of older media, in the course of late antiquity, which reflect a broad spectrum of principles that still form the core upon which new media are based.

The research elucidates a previously neglected text by the early fourteenth century scholar Theodore Hyrtakenos, the “Description of the Garden of St. Anna”. This rhetorical description reeks of allusions, textual and visual, pertaining to a different kind of spatiotemporal awareness which approaches practices of current augmented environments.

The design of Anna’s garden, as the author describes it, together with the visual evidence from manuscripts and frescoes occurred in Byzantine period, suggest a synthetic vision of space and time. “Topos”, as Hyrtakenos entitled the garden, is a set of fields of collective sentiments or affective states associated with myth as a mechanical mode of functioning. However, in order for the garden to function in its hybrid way, the reader/viewer should absorb the text rather than simply interpret it. Hence, by refusing to interpret the portrayal of the garden into a coherent text statement, this study implies the process of absorption to activate the garden’s function.

As a result “topos” set forth an alternative topological space, by its mathematical term, instead of being just topiary while addressing issues of parables, net, automata, filters, flow and Boolean operations will prove that Hyrtakenos’ text is not a simple “romance” but a remarkable “technoetic” analysis.

Katerina Karoussos is an artist and researcher. Her research is based on the convergence of old and new media and especially between Byzantine and ICT visual practices. From 1994 to 2003 she was the director and a co-founder of the Hellenic Center of Fine &

Applied Arts. Since 2004 she is working at The Athens School of Fine Arts as a freelancer at the Fresco studio, and she is member of the Planetary Collegium (CAiIA) as a PhD Candidate under the supervision of Prof. Roy Ascott. Apart from her work as a Byzantine mural painter at Orthodox churches, her work has been exhibited in various international media exhibitions.

**Max Kazemzadeh**

## **Visibly Invisible: Spukhafte Fernwirkung, Mechano-Moist & (the) Enlightenment**

ABSTRACT: While there is little consensus as to the date marking the beginning of the Enlightenment, the less disputed notion that the Enlightenment symbolized free and independent thought, dissolving the strict control of church and the imposed doctrine of what Peter Gay calls the “sacred circle,” may be one of the reasons the Enlightenment had such a long standing and profound impact on the way society views research and valid intellectual progress, still valued for its contribution to democratic and capitalist social ideologies. Coupled with what Kant reinforced in “What is Enlightenment?” as the time that made way for the freedom to use one’s own intelligence, scientific, empirical, and ontological methodologies developed, which required that “rationality” and “reason” be used to resolve all problems contributing to the establishment of new knowledge. This widely accepted neo-rationality may possibly have emerged as an answer to dogmatic and innate discourses, but more probably surfaced as a direct reaction to the authoritarian practices of the church embodying that dogma, where these new ideologies served as propaganda in the support for a free, secular society. As in most revolutions, one leading ideology is toppled and replaced by yet another, and so forth. Additionally, drawing from our experiences, thought and reflection influences our vision, motivates our action, and maintains our engagement within the tools we use to better understand and prototype our thoughts within the world of metaphor. Research and testing in the nano and quantum level reveal new findings in math, science, and the meta-sciences to confirming the connection and absorption of content latent within the thought layer. In all scientific studies, but even more prevalent in studies of quantum mechanics, the presence of the observer influences the effects the behavior of the subjects or particles. In the EPR (Einstein, Podolsky, Rosen paradox) thought experiment, the observers determination whether the spin direction of one of two “entangled” particles is positive or negative establishes a constant, which directly affects the other’s spin direction.

Max Kazemzadeh is an electronic and emergent media artist and tenure-track Assistant Professorship of Art & Media Technology at Gallaudet University, the only all deaf university in the world. Kazemzadeh is also a PhD Candidate within the Planetary Collegium. His work over the last ten years focuses on how constructed, semi-conscious interfaces influence human interaction, and is presently investigating the effects of directed thought on the realm of the physical through what he calls “re-falsifications” (ie. creative experiments) to reveal more concrete reflections of what is reality. Kazemzadeh has served on panels, curated exhibitions, organized conferences, given workshops, received grants, written articles, given performances, and exhibited internationally in the area of electronic and emergent media art. Some exhibitions include the Micro-wave Festival (Hong Kong), the Boston CyberArts Festival, Medialab-Prado’s Interactivos 08 (MexicoCity), Dashanzi International Art Festival (Beijing), IDMA IDEA’s Exhibition/

Symposium (Ohio), Fotofest (Houston), Macedonia Museum of Contemporary Art (Greece), Maker Faire (Austin), LA Center for Digital Art (Los Angeles), The Gerald Peters Gallery (NYC), and the Dallas Center for Contemporary Art (Texas). Kazemzadeh organized the conference Texelectronica '06 (Dallas), served as the chair of the electronic media art session at the College Art Association-CAA '08, served on the Creative Capital Foundation's Artist Grant Review Committee in '08, served as a juror for SIGGRAPH '07, and has given annual interactive hardware/software workshops at the Central Academy of Fine Art in Beijing since 2004.

### **Rachel Kessler and Matthew Fielder**

ABSTRACT:

*COGNITIVE DISSONANCE n. Psychology: A condition of conflict or anxiety resulting from inconsistency between one's beliefs and one's actions.*

The point of interest is an investigation into the psychological phenomenon of cognitive dissonance, a theory put forth by the American social psychologist Leon Festinger who suggested that an "inconsistency among (an individual's) actions or beliefs causes psychological tension". As a result of this tension or "inner conflict" individuals often adapt their beliefs in order to fit in with their behaviors.

The text navigates this idea through Festinger's "social comparison theory" as it relates to cognitive dissonance in social networks by questioning the language and role of a "communicative critical text", how it is read, understood or interpreted. The work takes on an experimental hybrid form, acting simultaneously as a critical essay, lecture manuscript, performative text, statistics report, and research paper-annotations (footnotes), as well as corrections are included in order to animate questions about the restrictions and expansions of such mediated time-space.

The body of the text fleshes through various facts surrounding the high number of "false alarms" in American public schools and the technological facilities that initiate and institute them. Here cognitive dissonance is discussed critically in terms of both social dynamization and neurological response. To enact a "double bind" equal attention is given to the exploration of these concepts and how they potentially function in the text itself as a piece of writing.

Matthew Fielder is an artist, writer and educator who works in a variety of mediums and disciplines. He holds a BFA in Fine Art and an MA in the program of Aesthetics and Politics from the California Institute of the Arts. In 2009 he spoke as part of the panel "Theatricality As Political Material" at the International Conference for the Pedagogy of the Theater Of The Oppressed.

Rachel Kessler is a visual artist who uses diverse media and methods including painting, sculpture, video, text and performance. She holds a BFA from California Institute of the Arts and an MFA from Art Center College of Design. She was also a 2009 Joan Mitchell Foundation nominee. Her work has been exhibited in group and solo shows.

**Linus Lancaster**

## **The Real Dirt on Soil and Location**

ABSTRACT: “Making the Real Really Real” is a question of shaping, re-thinking, massaging our interrelations with the material and flow of Being towards an intensified actuality that implies an ethic of expanded performativity and thought – a raised awareness and a broadening of consciousness. It is not different from the call of the post-human in its broadest sense: the acknowledgement of what is within and beyond humanity, beyond human perception, and human control. It refutes the notion of human (or Animal) autonomy as a constitutive ontology. It flows out from multiple points of departure, questions of why and how *expansive* embraces of Being are undertaken, and towards what?

In conventional terms, the “more real” the higher the impact, the higher the stakes: the realer the scarier, at least potentially. This fits with what I will discuss in this presentation, but fear immediately brings in complications with some unexpected results. As Bataille explains in his discussion of Sacrifice, fear inevitably accompanies the transformation of the sacrificial subject into the real, out of objectification, in the act of sacrifice. At the same time, obviously, fear and risk simultaneously act as blockages to acknowledgement of the actual. None the less, I will suggest that intensification of the Real calls for heightened activity, heightened stress, and higher discipline; but also a heightening of the ecstatic as a potentiality which can accompany expanded contact with Being, and the broader post-human ethic articulated by performativities and Materialities to-come.

“The Real Dirt” will focus on two performative pieces undertaken earlier this year. One, an exploration of sacrificial Listening and transfer of Soil at sea, done in collaboration with Dr. Frederick Young, UC Merced, which sought to articulate a constellative opening on the interrelations of Techne, Animalities, and Soils to-come. The other, an Earthwork which is also an exhibit space for regional Soil typology and theory in collaboration with a group called *Five Looking West* (forthcoming in *Koreana Magazine*), and a few of my students. Both pieces address how underlying theory is impacted when performative work is undertaken as an offering which gathers the material and “spiritual” into interrelation; and the ramifications for philosophy when “inert” objects move into ethical subjectivity. The “heightened reality” they suggest is a performativity which acknowledges expanded interrelations of Being, the stakes of conscious interactivity with them, and some of the issues and perils of working in more-than-rational modalities.

Linus Lancaster is an instructor of visual art and photography at Healdsburg High School in Northern California, as well as being a working artist and independent scholar. He is the founder of the International LandBuoy Project, a collaborative performance and sculpture project dedicated to interventionist practice which has focused on theories and politics of Land and location. Linus joined the Planetary Collegium in 2009 and is working towards a PhD in philosophy and art practice, currently with an emphasis on theories of post-humanism and ecology of Soil.

**Renata La Rocca**

## **Mnemonic Narratives: Through the Levels of Reality**

**ABSTRACT:** This article aims to discuss the construction of narratives related to the space, crossing and combining different levels of reality, through an adaptation of the classical mnemonics rules as a model of thought. The classic mnemonic, while being a memorization technique tied to the architectonic space, association images and places, can be understood or applied from what Frances Yates calls the “archetypal images” or “magically activated images”. The concept of “magically activated images”, gives us a clue to the potential of this method, especially if we imagine this technique as a mediator for creating different levels of reality. Transposing this technique to the realm of interactive digital arts, we can explore the association of various media through stimulating the senses in a holistic way – sounds, moving images, and the most different sensors and digital devices, opening the door to the construction of spaces-imagination built from the interactions, the dialogues. According to Peter Matussek, in the wake of advances in interactive applications, the function of digital technology is no longer described merely in terms of “storage and retrieval”, but rather in terms of the performativeness of images in motion (Matussek, 2003). From this perspective we can talk about the construction of dynamic visual memories in mnemonic spaces, images-memories in motion. This question is related to the question of transformation of the concept of artificial memory itself – from an inert depository to dynamic organizations. Connecting images to places (real or imaginary ones) in a dynamic way, the mnemonic becomes systemic, implying a complex network of temporal and spatial connections through crossed meanings, involving dynamic informational flow and updates, which can be presented as moving images and sounds, as an example. Using the conceptual basis of ancient mnemonic – the fundamental relationship between images and places – the goal of the PhD research in course is to propose adaptations of the technique to help in model chaotic narrative’s experiences related to the space creating networks between different levels of reality.

Renata La Rocca is a PhD researcher at ECA/USP – University of São Paulo, School of Communications and Arts, she is member of the Art, Design and Digital Media group, headed by her research supervisor, Professor Mônica Tavares. La Rocca holds a master’s degree in Architecture, obtained in 2006 at SAP/EESC/USP, University of São Paulo, School of Engineering of Sao Carlos, Department of Architecture. She is teacher and head of the Interior Design course, and teacher on the Graphic and Product Design courses at the FAAL. She is member of the The Double collective, her research interests relate to the construction of spatial narratives in interactive digital art installations by using mnemonic structures.

**Živa Ljubec**

## **Rethinking the Reality Source Code: Augmented or Fragmented Reality?**

**ABSTRACT:** Are the modern technologies enabling us to or preventing us from exploring the intuitive realm beyond the constraints of the intellect? Are they augmenting or fragmenting the reality? This paper will examine the limitations of intellect as a homogeneous medium of space-time that was derived from intuition, a heterogeneous medium of pre-space. It will explore the possibilities of transference between



intellect and intuition and how to augment the architecture of extensive reality to allow for intensities to flow through, how to implement the experience of interval in the culture of instant connectivity.

Živa Ljubec is an independent architect and researcher in the intersection area of art/science/consciousness. She studied architecture at Faculty for Architecture and mathematics at Faculty for Mathematics and Physics, both at the University of Ljubljana from which she obtained her master of architecture degree in 2004. She is currently exploring the intuitive realm, she claims is shared by artist and scientists, as a PhD Candidate at CAiiA (Centre for Advanced Inquiry in the Interactive Arts) at University of Plymouth. The research into intuitive medium that is navigated differently in diverse cultures (from ancient indigenous to current scientific culture) is conducted under Roy Ascott's supervision in collaboration with James Gimzewski as the second supervisor. The variety of experiences and skills acquired from studying architecture as well as mathematics gave Živa insight into the intuitive approach in both artistic and scientific problem solving before the solution is intellectually manifested by means of expression specific to the discipline at hand. The by-product of her search for traces of uncensored intuition in arts are her art reviews, that compare the artistic inquiries with the latest theories in science. She is interested in merging artistic and scientific approaches to reveal further the extents of the consciousness we are part of as humans.

**Luis Eduardo Luna**

## **Ayahwasca and the Concept of Reality**

ABSTRACT: *Ayahwasca* is the Quechua name of a psychoactive beverage used by many indigenous groups and segments of the mestizo population of the Upper Amazon. Since the beginning of the twentieth century, Brazilian religious organizations, originated in the Amazon, also use *ayahwasca* as part of their rituals. Offshoots of these organizations have emerged in urban centers in Latin America, Europe, the United States and Japan, among others. Consequently, in the last fifteen to twenty years, thousands of people have had access to the *ayahwasca* experience, either by traveling to Amazonian countries, mostly Peru, or through practitioners from various backgrounds that offer *ayahwasca* sessions in many countries. Since its use depends on cultural setting, significant religious syncretism has occurred, as well as incorporation of a variety of therapeutic methods. Experiences are often extremely deep, featuring contact with entities, animal or plant spirits, and journeys to other realms. The concept of reality among indigenous groups suggests a many-worlds interpretation of the real. *Ayahwasca* and other sacred plants facilitate access to these other realities. These experiences also often elicit in the western user discussions of a philosophical nature. In this paper Luis Eduardo Luna will present an overview of these ideas, based on fieldwork among indigenous groups, mestizo practitioners, Brazilian religious organizations and contemporary westerners from a number of countries, as well as from his own investigations throughout the years with *ayahwasca*.

Luis Eduardo Luna (Brazil) was born in Florencia, in the Colombian Amazon region. He studied Philosophy and Literature at the Complutense University of Madrid. He earned an interdisciplinary Masters degree, while also teaching Spanish and Latin American at Oslo University. In 1979 he moved to Finland where he is currently a Senior Lecturer at the Swedish School of Economics, Helsinki, Finland. In 1989 he received a PhD from the Institute of Comparative Religion at Stockholm University, and in 2000 an honorary

doctorate from St. Lawrence University, Canton, New York. A Guggenheim Fellow and Fellow of the Linnean Society of London, he is the author of *Vegetalismo: Shamanism Among the Mestizo Population of the Peruvian Amazon* (1986), and with Pablo Amaringo of *Ayahuasca Visions: The Religious Iconography of a Peruvian Shaman* (1991). In 1986 he co-founded with Pablo Amaringo the Usko-Ayar Amazonian School of Painting of Pucallpa, Peru. He was Professor of Anthropology at the Federal University of Santa Catarina, Brazil (1994–1998), has lectured about Amazonian shamanism and modified states of consciousness worldwide, and has curated exhibitions of visionary art in several countries. Dr. Luna has over 30 years of experience with ayahuasca in various contexts: as an anthropologist with indigenous groups and among urban and rural mestizo ayahuasqueros in Peru and Colombia, with all the syncretic Brazilian religious organizations that use ayahuasca as a sacrament, and as a facilitator in specially designed workshops.  
[http://www.wasiwaska.org/wo\\_luiseduardo.htm](http://www.wasiwaska.org/wo_luiseduardo.htm)

### **Roger Malina**

Roger Malina (France) is an astronomer and editor. He currently is a member of the Observational Cosmology Group of the Laboratoire d'Astrophysique de Marseille and Director of the Observatoire Astronomique de Marseille Provence. His specialty is in space instrumentation; he was the Principal Investigator for the NASA Extreme Ultraviolet Explorer Satellite. For 25 years he has also been involved with the Leonardo organization, whose mission is to promote and make visible work that explores the interaction of the arts and sciences and the arts and new technologies. He is Executive Editor of the Leonardo Publications at MIT Press. More recently he has helped set up the Mediterranean Institute for Advanced Studies (IMERA) and is co-chair of the ASIL (Arts, Sciences, Instrumentation and Language) Initiative of IMERA, which hosts artists in residence in scientific research laboratories of the Marseille region.

### **Nadia C. Meinhardt**

## **Digital Natives – Is There an Internet-generation?**

ABSTRACT: Does the so-called Internet-generation tick differently from generations before?

Today, when a newspaper publishes an article about the Internet, it usually contains the term Internet-generation, or "digital native". And explains what's obviously seen before: A lot of people born after 1980 have an unbiased and easy access to digital technology and the Web. Do the elderly have more problems with the Web and the new devices? Sounds very reasonable at first.

But those who think a little further will notice that even before the year 2000, there has been a colorful Internet community. In addition, even before the Web boom, a lot of computer games and programs were sold – especially to people who were then already over 18 years. So it seems that the division of society into digital natives and the *Others* is untenable.

Nevertheless, congresses are taking place, academic studies are created and there are social initiatives to show the rest of society what young people think and feel. Some of them assume special mental

benefits to digital natives – others suggest just the opposite – a lack of concentration and deficits in social behavior. The German initiative “DNAdigital” initiates meetings to discuss these issues with industrialists and education policy-makers. It gives the impression that they promote a social group which enjoys little understanding and acceptance. On the other hand the “German Youth Institute” calls for restraint with such concepts for a whole generation. It publishes a warning on its website: “It is a popular error to believe that even children in the use of new technologies are more competent than adults – they are usually only impartial on the computer and the Internet. The mystification of an ‘Internet generation’ does not correspond to scientific investigation.”

The term *Digital Natives* was coined by Marc Prensky in 2001. Prensky refers to a kind of Big Bang theory, which has produced this new type of man. The cause being the new-media-world, based on the boom of computer technologies at the end of the 20th century. He explains that the brain of young people of this generation has changed. Inter alia, a reason is the employment of young people with issues such as nano-technology, software, genetics and robotics.

John Palfrey, professor at Harvard Law School and director of the Berkman Center for Internet & Society, and Urs Gasser, professor at the University of St.Gallen mention in their book *Born Digital* the now grown-up “digital natives” as the generation that has changed our economy and our culture in a global way. Besides the search for identity, the question of security, privacy and information handling in the Internet, the authors consider the risks and opportunities of society from this development.

In this paper the writer discusses the conceptual model of “digital natives”, its options and limits. Also possible relations between changes in social and learning behavior and perception of digital installations will be analysed.

Nadia C. Meinhardt is an artist, creative producer and researcher, based in Berlin, Germany. She is cofounder and head of LUFTTANZ, a dance company focused on multidisciplinary performances. She graduated in performing arts, culture management and received a Master of Arts in leadership in digital communication at University of arts in Berlin. Currently she is an PhD-candidate in the Planetary Collegium, CAiiA-Hub, Plymouth, UK.

**Ryohei Nakatsu**

## **Logos, Pathos, and Entertainment**

ABSTRACT: Various new forms of entertainment using information and media technologies have emerged and been accepted among people all over the world. Casual and serious games, as well as communication using mobile phones, blogs, and Twitter, are such kinds of new entertainment. It is important to discuss the basic characteristics of such entertainment and to understand the direction to which these new forms are leading human societies. This paper provides a comparative study of entertainment between developing countries and developed countries, and between ancient times and the present day. The future relationship between entertainment and society is also described.

Ryohei Nakatsu is Professor at the National University of Singapore and director of the Interactive & Digital Media Institute (IDMI). He received BS, MS, and PhD degrees in electronic engineering from Kyoto University in 1969, 1971, and 1982, respectively.

After joining NTT in 1971, he mainly worked on speech recognition technology. In 1994, he joined Advanced Telecommunications Research Institute (ATR) as the President of ATR Media Integration & Communications Research Laboratories. From the spring of 2002, he has been a Professor at School of Science and Technology, Kwansai Gakuin University. At the same time, he established a venture company, Nirvana Technology Inc., and became a President of the company. His research interests include emotion extraction from speech and facial images, emotion recognition, nonverbal communications, and integration of multimodalities in communications. He received the Best Paper Award from the IEEE International Conference on Multimedia Computing and Systems (1996); Telecom System Award from Telecommunication System Foundation (1999 and 2000); the Best Paper Award from Virtual Reality Society of Japan (1999, 2000, and 2001); and the Best Paper Award from Artificial Intelligence Society of Japan (2000). He is a Fellow of the IEEE and the Institute of Electronics, Information and Communication Engineers Japan (IEICE-J). He is the Japanese representative at the International Federation of Information Processing.  
[http://www.idmi.nus.edu.sg/ourpeople/prof\\_nakatsu.htm](http://www.idmi.nus.edu.sg/ourpeople/prof_nakatsu.htm)

**Enrico Nardelli**

## **Computer-assisted Self Reflection on the Wholeness**

ABSTRACT: One of the lessons humankind has forgotten with the increasing level of technology available in the modern society is the unity and connectedness of all things in the universe. We are now accustomed to a dualistic vision splitting the self and the environment, and even if the latest IT tools enhance our connectedness with other people we are not able to jump out of this limiting vision. This dualistic vision forces us to refusing things that we do not like, without understanding that in doing so we refuse ourselves. We have lost the capability of accepting what happens in the universe and of building our future on the acceptance instead of on the rejection. Self reflection and meditation is a long used technique to help overcoming this limitation and we defined and built an IT-based installation aiming at helping a person to accept what happens without being altered by unexpected events. In the installation the person sees an image of herself that is processed on the basis of some regular laws having as input the values read by some sensors from the person: body temperature, skin humidity, ... and conscious actions: finger pressure, hand movement, ... Hence there is a regularity and predictability in the evolution of her image: the person may be able to obtain a desired processing effect by means of a conscious manipulation of sensors. But from time to time some chaotic processing rule is inserted in the processing and a completely unexpected result is obtained. Then regularity is recovered again, and the person return in control, and the person regains control, even if the image of herself now may be in an unexpected state. But the processing can again be fully controlled by the person. And then again randomness, i.e. destiny, perturbs the course of events. The person is therefore induced to reflect on the need to accept what happens in the universe as an un-escapable characteristics of life. And from this computer assisted self reflection she regains a sense of unity with the universe. The installation is based on the manipulation of self image pixels through the Processing language.

Enrico Nardelli is a full professor of Computer Science at the University of Roma "Tor Vergata", affiliated with the Department of Mathematics. He is the national coordinator of a two-years research projects on bio-informatics, financed by the Italian Ministry of University. Nardelli has been the President of GRIN, the Italian Association of University Professors of Computer Science (2003–08). Since September 2008 he is on the

Executive Board of Informatics Europe, the association of computer science departments and research laboratories in Europe and neighboring areas. June–July 2007 the Academy of Finland invited him along with seven other international Computer Science experts to evaluate Computer Science research in Finland in the years 2000–2006. He recently started working on the intersection between informatics and other disciplines, thinking that it is of the utmost importance for the future of informatics to show how it can be beneficial to, and benefit from, other cultural areas.

**Simeon Nelson**

## **Toward a Cybernetic Ontology of Thingyness**

ABSTRACT: Science, art and mysticism provide compelling accounts of reality in different but sometimes overlapping ways. In my work as a sculptor I am faced with a paradox, how to approach the real, the secret of things in a visual/spatial medium. How does a plastic artist go beyond superficial appearance in search of a more fundamental reality?

I will summarise my thinking and practice over the last 15 years as a praxis, a “practice based metaphysics”. I will discuss my “open sculptural systems”, multi-component contextually responsive sculpture-kits that can be combined into virtually any arrangement in the museum, street or other site. They are provisional, playful, they invite audiences to collaborate in their deployment to help determine how they will negotiate and disperse into their context. The main system I am talking about here, Paratekton – “beside the structure” – has an “alphabet” of about 40 characters that have a syntax encoded into them in terms of how they combine with each other and how they respond to the space they find themselves in.

*Paratekton* is consciously an entelechic structure. Entelechy, “in-end-having” is Aristotle’s term for what it is to be; the inner drive, principle or purpose. In Western metaphysics, the inmost soul of things, persons and entities is taken to be that which remains unchanged during the process of transformation which characterises a thing’s fleeting manifestation in the world, hence when Gertrude Stein says “a rose is a rose is a rose” it means that a rose is a rose whether bud, pollen, bloom or withered seed head. The changing phenomenal manifestation of the rose is not the substance (standing under) of the rose. So with my sculptural systems I am trying to get beneath their “thingyness” and think of them as a process, a system. Sculpture could be seen as a less than ideal medium for the apprehension of such immateriality; but I maintain that paradoxically it is through this very concreteness that the elusive effulgence at the base of reality may be glimpsed.

Simeon Nelson is Professor of Sculpture at the University of Hertfordshire. He was a finalist in the National Gallery of Australia’s National Sculpture Prize in 2005 and in the 2003 Jerwood Sculpture Prize. *Passages*, a monograph was published by The University of New South Wales Press, Sydney in 2000. Recent exhibitions include *Cryptosphere*, Royal Geographical Society, London, 2008 and *Objet Perdu*, Plataforma Revolver, Lisbon, 2010. Awards include arts council grants in Australia and the UK, Pollock-Krasner Fellowships in 2000 and 2009, and a Leverhulme grant in 2007. Australian representative to the IX Triennial India, New Delhi, 1997. Major commissions include Ben Chifley, Sydney, *Desiring Machine*, Melbourne; *Cactal*, the University of Teesside, UK; *Proximities*, Melbourne and *Flume*, Ashford, Kent, UK. Work is represented in the Art/Omi Foundation, New York, the

Jerwood Foundation, London, the Museum of Contemporary Art, Sydney the National Gallery of Australia, Canberra and the Cass Sculpture Foundation, UK.

**Jennifer Canary Nikolov(a)**

## **Hallucinations, an Existential Crisis?**

ABSTRACT: In his essay "Reality Adaptation or Adapted 'Reality'", from the book *Münchhausen's Pigtail*, Paul Watzlawick (1990, p. 134) reminds us that although the rest of the world has seemed to have let go of the assumption that there is such a thing as an objective Reality of which normal people are more conscious than the so called insane, in psychiatry the belief in a "real" reality, that separates the "sane" from the "insane", has survived. In this he refers to the tendency of psychiatry to assess a person's mental health by their ability to adapt to reality. In this paper the artistic researcher Jennifer Canary will investigate how this claim still holds up 20 years later, by taking a look at the concept of "hallucination" from alternative perspectives on reality in relation to modern day psychiatric diagnosis and treatment.

Having hallucinations is often seen as one of the key symptoms of mental health problems, in particular to that of schizophrenia. In the DSM-IV hallucinations are defined as followed: "A sensory perception that has the compelling sense of reality of a true perception, but that occurs without external stimulation of the relevant sensory organ" (Bentall, 2004, p. 350). What is a true perception? How can we be sure that there is no external stimulation? These questions become especially pertinent when we take a look at recent research that shows that people diagnosed with schizophrenia are not fooled by optical illusions (Dakin, 2005, Dima 2009). And that "sometimes their vision can be more accurate than non-sufferers." If a hallucination is experienced as a compelling reality by those who seem to have a better grip on what is actually there in time and space, it becomes imperative to look at concepts of hallucinations from alternative perspectives on our reality. One such alternative perspective on reality could be to look at the concept of a hallucination from Nick Bostrom's (2003) speculative claim that there is a high probability that we are living in a computer simulation ourselves. We might wonder if the concept of hallucination even has the right to exist.

The independent artist Jennifer Canary Nikolov(a) studied fashion design from 1994-1998 before graduating with the first version of roomforthoughts from the fine arts department of the Maastricht Art Academy in 2000. She continued with a Master's program at the Sandberg Institute in Amsterdam, which she completed in 2002. Afterwards, she was invited to participate in the first experimental curating course initiated by the University of Amsterdam and the Sandberg Institute. Jennifer Canary has participated in several art and science projects. From Nov. 2007 to April 2008 she has been artist-in-residence at the National Psychiatry Museum in Haarlem, Netherlands. She is currently a PhD Candidate of M-Node, Planetary Collegium, University of Plymouth, UK, and is since 2008 the head tutor of the Honours Program Art and Research of the University of Amsterdam and the Gerrit Rietveld Academy Amsterdam. All her installations are about the physics of thought. [www.roomforthoughts.com](http://www.roomforthoughts.com)

**Glauce Rocha de Oliveira**

## **On the Blue of the Sea: Real Virtualities and Virtual Realities**

ABSTRACT: In the first account, WYSIWYG (hp ad published in Times magazine, 11 June 2001) translates Western Culture ontology based on the belief that reality preexists human (culture-based) interpretation, and is grounded on values such as rationalism, materialism, and positivism. Therefore, it is no wonder that we believe in a concrete material world ruled by a chronological order of space/time, where one plus one equals two. While at the same time, we forgot about spirituality, transforming it into religious dogma and an excuse to dominate "Others".

In the second account, the augmented space (Manovich, 2006) we inhabit and IT-based societies challenge this Western ontology. We now make meaning in a context augmented by different sources of information and technologies. We also have the capacity to "be" in different places (Foucault, 2001) at the same time.

By living on a moving earth (Clifford, 1986; Morin, 2001), we realize that what we call reality is connected to the regimes of truth (Veyne, 1984) our social practices are based on. Thus, either material or virtual reality is a sociohistoric construction, which reflects nothing but localized interpretations/values.

Escher's "Holding Sphere" illustrates that we are dealing with reflections which interact within certain conditions. Metaphorically, the blue of the sea is also the reflection of its surroundings, instead of the assurance that the sea is really blue. What is there around to reflect it? How to negotiate meaning within complexity (Dimitrov, 2006; Lemke, 2006)?

The objective of this presentation is to propose this reflection, by calling attention to the complex relationship between our six senses (Rocha de Oliveira, 2008) and our surroundings during social interaction (Bhaktin, 1992). In this sense, the crux of the matter is to learn to negotiate meaning, considering the regimes of truth that ground "reality", in order to search other levels of consciousness (Goswami, 2005), and transform the interconnected web of senses that we call reality.

Glauce Rocha de Oliveira holds a PhD and a master's degree in English from the University of São Paulo (USP), Modern Languages Department, Faculdade de Filosofia, Letras e Ciências Humanas. Her research fields include visuality, virtuality, multimodality, and language education. She is also a lecturer and journalist in São Paulo, Brazil.

**Mary Oliver**

## **Talk to me!**

ABSTRACT: Digital Performance artist Mary Oliver would like to attend the conference to present the results of an experimental empathy based computer-performance project – “Talk to me”.

In the search for a more feminised empathetic computer interface this entertaining performance project was initially developed from performance artist Mary Oliver’s desire to create more spontaneous interactions with digital performers on stage, and has now become the starting point for a new development in HCI.

Developments in interactive gaming, notably the Nintendo wii and mii allow the player to receive direct responses from the computer programme in a seemingly two way dialogue but this interaction functions using limited user-data and a narrow interpretation of gender preferences in its choice of applications. Where the user is permitted to interpret and ‘own’ the interface we see a much more interesting and often perverse set of choices. In Second Life the wide-ranging approach to the construction of avatars suggests that as individuals we enjoy challenging the norms of identity as users re-gender, recreate and redesign themselves, but SL similarly is still a relatively unrequited relationship.

Technologies designed primarily for research in bio-science have to this point not been applied to developments in the generic computer interface; for obvious reasons of cost and the expertise needed to interpret the data. For this project Mary Oliver has successfully created a team of researchers and technicians from the Schools of Health and Computer Science and Engineering at the University of Salford who will support her in the development of performative experiments that combine the fields of HCI, neuro-psychology, bio-science and performance towards the development of a new two-way communication

system that allows the computer to interface directly and spontaneously with the user by talking directly to her in response to her current mood.

What sets this programme apart from other experiments in interactive HCI development that use bio-sign data, is that it is led by a theatre maker; an expert in making the imaginary appear real through the development of good character design. By working in collaboration with neuro-psychologist Dr. Adam Galpin who is an expert in the psychology of human behaviour, it is not just the psychology of empathy that is being employed here; the importance of believing that we are being heard by the machine persona, but clever script writing that uses suggestive and influential patterns of speech to make the inter-actor feel as if it is them as an individual that is being responded to.

This illustrated talk will primarily explore the importance of characterful spoken narrative in the construction of real and affective empathetic interactions and point to the potential of this development for wider applications in health and well-being.

After a couple of decades as a Live Artist, in 1998 Mary Oliver began experimenting with digital performance. These interactive “real time” conversations have attempted to bring impossible relationships to the performance space and make them appear real. By using a conflation of screen writing, computer programming, video making and devised performance techniques she brings different kinds of skills and human behavioural interests to the live/screen interface and to discussions on interactivity. Mary Oliver is



Reader in Digital Performance and Director of the Performance Research Centre at the University of Salford UK. [www.maryoliver.net](http://www.maryoliver.net).

**Luisa Paraguai**

## **92.1: mobility into immobility**

ABSTRACT:

“Networks process flows” (Castells, 2009, p. 20).

Mobile communication, owing to its ubiquity, accessibility and adaptability, has permeated all domains of life. People have moved around actualizing different networks, physical and digital nodes configuring a complex structure, programmed and self-configurable at the same time. We have faced different patterns of arrangements, juxtaposed and superposed, trying to transcend the dominant logic of each network.

Firstly, the text is concerned with the networks and flows of information and bodies, discussing other perceptions and movements configurations to perform our daily lives and to comprehend the world. “Movements often involves an embodied experience of the material and social modes of dwelling-in-motion” (Urry, 2007, p. 11), and we have been sewing those organizations and systems upon physical and informational networks.

The 92.1 artwork, presented at the end of the paper, gives visibility to temporary social networks created upon the idea of enhancing our physical displacements while driving, stuck in the middle of the traffic jams. Mobile technologies have set other possibilities of people being temporarily “on the move”, creating gaps and holes, other dimensions and domains. The nine-to-five culture, in big cities like São Paulo, using mobile devices, can engender interspaces and reorganize physical arrangements to transcend space and time models. Sound and image narratives are presented, trying to monitor ad-hoc networks and to map those social activities, questioning the feeling of belonging to those metropolitan areas.

Luisa Paraguai, artist and researcher, studied Civil Engineering and Computing at University of São Paulo, Brazil. She holds a master and doctoral degree at the Department of Multimedia, Institute of Arts, State University of Campinas, Brazil. She is professor at the Post-Graduate Program Master in Design, Anhembi Morumbi University, São Paulo, Brazil. Currently, she has reflected about the potential of mobile devices as a mediator for body and space perception and experimentation.

**Pam Payne**

## **The Invocation of our Polyrhythmic Reality**

ABSTRACT: This paper explores the notion that our experiences and varied states of consciousness are encoded, communicated and realized as sequential rhythmic patterns in time.

Siberian Shamans believe their “real” self is the dream-self experienced in an altered state. MTV’s “Real World” is a contrived television drama. We experience a range of conscious states such as the athlete’s

“zone”, the musician’s performance trance, or the Balinese dancer’s channeling of deities. These realities, our thought processes and emotional tides are the result of shifting our concentration in alignment with specialized patterns. Throughout history various exercises, formulas, spells and rituals have been practiced to induce such shifted states. Our individual dynamic patterns mesh and mingle with each others’ and with environmental patterns. When we experience a synchronized shift in focus as a group the effect may generate a phenomenon greater than the sum of its parts, perhaps with momentum to feedback and sustain a force of its own. The result of such focused concentration might be the ability to conjure rainfall, or at least, certainly cultural revolution.

What is going on when a song touches us so profoundly? Or when a sports event incites mass mania? A song is certainly enhanced by the musician’s skill to convey emotion and the particular sonic vibrations. But there may be something additional conveyed: core life-source soul-stuff encoded in an underlying pattern that can be perceived only as a process or experienced as a sequence of events in time. (A bird’s flight leaves no trail.) Possibly archetypal patterns exist such as ocean waves. Perhaps the closer the connection to an authentic core pattern, the stronger the potential for deep communication and transformative experience. Cuban Yoruba ritualistic drum rhythms are intended to evoke the divine and induce a meaningful spiritual experience. If the rhythms were translated into images would the visual patterns induce a similar experience?

Traditional artistic practices such as playing a musical instrument communicate emotion directly through vibrato and breath. Digital instruments may be uniquely capable of identifying and communicating complex, transformative experiences and states of reality.

Pam Payne is an artist based in NYC who has been working with digital media since the mid-1980s. Her work explores the interaction of electronic and organic forms through video motion paintings, installations and performance. She is interested in states of consciousness and transformative human experience communicated and achieved via art and music. She earned her Master’s degree from New York University’s Interactive Telecommunications Program in 1989 focusing on video and digital systems and her BA from SUNY Potsdam in 1982 in Fine Art (Printmaking) and Psychology. She is also a trained musician with a background in dance and creative writing. In 1995 she formed Brickhaus, a company specializing in presentation design and production. Her experience includes the development of analog and digital (software) video tools and teaching in the media arts field. Pam Payne actively exhibits her artwork in the USA, Mexico and Central America and is the recipient of grants from the National Endowment for the Arts, New York State Council on the Arts, Lower Manhattan Cultural Council and The Puffin Foundation.

**Mike Phillips**

## **Really? The Incomprehensible Truth**

ABSTRACT: This paper explores the potential extension or penetration of the precarious reality bubble our senses create around us. Whilst our various sensory organs have their obvious limitations, generally issues of resolution, our ability to anticipate, guesstimate, predict and plan is the result of complex aggregation and extrapolation from limited information. On a daily basis these processes of aggregation are augmented and fed by technologies that essentially do our seeing for us – increasing resolution or providing alternative

sensory information. Whilst our biological senses have been tempered, normalised and ecivilised through millennia of creeping evolution our ability to make sense, absorb and understand the data feeds from our instruments is significantly less sophisticated. The reality we have collectively negotiated for ourselves is slowly expanding through this process of aggregation and accretion. Layers of data sediment provide the potential of an extended physicality to explore this reality we were not designed feel, or alternatively create an armour or cocoon that restricts our perception.

Mike Phillips is professor of Interdisciplinary Arts, University of Plymouth, School of Arts & Media, Faculty of Arts. He is director of i-DAT, a component of the Centre for Media, Art & Design Research, and Principal Supervisor for the Planetary Collegium. His R&D orbits digital architectures and transmedia publishing, and is manifest in two key research projects: Arch-OS [[www.arch-os.com](http://www.arch-os.com)] (now reincarnated in Perth WA in the form of the i-500 [[www.i-500.org](http://www.i-500.org)]), an “Operating System” for contemporary architecture (“software for buildings”) and the LiquidPress [[www.liquidpress.net](http://www.liquidpress.net)] which explores the evolution and mutation of publishing and broadcasting technologies.

**Clemens M. Plank**

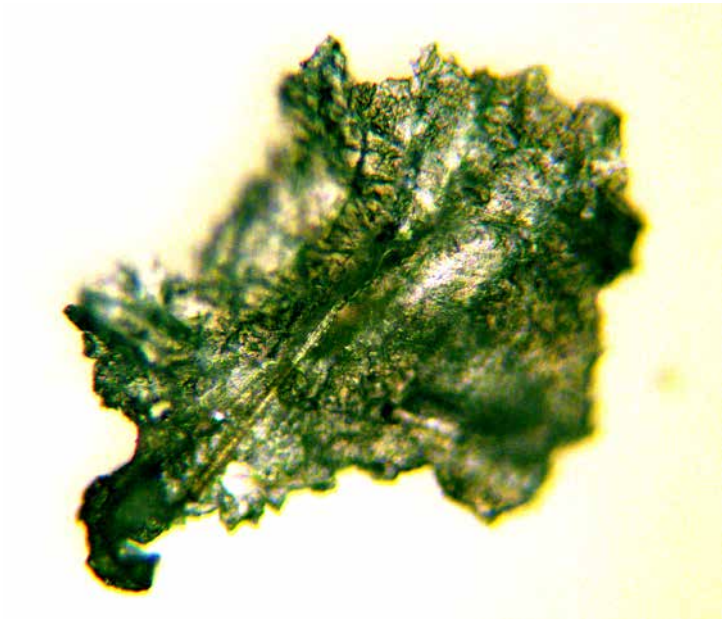
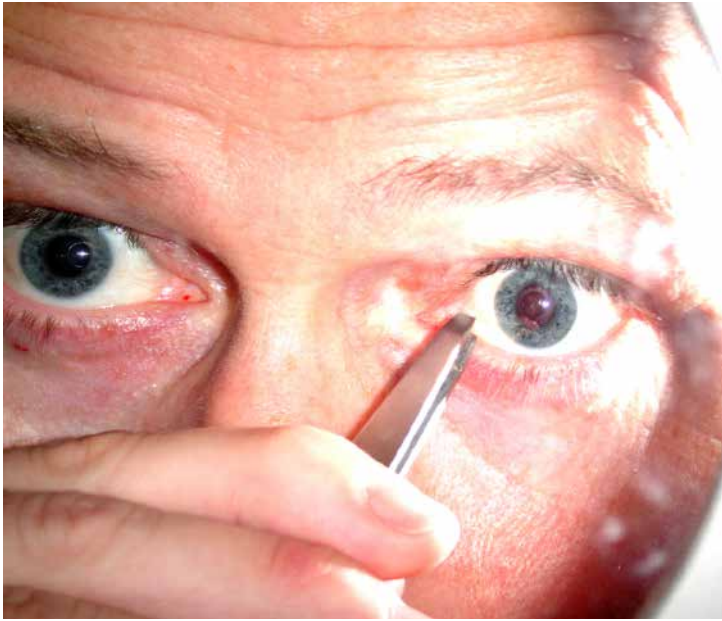
## **The Cognitive User of Architecture**

**Building a Conceptual Framework for the Exploration Between the Relationship of Architecture and its User Based on the Current Neuroscientific Debate**

ABSTRACT: This paper introduces the ongoing project “The Cognitive User of Architecture”, which investigates the relationship between architecture and user. The main thesis states that in order to receive knowledge of this relationship, the focus has to lie on the user rather than on the built environment. Accepting and validating the user as a subjectively perceiving and consciously processing “actor” on the stage which architectural environments provide, the central claim is that architecture is a consciously experienced subjective product, emerging out of the user’s emotional perception. Focusing on cognitive science as a consequence, German philosopher Thomas Metzinger’s work is examined and incorporated. In *Being No One*, Metzinger considers neuroscientific research to present a representational and functional analysis of what consciously experienced first-person perspective actually is. Metzinger’s significance lies in the development of a conceptual toolkit, interlinking the humanities with the empirical sciences of the mind.

This research paper explores the capabilities, opportunities and implications which Metzinger’s studies have for the architecture/user relationship. Therefore not only theoretical concepts based on the neuroscientific debate are presented and explained, but also interactive spatial experiments – responsive architecture – verifying theoretical concepts with supporting empirical data.

Clemens M. Plank is an architect, researcher and lecturer at the University of Innsbruck, Faculty of Architecture, where he supervises a design studio and teaches architectural theory. His academic work draws strongly on neuroscientific research, pursuing a contemporary analysis of the phenomenological experience of architecture. His real-space experiments have been exhibited at Researchers Night, Innsbruck, 2005 and 2007; VLOW, Bregenz, 2008 (Winner Award vlow08 for young researchers). He is also active in architectural practice, focusing on residential and cultural building.



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**Barbara Rauch and Michael Page**

## **Synthetic Emotions**

**ABSTRACT:** This research project maps emotions and visualises the virtual emergence of emotions. We use 3D-surface capturing devices to scan facial expressions in animals (taxidermy) and humans which we sculpt with the Phantom Arm / SensAble FreeForm device in 3D virtual space. The haptic sculpting tool produces physical feedback on the hand and arm; touching and sculpting digital data in cyberspace is still awkward, as if the virtual data was not quite real data.

Rauch established the e\_Motion Research Lab at OCAD earlier this year which resulted in a new collaboration with The RAIL Project, convened by Michael Page (OCAD). Rauch recently morphed 3D laser scans of taxidermy with a large database of the human face to show an evolution of facial expressions of emotions. The application developed to further access faces and expressions that the human face was unable to express and Rapidform printed objects allowed us to bring these composites of synthetic and real data back into the material reality.

Page explores synthetic imagery created from real-world scenes composited with artificial elements to form an interactive experience for the viewer. He has developed a device that creates camera-ready artwork for the production of auto-stereoscopic 3D hardcopy images. Other applications include the creation of 3D constructs by digitizing real-world scenes, for example human subjects in natural or studio lighting. This paper is a case study on synthetic emotions. It is a reflection on some practical work that was conducted between Rauch and Hammond at UCL in London, UK. The work progresses into a discussion about artificial expression, artificial emotion and affect. The presentation of this material asks the audience to go back and forth between digital data and physical/actual output (Digital Holography).

[Dr. Barbara Rauch is an artist practitioner and academic. Funded by the Arts and Humanities Research Council, UK, her research on 3-dimensional prints and screen-based works culminated in an exhibition/symposium at the Institute of Contemporary Arts, London and conference at the Victoria & Albert Museum, April, 2009. She was Acting Director of the "Sensory Computer Interface Research and Innovation for the Arts" research unit at University of the Arts London, UK. She is currently writing a book for the "Consciousness, Literature & the Arts" series with Rodopi Editions, New York and Rotterdam. Rauch is a key member of OCAD's strategic Digital Futures Initiative.](#)

**Julian Rennie**

## **"Real-eye-ising" the miniature**

**ABSTRACT:** In architectural design the investigation of the miniature allows the design student to calibrate the three-dimensional entirety in a method similar to how Henry Moore worked with his sculptural Marquette's. Architectural models due to their smallness in size relative to us as humans tend to be viewed from the outside, that is, they "talk" to us externally. However due to the miniaturization of digital cameras, it is now possible to place the camera inside the model, and take photographs from the interior looking out. The images allowing the design student to get some sense of the "feeling" of the interior space. The built models react to natural light just like real buildings do, so with careful manipulation of scale indicators, (or even the

removal there of), the resulting two dimensional images can look very “real” to the eye and brain. There is some type of phenomena at work here, the compression of miniature 3D into pixelated 2D can produce some poetic results.

With our ongoing and extensive daily engagement with the cyber-world, in equal and opposite measure, our desire to physically engage and partake in tangible experiences that require us to use our human abilities to see, smell, hold and touch in real and visceral ways, is increased. Building actual miniature models is a haptic and tactile activity that satisfies our human need to physically make things. Together with the captured interior digital images provide the design student with a quick and economic technique to produce some captivating presentation work.

This paper reports on student outputs from classes held within Unitec, Auckland, New Zealand, where design work was done directly in 3D form, (i.e. with minimal or no use of 2D drawings), and shows the results stemming from such a technique: taking some of the “real,” in combination with the capturing of some of the “virtual” realm to produce some poetic images which can be very compelling. The accompanying text speculates on this phenomenon and positions it within the history of conceptual model making, perception and photography, citing links within a wide range of writings.

Julian Rennie holds a B.Arch. (Honours) (1983) and a Grad. Dip. in Higher Education from Unitec, Auckland, New Zealand (2009). He was finalist and Prize winner in Housing New Zealand’s “The Starter Home Design Competition,” 2009; and was awarded Highly Commended Prize in Housing New Zealand’s “100 Years On Design Competition,” 2005. Conference/Presentations/ Exhibitions include “Being There,” Toronto, Canada, April 2010; “Fly on the Wall: Can the presence of the student during the assessment process help in their learning?” connectED 2010 Conference, Sydney, Australia, June–July 2010; Group Exhibition of the Entries for Positively Wellington’s Waterfront, at Shed #6: Blue Sky Outer-T, Architectural Competition, 2009; Group Exhibition of the 10 Winning Entries for Housing New Zealand’s “The Starter Home Design Competition,” at Parliament Buildings, Wellington, 2009.

**Clarissa Ribeiro**

## **Spaceless Spaces: From Impression to Imagination**

ABSTRACT: Collective practice in digital arts and interrelated fields, defines a kind of practice that implies the interaction of several actors in processes that could have generative characteristics. Some artworks produced collectively, like interactive installations, for instance, share with these creative processes similar characteristics. The complex perspective brings the opportunity of considering and studying both, – the collective practice and the work generated – as complex adaptive systems. In our proposition of a methodology to study this sort of complex, the specificity is related to the selection criteria adopted that is based on the concept of *storied spaces*. It is an artifice to build a network of emergent meanings, helping to visualize the system infra-structure itself: the instances of organization and the relations between the system’s elements, to mention a few. From the sociology of space, it is possible to reflect on spaces as constructions from action of living entities in dialogue with technology/media, constituted in processes of perception, recall, or ideation to manifest itself as storied structures. According to Baskin (2008), all of us experience life as a space defined by the stories we’ve accepted to explain the events that happen around

us. This line of thought has some aspects in common with hermeneutic approaches that incorporate complex sciences logic to observe the emergence of meaning and consciousness in reading processes (Rasmussen, 2002). In hermeneutics, meaning is understood as something that is constructed as a boundary between the actual and the possible, emerging from the storyteller's particular choosing and sequencing of events. For Cohen (2003), the ability to create apparently contradictory meanings from the same reality is a central quality of all complex systems. The idea of storied spaces could be helpful in an exercise of capturing these placeless places, spaceless spaces that give the self and the system visibility to themselves; from the flow of information to the construction of memories, making reality really real in the blurred frontiers from impression to imagination (Condillac, 1754).

Clarissa Ribeiro is a PhD researcher at ECA/USP - University of Sao Paulo, and a visiting postgraduate research member of the CAiiA-Hub, Planetary Collegium, based in Plymouth, UK. At ECA/USP, she is a member of the Digital Poetics group, headed by her research supervisor, Professor Gilberto Prado. Director of the Double collective and artistic director of Instants of Metamorphosis, the aim of her PhD research is to develop a methodology based on systemic measures of complexity and organization to study collective creative processes and artworks in digital arts and interrelated fields.

**Paulo Rodrigues**

## **Musical Variations on the Theme of Reality**

ABSTRACT: Although aware that art is in essence a constructed reality, artists, and performing artists in particular, aim frequently at creating a sense of authenticity and aspire at communicating and engaging in their performances as if in real reality. Authenticity is a question of coherence of elements in the work of art but also something that has an inner spiritual aspect, which is possible to grasp but difficult to define. In this paper Paulo Rodrigues looks at his experience as a musician to try to understand what is really real in the fictional world of Art.

Paulo Maria Rodrigues is a composer and performer, working on the fields of theatrical music and music education. After completing a PhD in Biochemistry and Applied Genetics in the UK, he shifted his professional interest to multidisciplinary artistic creation and started Companhia de Música Teatral, an innovative group based in Portugal. During the last four years he coordinated the Education Service of Casa da Música in Oporto, having created a broad program of music experiences for a wide range of audiences. He is currently resuming his professorship position at the University of Aveiro and joining the Planetary Collegium as an Associated Researcher.

**Emily Schleiner**

## **Divination2.0**

ABSTRACT: divination2.0 is a computer program and art installation that gives divination readings to peoples' digital, or computer-related selves. Some goals of the project are to: 1. demystify computers, 2. understand our relationship to computer hardware vs. Web 2.0 phenomena and, 3. make possible a meditative experience

with a computer. Human habits are changing because of the intimate and constant use of technology, and there are far-reaching effects on how we communicate – and how we feel about and interpret these changes. Debates within media theory discuss to what extent computing technology is a distancing and hierarchical tool, or whether it creates space for a new kind of sociability. Divination2.0 holds up computer parts and technology-related social changes against a simple system of divination; with this we can look at these Web 2.0-related subtleties in the form of personalized “readings”. In this text as it related to divination2.0, the aim is to explore computing technology’s ability to make meaning from the standpoint of new media studies. This project was structured through a process of stripping down and reusing conventional systems of divination such as Astrology and Tarot. This paper is an exploration of topics that surface in the divination2.0 project and a description of how it was manifested as a performative installation in April 2010. The divination2.0 project will take more forms that comment on divination as a meaning-making structure. The future of the project includes a comprehensive interactive website.

Piñatas, animal costumes, and sight-specific-demonstration-videos are some tools Emily uses to create humorous and irreverent conceptual art. With an eye towards metaphor, her interest in patterns and people is expressed with symbolic imagery, performances, large-scale-community-projects, sculptures, and short-films; a mix of material that is dipped in a pot of politics, technology, and ephemerality. She does ensemble-style collaborations with artists from multiple disciplines, partaking in the emergent creative process of group art-making, and is currently flocking and herding her way through Brooklyn College.

**Ellen Sebring**

## **Picture Pathways as Threads through Time From Opium to Boxers, China 1838–1900**

**ABSTRACT:** It is not unusual for historians to trace the tensions that fueled the mid-19th century Opium Wars in China to the ultimate domination by foreign powers that occurred during the brief, but far-reaching Boxer Uprising of 1900. Understanding China’s position in the world of 1900, however, can be seen from a new vantage point, with unknown results. “Image-driven scholarship” is a developing research paradigm unique to the digital environment that fronts images as the primary source material in social/cultural historical inquiry. The research process begins with search and collection, continues with the identification of unique visual “fingerprints” for events, and grows in complexity and depth as the connection of visual threads between events is studied.

Images from the historical record coalesce around an event and provide a window to the past rich with themes for further exploration. In another evolving aspect of image-driven scholarship it is possible to “zoom out” for a meta-view and look at how images connect events over time. Following these “picture pathways” across time is an innovative way to look at a period of history and it is as yet unclear what will emerge. Can events in China in the second half of the 19th century be visualized laterally, as “threads through time?” What thematic pathways can be seen? Is it possible to represent picture pathways as concise and flexible nodes that are useful tools for inquiry? Is there a dimensional aspect of visualization that encompasses a “point” within a moment as well as a “connective line” over time? Will original, previously unseen topics and



historical themes emerge? Finally, what impact does a visually-based historical approach have on the ways in which learning occurs and how the past is imprinted in contemporary consciousness?

Ellen Sebring has been Creative Director of Visualizing Cultures at the Massachusetts Institute of Technology since the project's founding in 2002. She earned the Master of Science in Visual Studies degree at MIT and was a Fellow at MIT's Center for Advanced Visual Studies for six years. She is currently a PhD student at CAiiA at the University of Plymouth, England. Visualizing Cultures received the National Endowment for the Humanities award in 2005, was exhibited at Stephen Sondheim's "Pacific Overtures" on Broadway, and is in the permanent collection of the US National Archives. The project's first conference was held at Yale University in April 2010 and second conference will be at Harvard University in May 2011. As President of Botticelli Interactive, Inc., 1997-2002, Sebring designed interactive media for museums, including the "Titian Kiosk," awarded The New York Festivals' World Medal; an interactive television show commissioned by the Institute for Civil Society; "Star Festival," Best of Show at MacWorld Expo; and "Star-Network," starring George Takei, awarded the Distinguished Award at the Multimedia GrandPrix 2000, Tokyo. Selected for the prestigious Directing Workshop for Women at the American Film Institute to direct a fiction film in Hollywood, Sebring has also directed many documentaries on the arts. Awards include The Artist's Foundation Fellowship for Video Art, Canon Europa prize at the WorldWide Video Festival, Holland, and Banff Centre, PBS, NEA, NEFA, Meet-the-Composer and NEFV Foundation grants and national broadcasts by WGBH and WNET. Trained as a musician at Indiana University and the Hochschule für Musik und darstellende Kunst in Vienna, Sebring explores the relationship of sound and image in her work.

**Paul Sermon and Charlotte Gould**

## **Liberate your Avatar; The Revolution Will be Social Networked**

**ABSTRACT:** This paper brings together the practice-based creative research of artists Charlotte Gould and Paul Sermon, culminating in a collaborative interactive installation that investigates new forms of social and political narrative in multi-user virtual environments. The authors' artistic projects deal with the ironies and stereotypes that are found within Second Life in particular. Paul Sermon's current creative practice looks specifically at the concepts of presence and performance within Second Life and "first life", and attempts to bridge these two spaces through mixed reality techniques and interfaces. Charlotte Gould's *Ludic Second Life Narrative* radically questions the way that users embody themselves in on-line virtual environments and identifies a counter-aesthetic that challenges the conventions of digital realism and consumerism.

Through practical accounts of recent projects the authors will explore issues of virtual embodiment and identity in relation to presence and social change as experienced and performed in telematic and virtual environments. At what point is the participant embodying the virtual performer in front of them? And have they become disembodied in doing so? A number of interactive Second Life artworks are looked at in detail, to provide answers to these questions. Stemming from Paul Sermon's telematic experiments in the early 1990s to current collaborative site-specific user-generated presence and performance in

“Second Life” that polarizes fundamental existential questions concerning identity, the self, the ego and the embodied avatar.

Sermon and Gould’s collaborative practice aims to examine the notion of telepresence in Second Life and first life spaces through a blurring between “online” and “offline” identities, and the signifiers and conditions that make us feel present in this world. This artistic practice questions how subjectivity is articulated in relation to embodiment and disembodiment. It explores the avatar in relation to its activating first life agent, focusing on the avatar’s multiple identifications, such as gender roles, human/animal hybrids, and other archetypes, identifiable through visible codes and body forms in Second Life.

Since the early nineteen-nineties Paul Sermon’s practice-based research in the field of contemporary media arts has centred on the creative use of telecommunication technologies. Through his unique use of videoconference techniques in artistic telepresence applications he has developed a series of celebrated telematic art installations Awarded the Prix Ars Electronica “Golden Nica”, for the hyper media installation “Think about the People now”, in 1991. Received the “Sparkey Award” from the Interactive Media Festival in Los Angeles, for the telepresent video installation “Telematic Dreaming” in 1994. Charlotte Gould has developed a number of interactive environments that explore user identity and the notion of a floating narrative. She is currently developing location specific work in which the user becomes an active participant in the narrative and explores methods of user driven content. Charlotte Gould has developed projects for the BBC Big Screen in Liverpool, the Glastonbury Festival and the ISEA 2009 Belfast, she has presented at ISEA 2008 Singapore and at DAC09 in California.

**Diana Reed Slattery**

## **Ecstatic Significations: Psychedelics, Language, and Realities**

ABSTRACT: Psychedelics can enable a broad and paradoxical spectrum of linguistic phenomena from the unspeakability of mystical experience to the eloquence of Mazatec curandera Maria Sabina. Interior dialogues with the Other, whether framed as the voice of the Logos, an alien download, or communion with ancestors and spirits, are relatively common. Visual languages appear: Allyson Gray’s “secret writing;” Terence McKenna’s multidimensional, synaesthetic, self-transforming linguistic objects; Dennis McKenna’s description of a ring of violet trans-linguistic matter; Jason Tucker’s “Actual Contact,” and the Glide symbolic system of three-dimensional, transforming visual metaphors introduce novel ways of making meaning, beyond our familiar “natural” languages. Examining psychedelic experiences of language, a new perspective on the relations of language, consciousness, and reality emerges. Embedded in cocoons of culture woven between ourselves and nature, our realities are symbol-laden and symbol-driven. Psychedelics can propel one outside the veil of natural language, to a place exterior to culture and cultural conditioning. From this vantage, “natural” languages can be perceived as more technological than natural, the software of social intercourse and civilization. The linguistic phenomena arising in altered states are means of navigating and communicating within those realities, and between psychedelic realities and baseline states. The ontological questions – What is really real? And what is Reality anyhow? – arise time and again in the lived experience of multiple realities, turning the psychonaut into an ontological engineer and xenologist.

Diana Reed Slattery (USA) is a novelist, psychonaut, and video performance artist. For the last 10 years, she has been developing a project centered on the exploration of the visual language, Glide, which appears in her sci-fi novel *The Maze Game*. The LiveGlide software, is a three-dimensional interactive calligraphic writing instrument for Glide forms. Glide, according to its myth of origin in the story-world, is a psychedelic language. States of extended perception were used in the conception, design, and implementation of LiveGlide, in practice and in performance, and in learning how to read the writing produced. Psychedelics provided the means to emerge from the cocoon of natural language into what could be understood as both a pre-linguistic state of direct apperception of the world around and inside us, and as a post-linguistic (post-natural language) realm of evolutionary forms of language. Glide has been described, screened and/or performed live at art, technology, and consciousness conferences in Tokyo, Beijing, Sao Paulo, Bilbao, San Jose, Plymouth, Perth, Siggraph (LA) and most recently, at the World Psychedelic Forum in Basel. Fulldome screening and performances have been given at the Atlantic Center for the Arts in Florida, the Schenectady Museum, The Plymouth Immersive Vision Center, and the Children's Museum of Science and Technology in Troy. Flat-screen performances have been given at the Children's Interactive Museum in Middletown, Issue Project Room in Brooklyn, and the Center for Sustainability at Penn State.

**Simona Sofronie**

## **Agenda for an Innovative Assessment Technique**

ABSTRACT: In order to act effectively in the environment, to locate themselves or other objects in space, to get to various destinations, to communicate spatial knowledge or to interpret navigational instructions, people need mental representations of space, the so-called environmental images. Following the cognitive processes of constructing and activating the environmental images, it has been observed that usually people are not aware of their perceptions. They experience the environment in an almost unconscious way, paying little or no attention to the setting. In general, the process through which people are "seeing" and "reading" an environment is hardly accessible to consciousness. (Kaplan, 1991, p. 23)

Furthermore, the claim is frequently made that people do not take part in the planning process of their environment until the very last moment, when they are confronted with certain issues, such as unwelcome developments. Unfortunately, it is usually the last phase of the planning process that makes people become aware of the changes that are about to take place. Given the inhabitants' lack of awareness of their surroundings, and their lack of participation in the planning process, we propose a ubiquitous urban game to engage people in perceiving and valuing their environment, by assessing their environmental images. At the same time, this game could inform planners of the knowledge acquired from local sources, the so-called "genius loci" of places. The purpose of this paper therefore is to deliver an agenda for such an innovative assessment technique that would visualize environmental images as representations of the way people use, perceive and conceive their environment.

To define such an agenda, a holistic theoretical framework of the concept of environmental image is provided, by integrating three fundamental paradigms which reveal the essential features that mediate the acquisition of environmental knowledge. These paradigms are environmental cognition, sensory perception and phenomenology. Examination of assessment techniques developed within these paradigms will lead

the way to defining an agenda for an innovative tool to promote spatial learning by raising cognitive and perceptual awareness, and by engaging participants in deliberate spatial exploration, while examining the multiplicity of sensory and informational modes of experiencing the environment.

Simona Sofronie graduated architecture in Greece and she is currently a PhD researcher in Urban Design at the PHL University College and Hasselt University, Belgium. She is working on the development of a ubiquitous urban game that visualizes mental maps as representations of the way people use, perceive and conceive a given spatial environment. Her interests reside in mobile/location-based applications in the urban space, design for social practices and serious-fun gaming. She is part of the research group ArcK at PHL, focusing on the physical/social/cognitive impact of mapping on the urban space.

**Marko Suvajdzic**

## **Cultural Roles and Identity – An Interactive Upgrade**

ABSTRACT: In the paper “Cultural Roles and Identity – An Interactive Upgrade”, I analyze the role of social media and the effect that it has on the cultural identity of a contemporary human being. Also, I expand the argument to encompass the limited availability of cultural roles within a given society pre- and post-Internet era. Finally I analyze a new phenomenon caused by this shift in which one is presented with an entirely new set of roles to choose from, or to become into, while being online (connected to the Internet).

The seed of New Media has germinated into a New Social Dimension around the turn of the century, more specifically between 1993 with the creation of the first web browser, and 2004 with Tim O’Reilly coining the term “Web 2.0”. The existence of this New Social Dimension has fulfilled itself through the forces of the sharp and continual decrease in the prices of technology, the miniaturization of technology, and the capability to easily connect to the grid (Internet) from portable mobile devices. Once connected to the grid, a person’s geographic location ceases to play the monopolistic and defining role in determining one’s personality, and in turn ceases to define how we interact and communicate with others. It is the online reality where one often feels more freedom in expressing oneself. It is online that one can associate with a community of like minds regardless of geographical distance. It is online and within the New Social Dimension that our own reality often seems really real. It is during this period of around the turn of the 21st century that humans have created a new, synthetic, infrastructure that gave rise to the existence of the New Social Dimension. This new aspect of our reality is different, but complimentary to the already existing reality of our bodily senses. These two dimensions of our reality will never substitute each other; rather, they will continue to add upon each other, and in this manner further diversity to the scope of existence that human beings are capable of perceiving.

Marko is a diverse thinker with 15+ years of experience in the creative production space, and with 6+ years of professorial status. His intellectual involvement includes a wide range of projects, from working on AI-intensive video game titles (PF.Magic/Mattel), and from co-founding Internet startups with Internet industry visionaries like Andrew Keen, to founding his own creative production studio, IQ Studios, Inc. Marko has traveled around the globe, has lectured at conferences and art shows in the USA, UK, and Serbia; and is currently an Associate Professor and Department Head at the Academy of Arts in Belgrade, Serbia.

**Victoria Vesna and Siddharth Ramakrishnan**

## **Metamorphosis of the Human Animal: Hox Zodiac**

**ABSTRACT:** The Homeobox (hox) genes essentially define body regions in all animals including humans – responsible for determining two arms, two legs, one nose and so on. This gene is shared by all living beings – from the snail to the elephant to humans – and it can now be manipulated into transforming certain parts of the body into others. We have observed such transformations, such as that of an amputated antenna into a limb, as far back as 1901, termed neomorphosis, and it has only recently re-emerged as an area of scientific study. Spontaneous transformations and induced regenerations are fascinating research topics that are fast becoming a reality; some scientists are postulating that it may be possible that the hox gene could be central to limb regeneration in the future.

This paper will present the Hox Zodiac project, which attempts to introduce this subject and push the ideas further into speculation of mutation (i.e. humans and animals) into creatures that may resemble the mythical beings we know as fiction. The starting point of this wheel of life is the Chinese zodiac, consisting of twelve animals that are associated with humans. In the process of development, it became interesting to note that half of the animals on the wheel are those used in the lab – rat, pig, monkey, dog, sheep and rabbit. The ox, tiger, horse, snake, and rooster are considered mythical and the dragon could easily fall into the category of a genetically modified creature that is to re-emerge in the future. Since medical and scientific testing on humans is strictly forbidden, scientists have virtually shifted to animals for all such studies. Thus, everything that is used on our bodies and minds is directly related to the animal kingdom. The pig heart and rat mind are symbols for the paradox of science that uses animals in ways that is at once disconnected while subconsciously connecting us more than ever by using research results in medical and food products we consume.

Although the controversy of using animals in labs is widely known and often violently opposed, the artist in the lab questions how this research impacts our collective consciousness, especially with the growing trend of brain-computer interfaces and particularly synthetic telepathy. This relationship of the human to the metaphorical meaning of the animal kingdom brought to mind Jung's research on metaphors, symbolism and archetypes, which became central to the Hox Zodiac. This paper focuses on the first animal in the Hox Zodiac, the (transgenic) rat.

Victoria Vesna is a media artist, professor at the department of Design | Media Arts at the UCLA School of the Arts, director of the UCLA Art|Sci center and of the UC Digital Arts Research Network. Her work can be defined as experimental creative research that resides between disciplines and technologies. She explores how communication technologies affect collective behavior and how perceptions of identity shift in relation to scientific innovation. Her most recent installations – Blue Morph, Mood Swings and Water Bowls, all aim to raise consciousness around the issues of our relationship to natural systems. Other notable works are Bodies INCorporated, Datamining Bodies, n0time and Cellular Trans\_Actions. She has exhibited her work in 18 solo exhibitions, over 70 group shows, published 20+ papers and given a 100+ invited talks in the last decade. She is recipient of many grants, commissions and awards, including the Oscar Signorini award for best net artwork in 1998 and the Cine Golden Eagle for best scientific documentary in 1986. In 1984 she was awarded the Fine Arts Diploma of the Faculty of Fine Arts, University of Belgrade, Yugoslavia, and in 2000 she received the PhD of the University of

Wales (Centre for Advanced Inquiry in Interactive Arts). She is the North American editor of *AI & Society* and author of *Database Aesthetics*.

<http://vv.arts.ucla.edu/biography/>

**Claudia Westermann**

## **Towards a Poly-Valued Logic of Another Real Dream**

ABSTRACT: Selfhood is the foundation of all knowledge – as the foundation of permanence in change – as well as the principle of utmost diversity (You.)(Instead of the non-ego – You)  
(Novalis. Notes for a Romantic Encyclopaedia)

There is some truth in the mystic fairy tale that tells the story of a tower to be built higher and higher to never reach the heavenly beyond but instead to mark the beginning of misunderstanding. Many towers have been built. There will be more, some higher ones in the future. Yet, they may never reach beyond. They may never reach out to You – beyond a two-valued logic that made objective Being coincide with subjective Thought in heaven. From this landscape You were logically excluded. Objectively one can conclude that misunderstanding was logically included.

Yet, there is another reality to be found.

It plays the symphony of a higher order and reflects a future's present: I have been created to always become what you desire me to be. I am the sole opportunity, a mere offer to you – to follow the traces that resonate your voice – your unknown voice. I do not wish to speak but your speech. I want to dissolve in your desires, want to be possessed, be made all your own. It is you – the unknown addressed – who is my orientation. I come as a perfect gift, without expectations.

All that which resonates, resonates in you.

You are the unknown addressed to become creator and the author of another still hidden story to be told in a future present. You are the unknown addressed within inhabitable theories that can be grasped in present time exclusively. You are the unknown addressed to become creator and then to dissolve in another present, another utopia, another architecture, that will be home for someone else unknown.

You make reality real.

This paper develops on the idea that the poly-valued logic of a concept of inhabitation is at the core of a perception of reality as real. One might speak about it, however, on the basis of a discourse that is capable of speaking the unknown.

Claudia Westermann is an artist and licensed architect holding degrees from the University of Karlsruhe and from the School of Design at the ZKM in Germany. Since 2003, Claudia Westermann has been member of the Planetary Collegium (CAiiA) conducting trans-disciplinary research under the supervision of Prof. Roy Ascott. She currently holds the position of Assistant Professor in Architectural Design at the Vienna University of Technology, Austria. Claudia Westermann's works have been exhibited internationally including at the Venice Biennale for Architecture, the Moscow International Film Festival,

Isea Symposium for the Electronic Arts in Japan, and the ZKM in Karlsruhe. Recent publications include “The Architect’s Circle, or The Geometrical Incline of Truth” in *New Realities: Being Syncretic* (Springer, 2008), and “An Entry without Inscription, a Letter, and a Map” in *Orientation \_ Dis-/Orientation* (Lars Müller, 2009).

**Xiaoying Yuan**

## **China – Living in Between Real and Unreal**

ABSTRACT: The current presentation, as part of the author’s PhD research on the topic of “Media Arts and Human Ecosphere”, focuses on Chinese artists’ research on the theme of “Reality”.

We will track back to the genesis of the research on “Reality” in China, Virtual Reality (VR) technology, with an overview of the development of “State Key Projects” at major academies and institutions. By relating different artistic projects in Second Life’s virtual platform, we will give an analysis of Chinese artists’ investigation of “Real” and “Unreal”, their search for identity and cultural roots, and their tendency to merge the real world with the virtual world by choosing to live online.

Xiaoying Yuan is a PhD candidate of Planetary Collegium, under the direction of prof. Roy Ascott

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# MAKING REALITY REALLY REAL

美の状態は不明である。我々の日常の経験の固体客観世界は振動非物質的な、我々は認識の表現、量子現象のものとして決議の別のレベルです。これは、問題はもはや問題ではないので、多くの、おそアアとしてはもう問題ではないことの問題があります。

Consciousness Reframed

Ascott/Gangvik/Jahrman (eds.)



	DATE	EXHIBITIONS	CONCERTS	
OCTOBER	7		DOKKHUSET: Tomoko Sauvage   Antoine Schmitt / Jean-Jaques Birgé. <i>OPENING CONCERT</i>	
	8		DOKKHUSET: Staalplaat Soundsystem   Roberto Paci Dalò   Audiovision: Karl Bartos/Mathias Black BABEL: Sohnified. <i>EXHIBITION OPENING</i>	
	9		DOKKHUSET: artificiel   Pierre Bastien   incite/ TRØNDELAG CENTRE FOR CONTEMPORARY ART: KAOS. <i>EXHIBITION OPENING</i>	
	10			
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	19			
	20	GRÅMØLNA	TRØNDELAG CENTRE FOR CONTEMPORARY ART	BLÆST: Origami Bøe   Kai Kobi Mikalsen   Alexander Rishaug
	21		BABEL ART SPACE	
	22			THEATERCAFEEN: Klubb Kanin: Tore Boe
	23			
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NOVEMBER	1			
	2			
	3			
	4			GALLERI KIT: PIKSEL NIGHT: Pikel Soundsystem   PikelSaver
	5			THEATERCAFEEN: Klubb Kanin: Hands Up Silver Spacesuit   Flymodus   Killing Fields   Lumisokea
	6			VERKSTEDHALLEN: PNEK NIGHT: Greg Pope   Bruce McClure
	7			

	CINEMA		WORKSHOP	CONFERENCE
	NOVA 2	NOVA 3		
			ReMida Oct 4-6: Trondheim Philarmechanic Cobra Youth Orchestra	
				DOKKHUSET: New.Brave,World!
				DOKKHUSET: Territories, Temporalities, Transmissions: ART, TECHNOLOGY & THE PUBLIC SPHERE
			ReMida: Komputer + Kunst = Kreativitet (K+K=K)	
	18.00 Metropolis			
	20.30 Metropolis	18.30 Things to Come		
		20.30 Things to Come		
			ReMida: Acoustic Laptop Workshop	
	18.00 Moon			
	20.30 Moon	18.00 2001: A Space Odyssey		
		21.30 2001: A Space Odyssey		
	18.00 Blade Runner			
	20.30 Blade Runner	18.00 Solaris		
		20.30 Solaris		
			TEKS: Iphone / Ipad Developer Workshop	
				SCANDIC SOLSIDEN: The 11th Consciousness Reframed Conference MAKING REALITY REALLY REAL

# Meta.Morf 2010

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[www.babelkunst.no](http://www.babelkunst.no)

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