

# DIGITAL ART WEEKS



## "The Meeting Point between Art and Technology at ETH Zurich"

**Zurich, Switzerland, Wednesday 12th to Saturday 15th July, 2006**

The DIGITAL ART WEEKS program is concerned with the application of digital technology in the arts. Consisting of symposium, workshops and performances, the Digital Art Weeks program offers insight into current research and innovations in art and technology as well as illustrating resulting synergies in a series of performances during the Digital Art Weeks Festival each year, making artists aware of impulses in technology and scientists aware of the possibilities of application of technology in the arts.

Digital Art Weeks Chairs: Jürg Gutknecht, Art Clay, Stefan Müller Arisona  
Organising Institution: ETH Zürich

Homepage: [www.digitalartweeks.ethz.ch](http://www.digitalartweeks.ethz.ch)  
Contact: [daw-info@inf.ethz.ch](mailto:daw-info@inf.ethz.ch)

## After DAW 2006

Digital Art Weeks 2006 is already over. We thank all performers, artists, speakers, volunteers, sponsors, and participants. You all helped to make this event a success. The DAW homepage probably will remain unchanged until we start working on DAW 2007. Don't forget to subscribe to the [mailing list](#) in order to receive latest news.

## Admission

### Symposium

- Restricted to registered participants. → [Register Now](#)
- Online registration: CHF 150.-
- Registration during the DAW: CHF 200.- (for three days) or CHF 75.- (for a single day)
- Registration for ETH students during the DAW: CHF 50.- (for three days)

### Digital Parcours

- Free Admission

### Evening Events

- Free for registered participants

- Events at Cabaret Voltaire: CHF 10.-
- Events at Kunstraum Walcheturm: CHF 15.-

## Soundscapes

- Free Admission

## Latest News

### \*China Gates Movie

A movie of the China Gates performance at Zurich Platzspitz is now available. → [Quicktime / H.264 Movie](#)

### \*Proceedings are Online!

The DAW06 proceedings (papers and posters) are now online. → [Proceedings Page](#)

### \*Zurich Transport Vehicles for Free!

At <http://www.zuerirollt.ch/> you will find more information on bicycles, electrobikes, etc, that are available for free (on a daily basis) at different locations. In case of good weather, this is an excellent option as you can reach most DAW venues within 5 minutes by bicycle.

### \*DAW on Air!

ETH's campus radio will broadcast interviews with artists and researchers during DAW. → [Campus Radio Online](#)

## The Digital Art Weeks Mailing List

To get news and information about the Digital Art Weeks, please subscribe to our public mailing list [here](#).

The Digital Art Weeks 2006 are supported by:



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August 02, 2006, at 08:49  
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<http://www.jg.inf.ethz.ch/wiki/DAW/Front>

# DAW06 PARTICIPANTS

- **Amy Alexander** is a software and performance artist and software-yapper (occasional speaker, writer, curator, etc.) who has worked in film, video, performance, music and UNIX systems administration as well as in digital media art. She is currently Assistant Professor of Visual Arts at the University of California, San Diego. She started making digital media art in 1995 and net art in 1996. Much of her recent work has been in live performance and software art (often at the same time), playing with the overflow between work and leisure life. Amy is one of the founder/developer/moderators of the Runme.org software art repository (2003-present). She's also a member of the TOPLAP livecoding audio-visual performance group (2004-present). <http://deprogramming.us/ai/>
- **Julie Andreyev** is a Vancouver-based new media artist whose work is influenced by popular entertainment, car cultures, and interactive, mobile technologies. The most recent projects involve multi-media interactive cars. Her work has been shown across Canada, in the US, Europe and Japan. Her work was nominated for a BAFTA Interactive Arts Installation Award and received a Project Award from MAD '03NET, Spain. Andreyev has received grants from The Canada Council, BC Arts Council, Foreign Affairs Canada, and from the Social Sciences and Humanities Research Council of Canada. She is also Associate Professor at Emily Carr Institute. <http://www.eciad.ca/~jandreyev>
- **Jan Borchers** is full professor of computer science and head of the Media Computing Group at RWTH Aachen University. With his research group, he explores the field of human-computer interaction, with a particular interest in new post-desktop user interfaces for smart environments, ubiquitous computing, interactive exhibits, and time-based media such as audio and video. Before joining RWTH, he worked as assistant professor of computer science at Stanford and ETH Zurich. He received his Ph.D. in computer science from Darmstadt University of Technology in 2000, and is a member of ACM, SIGCHI, and GI. <http://media.informatik.rwth-aachen.de/borchers.html>
- **Linda Cassens Stoian** lives and works in Basel (CH). An artist, theorist and associate researcher at the University of Art and Design Basel, her recent experience includes exploring 'the situated body' as a contextual-based methodology for artistic research. She received her M.A. (1994) at the Gallatin Division of New York University completing an academic investigation of landscape as a performative element. Parallel with the writing of her thesis, she created a series of performances in gardens in the Lower East Side of Manhattan. She also studied architecture at The Cooper Union School of Architecture and worked for a number of years in the field. Since 1987, she has realized a wide variety of art projects in the USA and Europe exploring the way that people and their surrounds are in dynamic interaction. She frequently writes about performative aspects of art and architecture. <http://www.situated-body.net>
- **Art Clay** was born in New York, lives in Basel, Switzerland. He has worked in Music, Video & performance. He regards himself as a specialist in the performance of self created works with the use of intermedia. Appearances at international festivals, on radio and television in Europe, USA, Canada, and Japan. He has written works for newly invented instruments of his own design and for traditional acoustic and electro-acoustic instruments. Recently, his work has focused on large-scale performative music-theater works and public art spectacles using mobile devices. He is Artistic Director of the 'Digital Art Weeks' Program held at the ETH in Zurich. <http://mypage.bluewin.ch/artclay/>
- **Roland Dahinden** studied trombone and composition at Musikhochschule Graz (Erich Kleinschuster, Georg F. Haas), Scuola di Musica di Fiesole (Vinko Globokar),

Wesleyan University Connecticut (Anthony Braxton, Alvin Lucier) and Birmingham University England (Vic Hoyland). As a trombonist, he specializes in the performance of contemporary music and improvisation/jazz world wide. Composers such as Maria de Alvear, Anthony Braxton, John Cage, Joelle Léandre, Alvin Lucier, Chris Newman, Pauline Oliveros, Christian Wolff amongst others wrote especially for him. Since 1987, he works in the duo with Hildegard KleeB and since 1992 together in the trio with the violonist Dimitrios Polisoidis. As a composer, he collaborated with visual artists Andreas Brandt, Stéphane Brunner, Daniel Buren, Rudolf de Crignis, Sol LeWitt amongst others as well as with the architects Morger & Degelo, and with the author Eugen Gomringer. Exhibitions with sound installations and sculptors in Europe and America. <http://www.roland-dahinden.ch>

- **Johnny De Philo** (Prof. Golding) is a working philosopher and artist. She is attracted to the sensuous logics slipping in and amongst aesthetics, media arts, and mathematics under the rubric of "visual/acousticpoetics". Installation/filmand video work have been shown throughout the UK, Europe, Western/Southern Africa and US galleries/contemporary arts institutes. Currently holds the Chair in Philosophy of the Visual Arts and Communication Technologies and is Programme Director for the postgraduate New Media Arts programme: Critical Studies, New Media and the Practising Arts, University of Greenwich, London. <http://www.gre.ac.uk/~gs04>
- **Ian Dunning** has been working with complex multi-media installations for the past two decades, using the computer as a tool for generating data fields and, most recently, real-time interactive environments. Since 1980, he has exhibited in more than 90 shows and has had more than 70 catalogues and reviews published on his work. His work has been featured on CNN, The Discovery Channel and CBC's Brave New Waves. Solo shows include major installations at the National Gallery of Canada, Ottawa, Walter Phillip's Gallery, Banff Centre, Banff, Rutgers University, New Jersey, York University, the Contemporary Art Gallery, Vancouver and Optica, Montreal. His work has received numerous awards including grants from the Daniel Langlois Foundation, SSHRC, the Canada Council and the Alberta Art Foundation. He is represented in many collections including the National Gallery of Canada, Ottawa and the Museum of Modern Art, New York. He currently is the Chair of the Media Arts and Digital Technologies Programme at the Alberta College of Art and Design in Calgary. <http://www.ucalgary.ca/~einbrain/>
- **Stefan Heinrich Ebner** (D) was born in Freiburg in Breisgau, Germany and lives in Berlin. His output includes work in painting, text based work, social plastic into newer forms of art regarding space, time and architecture. His photographic work concerns architecture and its representation and has been termed "Bildarchitektur" and focuses on the perception of time and movement on the two dimensional plane. His concrete space structures, termed by him as "Raumfalten" show a strong interest in aesthetic questions of modern schools of architecture. Recently, the use of the computer has caught his attention and has been used as an artistic tool to research and create color-field animations pictures for wall space and projected images in open spaces, which border between concrete und virtual spaces.
- **Kristina Eschler**, (UrbanWhispers) is a conceptual based designer of new media, motion graphics and visual communication and graduated 2004 at the Bauhaus University of Weimar. Since 2004 she has been working at the Institute for Design2context at the hgk Zurich (Prof. Ruedi Baur). Her major interest is in working together in international and interdisciplinary teams to create new fields of visual communications specially related to navigation in space.
- **Sabine Gebhardt Fink** is a media and performance theorist. She received her Ph.D. at the University of Basel in Art Theory, Philosophy, Theatre and German Literature in 1992. Over the last 4 years she has been evolving a new methodology

of approaching artwork based in architecture and performance as a core researcher at the University of Art and Design Basel in the Swiss National Science Foundation projects Perform Space (2002/03) and The Situated Body (since 2004). Gebhardt Fink is one of the initiators and co-founders of Performance Index. She has international curatorial experience with Performance Index (1995/99), Transformance (2001) and research collaboration concerning intermediality with Steirischer Herbst Graz 2006. Since 2004 she is a post-doctoral research associate at the ICS and works in a transdisciplinary team "Verhältnis der Künste" at the University of Art, Media and Design Zurich; Gebhardt Fink is writing her habilitation thesis on "Ambient Art: Embodiment and Performative Architecture".

- **Jason Freeman** works break down conventional barriers between composers, performers, and listeners, using cutting-edge technology and unconventional notation to turn audiences and musicians into compositional collaborators. His music has been performed by the American Composers Orchestra, Speculum Musicae, the So Percussion Group, the Nieuw Ensemble, Le Nouvel Ensemble Moderne, and Evan Ziporyn, and his interactive installations and software art have been exhibited at the Lincoln Center Festival, the Boston CyberArt Festival, and the Transmediale Festival and featured in the New York Times and on National Public Radio. N.A.G. (Network Auralization for Gnutella), a commission from Turbulence.org, was described by Billboard "as an example of the web's mind-expanding possibilities". <http://www.jasonfreeman.net>
- **Zeenath Hasan** is an independent media designer / researcher interested in the practice of design for development. She works in the boundaries of networked technology and community based media by exercising the potential of mobile ICTs to facilitate grassroots activities and networks. In her work, she explores the contexts in which meaning making takes place. She has experience mediating between technology actors, interest groups and the working team. <http://mlab.uiah.fi/improve>
- **Günter Heinz** was born in Zeitz, and studied mathematics in Halle, music in Dresden and Berlin. He taught as a mathematician at the Academy of Mines Freiberg and at the Academy of Sciences Berlin where he graduated in 1983. Since 1987 he has worked as a freelance musician focusing on contemporary compositions and improvisation. He has premiered several works and recorded for radio and CD in Germany, Switzerland and USA. Between 1992-93 he worked as a guest composer at the Electronic Studio of the Musikakademie Basel. In 1994 he was teaching free improvised music at the Conservatory of Sardinia at Cagliari. He has participated in some of the most important music festivals. His compositions have been performed in throughout Europe. As improviser he has collaborated with Bernd Koeppen, Kent Carter, Bill Elgart, Guenter Mueller, Lou Grassi, Hartmut Dorschner, Fred van Hove and many others. He is artistic director of the Festival of Free Improvised Music in Dresden. <http://www.guenter-heinz.de/>
- **Steve Gibson** is a Canadian multimedia artist, composer, and theorist. Simultaneously deeply involved with technology and deeply suspicious of its effects, Gibson's musical, multimedia and virtual reality work celebrates both the liberation and paranoia of techno-fetishism. His works have been performed in such venues as Ars Electronica, the Whitney Museum of American Art, Banff Centre for the Arts, Festival International Musique Actuelle de Victoriaville, European Media Arts Festival, San Francisco Art Institute, 4 & 6 CyberConf <http://www.telebody.ws>
- **Jürg Gutknecht**, is professor for computer science and head of the Computer Systems Institute at the ETH Zürich. He has a passion for new hybrid art forms. He has actively participated in culturally-oriented "wearable computing" projects, including "Instant Gain in Grace" (motion tracking of a Butoh dancer), "Going Publik" (distributed orchestra based on mobile electronic scoring), and "On the

Sixth Day" (multi-channel video system for interactive storytelling). Together with Sound Artist, Art Clay, he organizes the Digital Art Weeks which offers performances and provides courses in the areas of computer-aided art and music.  
<http://www.jg.inf.ethz.ch/jg>

- **Urs Hugentobler**, (UrbanWhispers) received the Dipl. degree in mechanical engineering from ETH Zurich, Switzerland, in 2002. The analytic approach of the engineer, looking at the world through technological developments comes together with his experience of a variety of cultural backgrounds that made him sensitive to questions of our living environment. Currently he is working at VonRoll Inova, Zürich as a database application developer, with main interests in integrated information systems.
- **Kurt Hörbst** was born in Austria in 1972. Having originally educated in telecommunications, he then turned to photography beginning his studies in Prague in 1992. Kurt founded a school of photography in Austria in 1996 and now teaches history of photography, journalism and digital photography and he gives lectures at the Kunstuniversitaet in Linz and at the St. Pölten University of Applied Sciences. Publisher of three books and multiple prize winner in this field, Kurt's work has enjoyed numerous exhibitions both home and abroad. Over the last five years, multimedia projects have been a focal point of his activities. <http://www.hoerbst.com>
- **Volko Kamensky** was born in Würzburg and grew up in Antwerpen, Paris and Bad Tölz. Since 1992, living in Hamburg. He studied at the Hochschule für bildende Künste Hamburg from 1994 to 2001. In 2003 he received a Work Grant for the Arts from Hamburg, in 2005 from Schloß Plüschow. As a film maker he continues to produce inovative work in a variety of film genre: (Selection): Vogelweide 27 b: My Whole Neighbourhood Is Reelin And Rockin, 1995 Ohne Titel, 1996 Divina Obsesión, 1999. He received the Förderpreis der deutschen Filmkritik (Duisburger Filmwoche) and was nominated for INPUT, and for TV broadcast on ARTE and 3sat. He has participated on many film festivals in Europe and abroad: 'Alles was wir haben', 2004 (Festival International du Documentaire Marseille, Duisburger Filmwoche, Hamburger Kurzfilmfestival)
- **Stefan Kern**, (UrbanWhispers) received the Dipl. degree in mechanical engineering from ETH Zurich, Switzerland, in 2002. Since 2002, he has been a Ph.D. student at the Computational Science and Engineering Lab (CSE), ETH Zurich. His current research interests include the development of evolutionary algorithms and learning strategies, and their application to engineering problems and art.
- **David Kim-Boyle**, originally from Australia, is an audio engineer and composer whose work has been featured at various festivals and conferences around the world. An Assistant Professor at the University of Maryland, Baltimore County, recent presentations of his work have taken place at ICMC 2004 (Miami) and 2005 (Barcelona), DAFX 2005 (Madrid), SEAMUS 2004 (San Diego) and 2005 (Muncie), NIME 2005 (Vancouver), FEMF 2005 (Gainesville), the 2005 Sonic Odyssey Concert Series (Los Angeles), JIM 2005 (Paris), the 2005 Electronic Music Festival (Basel) and Spark 2006 (Minneapolis). In 2005 he was a guest artist at the Zentrum für Kunst und Medientechnologie (Karlsruhe). Also active as a professional audio engineer, his work in this capacity has been released on various labels including EMF, Sunken Gong Records, Mark Custom Records, and EMI Australia.  
<http://userpages.umbc.edu/~kimboyle>
- **Irena Kulka** has a background in biochemistry, dance performance and new media. Her current media project work aims at altering the state of mind. Her Hyperwerk diploma 2003 (FHBB interaction design) was the start of the project "Instant Gain in Grace" in collaboration with the ETH Zürich. In 2005 the project was shown in the framework public events and presentations (Zappy Birthday, Digital Artweeks and Escaping Reality 2005). The work was supported by

Sitemapping.ch. Irena Kulka explores her vision of a fluent creative process with digital instruments between imagination and visual design, between improvisation and choreography. She works with students and scientists at ETH Zürich and at UMIT Innsbruck and at the University of Glasgow. "Instant Gain in Grace" was presented successfully in 2004 and 2005 with music from the electronic sound artist Kanito.

- **Heinrich Lüber** was born in Wattwil, Switzerland and lives in Basel, where he teaches at the School of Fine Arts. He is widely known as a performance artist and is known best in his works in which he clads himself in special clothing with various customized props, conducting physical spatial interventions which confront viewers as pictures in space. He likes to include language in his performances as merely the act of speaking, resulting in a ?linguistic picture. He has been the recipient of many prizes from both national and international art podiums. He is the initiator of the Performance Index Basel (1995, 1997, 1999) and at present is involved in the SNF research project the Situated Body. <http://www.heinrichlueber.ch>
- **Thierry Madiot** is a French artist living in Paris and working internationally as a sound artist and trombonist. He has been coined as the performer of the breath and the wind. As inventor of instruments and collector of accessories for and beyond the trombone, he is at home in improvised as well as in contemporary music, leading musical time by a perpetual transgression with a true direction of improvisation. Improvised and composed music with or without texts, images, dance in solo or in ensemble with many international artists. He also play offen some Modern written music as John Cage, Scelsi, Globokar, Schnebel, Pierre Jodlovsky Jean-Christophe Feldhandler, Art Clay, quatuor Hélios and has appeared at Festivals in Europe, North America and Asia. He founded several experimental spaces for art production such as Astrolab, In-ouïr, Topophonie and Informo. He organise dthe first festival In ouïr "Ca vaut jamais le réel" in september 2004 in Instants Chavirés. <http://madiot.free.fr/>
- **Dennis Majoe** has a PhD in Navigation related Electronic systems and has worked extensively in the design of a variety of motion and orientation sensing systems and computer generated environments including 3D audio. He is director of MASC, an innovative electronics and computer design company active in the field of wireless communications having designed GPS and GPRS Bluetooth systems, RISC based wearable computing platforms and large real time motion sensing systems for the CG industry. In addition to his activities at MASC his is as a researcher on the ETH Zurich for the Computer Systems Department.
- **Franziska Martinsen** holds an MA in Philosophy, Political Theory and Music Sciences from the Humboldt-University in Berlin, Germany, and works as a Research Assistant at the Philosophical Institute at the University of Basel, Switzerland. During and after her studies, she worked as a dramatic adviser and text writer for various music theatre productions based in Berlin and Basel. Since 2003 she lectured both at the Philosophical Institute and at the Centre for Gender Studies, University of Basel.
- **Etsuko Maesaki** was born in Japan. After graduating from Kanazawa College of Art in the Department of Visual Design she studied media art at the Institute of Advanced Media Arts and Sciences (IAMAS) and has been studying new media art at the Hochschule fur Gestaltung und Kunst Zurich (hgkz) since 2005. "The series Bug???" is an installation artwork that puts cockroaches, which are usually hidden, into a box. "LoveLetter" is an installation artwork that uses the ability of a cockroach to remember a route. These two installations were exhibited at two art festivals, the "Ars Electronica Festival" in Linz, Austria in 2004 and at the "Ogaki Biennial" in Gifu in 2004.
- **Benoit Maubrey** was born in Washington, DC. He received a Bachelor of Arts from

Georgetown University, and lives in Berlin and Baitz (Brandenburg) since 1980. He is the founder, manager, and director of DIE AUDIO GRUPPE, a Berlin-based art group that build and perform with electronic clothes. Since 1983, Benoit Maubrey and his Berlin-based AUDIO GRUPPE have been building electro-acoustic clothing and suits. Benoit's performance pieces combine various thematic articles of clothing and sound equipment, worn by performers who interact with the sounds coming from their apparel and the public. Since 1985, Benoit's performances have been shown at a number of international festivals and conferences, such as ARS ELECTRONICA, (Linz, Austria), ISEA (Chicago and Helsinki), Tokyo City Opera, IDAT/ University of Arizona at Tempe and various events in Berlin.

<http://home.snafu.de/maubrey/>

- **Guerino Mazzola** developed a mathematical music theory, which he operationalized on composition, analysis, and performance software (presto, rubato). He has written 11 books and over 80 papers in the fields of number theory, topology, algebraic geometry, statistics, computer graphics, neuromusicology, music informatics, semiotics, epistemology, and science policy. As a contemporary jazz pianist and composer he published 15 LPs, CDs, and a classical sonata. Presently he works at the Multimedia Lab of the University of Zurich and is an associated researcher at Ircam in Paris, he is lecturer for music informatics at the University and the ETH of Zurich. His 1368-page book *The Topos of Music* was published in 2002 by Birkhäuser Verlag, Basel. With this work, he is presently qualifying as a professor in computational science at the University of Zurich.  
<http://www.ifi.unizh.ch/mml/musicmedia/home.php4>
- **Anja Meyer**, (UrbanWhispers) runs an office as an architect interested in practice as much as in theory, the latter she understands to be the necessary practice of thought and field of experimenting with one's own experiences before becoming a fundament of practical work. She lately has lead a workshop for easa on the topic of "shrinkage" and worked on a project concerning the perception of urban space «shuttle to space» for Swiss Re. Her education includes the Vorkurs at hgk Zurich, studies of architecture at ETHZ, and she has worked with Gramazio und Kohler, Zürich. <http://www.amjgs.ch>
- **Gérard Milmeister** studied computer science at the ETH of Zurich. His main interests have been and still are functional programming and computer algebra. After a four semester study of musicology at the University of Zurich, he has been working with Guerino Mazzola on the design and implementation of a successor to the Rubato software, called Rubato Composer, based on the concepts introduced in the book *Topos of Music* (Mazzola 2002). This ongoing work will be the subject of his doctoral thesis soon to be submitted to the faculty of science at the University of Zurich.
- **Pascal Müller** is a Ph.D. candidate and research assistant at the Computer Vision Lab of the ETH Zurich, Switzerland. His main interests lie in the field of computer graphics: physical modeling, generative design, animation, visual effects and computer-aided media art. He developed the CityEngine and is co-developer of the multimedia engine Decklight. For two and a half years, he worked as a freelance consultant at ETH Zurich and as a technical director for the production company Central Pictures, Switzerland. <http://www.vision.ee.ethz.ch/~pmueller>
- **Stefan Müller Arisona** is lecturer and post-doctoral researcher at the Programming Languages and Runtime Systems Group at ETH Zurich. His research is focussed on real-time multimedia systems and on live multimedia composition and performance software. In addition, he is scientific director of ETH Zurich's Digital Art Weeks. In 2004, Stefan received his Ph.D. from the University of Zurich's Multimedia Laboratory. The thesis introduced a mathematical model for the performance of musical gestures, and how musical gestures can be synthesised

- from a given musical score. He is a founding member of the Corebounce Association, and co-author of the Soundium multimedia performance platform, which is frequently used for multimedia art installations and live performances by himself and by the other Corebounce members. <http://www.jg.inf.ethz.ch/sma>
- **Stijn Ossevoort** has studied both engineering at Delft University in the Netherlands and art related design at the Royal College of Art in London. His work has been as diverse as his academic background, from interactive jewellery to public sculptures. He began to focus on wearable electronic devices in 2001 at the Interaction Design Institute Ivrea in Italy . After Ivrea, he joined the ETH in Zurich as a design researcher on to wearable computing devices. [http://www.ife.ee.ethz.ch/~stijn88/website\\_portfolio/hoofdpagina.htm](http://www.ife.ee.ethz.ch/~stijn88/website_portfolio/hoofdpagina.htm)
  - **Will Pappenheimer** Will Pappenheimer is an artist working in new media, installation and multimedia who moved to New York City in 2004. He is a professor of Digital Media at Pace University and received his MFA from the Museum School/Tufts University, Boston and a BA from Harvard. His work in video, mixed media, installation and new media has been exhibited in over 50 national and international exhibitions. At Art Basel Miami 2003, his work received a half page photo and citation in the New York Times. Work resulting from collaborations with New Media theorist Gregory Ulmer forms a chapter of Ulmer's 2005 book, "Electronic Monumentality." His recent series of projects reconfiguring home surveillance networks have been shown at "Interactive Futures05" in British Columbia, FILE2005 in Sao Paulo, Brazil and will be exhibited at ISEA2006/ZeroOne, San Jose Museum of Art at the Museum of Fine Arts, Boston in 2008. <http://www.willpap-projects.com/>
  - **Leonard J. Paul** attained his Honours degree in Computer Science at Simon Fraser University (SFU) in BC, Canada with an Extended Minor in Music concentrating in Electroacoustics. He has a ten year history in making music and coding for video games working for companies such as Electronic Arts, Radical Entertainment and Rockstar Vancouver. As Freaky DNA, he has performed in Vancouver, Toronto, Banff, Japan, Portugal, Germany and the UK. He is the composer for the film The Corporation which has become the highest grossing Canadian documentary in history. He has been invited to give lectures at the Banff New Media Institute, the Game Developer's Conference and Olhares de Outono in Porto, Portugal. For DiGRA 2005, he was invited as a senior scholar to mentor students in with other leading game scholars. He currently teaches video game audio full-time at the Vancouver Film School (VFS). <http://cfisrv.finearts.uvic.ca/interactivefutures/paul.html>
  - **Cornelius Pöpel** was born in Stuttgart and is presently living in Cologne. He is teaching at the Academy of Media Arts Cologne and doing a Ph.D. at the University of Birmingham and RWTH Aachen exploring the instrument player interaction and computer based bowed stringed instruments. He studied viola with Jürgen Kussmaul (Düsseldorf) and Hatto Beyerle (Hannover). After his studies in Audio-Design (scholarship of DAAD) at the Musikhochschule Basel, he worked at the Institute for Music and Acoustics of the Center for Art and Media Karlsruhe (ZKM). He has directed sound for several ensembles (e.g. Basel Symphonie Orchestra, Ensemble 13 or European Chaos String Quintet), worked extensively in the realisation and performance of live-electronic compositions and interactive installations. Besides these, he undertook media-theoretical studies in the field of live and recorded performance of music. His research interests lie in the possibilities of live performance and in human-computer interaction for realtime musical applications. <http://media.informatik.rwth-aachen.de/poepel.html>
  - **Julian Rohrhuber** is a German artist and theorist. In both his theoretical work and his artwork (video, film sound, sound-art, meta-art, algorithmic composition) he tries

to find new formulations of problems such as causality, time and politics. He has been teaching algorithmic acoustics at various Universities and Art Academies, emphasizing the philosophical and cultural implications of programming. Rohrhuber has made substantial contributions to the SuperCollider sound programming language and has realized the Laboratory for Acoustics and Time-Image at the Hamburg Academy of Fine Art, where he studied film and media theory, philosophy and media art. He currently works in the project "Artistic Interactivity in Hybrid Networks" within the research association "Media and Cultural Communication" funded by the German Research Foundation (DFG) at the University Cologne, and at the Academy of Media Arts Cologne. <http://swiki.hfbk-hamburg.de:8888/MusicTechnology/16>

- **Hannes Raffaseder** studied communication engineering and computer music in Vienna. He is head of the research project "AllThatSounds" and works as a lecturer at the University of Applied Sciences in St. Pölten. His book "Audiodesign" is published by Hanser Verlag, Munich. Hannes is artistic director of the Composers Forum Mittersill, the Klangturm St. Pölten and einklang-records. Hannes composes for orchestra and chamber ensembles, computer music, sound installations, multimedia-performances, video and live electronics. One of his recent projects is the Duo "snail" together with Martin Parker focusing on Real-Time-Remixing. His music has been performed in several well-known concert halls and he participated at international media-festivals. Hannes has won several awards and commissions. Some of his works are recorded on CD, broadcasted and published by Musikverlag Doblinger, Vienna. <http://www.raffaseder.com>
- **Peter Schweri** is a Swiss artist who concentrates on graphic images in the Konkretkunst style. He has developed an actual "language" for images over decades. This pursuit was finalized over the last few years with the programming language Sakkara, which was coauthored and programmed by Dr. Jürg Gutknecht of the ETH Zurich. Peter Schweri has used the program extensively to produce a several series of works that support the artist's basic intentions structurally. Today, the artist, despite complete blindness, continues his work by "writing" new works in Sakkara code. <http://mypage.bluewin.ch/a-z/top/>
- **Simon Schubiger-Banz** works as a senior engineer at Swisscom Innovations, teaches a mobile systems architecture course at ETHZ, and is an associate researcher of the Pervasive and Artificial Intelligence group (PAI) at the University of Fribourg (DIUF). His research interests include multimedia performance systems, knowledge representation, programming languages, user interface design, and mobile computing. He is a co-developer of the Soundium2 multi-media system. Simon Schubiger-Banz received a Ph. D. in computer science from the University of Fribourg, Switzerland. He is a member of the ACM and president of the Corebounce Association.
- **Jill Scott** was born in Melbourne, Australia. She became interested in Art and Science from her own research in human molecular biology and bio-informatics and is currently specializing in artificial skin and wearable computing for the visually impaired. (e-skin) Currently she is Professor for Research in the Institute Cultural Studies in Art, Media and Design at the Hochschule für Gestaltung und Kunst (HGKZ) in Zurich, Switzerland where she is leader of the AIL (artists-in labs) research project at the HGKZ and Vice Director of the Z-Node of the Planetary Collegium-a collaborative research program with the University of Plymouth, UK. She has exhibited many video artworks, conceptual performances and interactive environments in USA, Australia, Europe and Japan. <http://www.jillscott.org/homepage.html>
- **Eva Sjuve** is a Swedish artist who is exploring the spectrum of transdisciplinary media arts with sound, sculptural objects, and performance. She builds mobile

physical interfaces and digital instruments used in improvised performance. She has been performing combining real-time audio processing with improvisation, in the US, Germany, UK, France, Denmark and Belgium. In 2000, she received an Award of Recognition at CYNETart 2000, Dresden, Germany, for the audio composition "Astro Turf", which explores auditory spaces. She exhibited at venues such as Australian Center of Contemporary Art, Melbourne, Australia; Kiasma Museum of Contemporary Art, Helsinki, Finland; European Media Arts Festival, Germany; Centre d'Art Contemporain de Basse Normandie, France and CAEIT, California Institute of the Arts, US. She holds a Masters Degree from the Interactive Telecommunications Program, New York University. She studied electronic music at Centre de Creation Musicale de Iannis Xenakis, CCMIX, Paris.

[http://www.vibrofiles.com/artists/artists\\_eva\\_sjuve.php](http://www.vibrofiles.com/artists/artists_eva_sjuve.php)

- **Atau Tanaka** is researcher at Sony Computer Science Laboratories (CSL) Paris, spanning cultures and encompassing domains of artistic expression, scientific research, and industry. He holds degrees in science and music from Harvard University and Stanford University's CCRMA. He has conducted research at IRCAM in Paris and was Artistic Ambassador for Apple Computer Europe. In Japan he has been in residency at NTT/ICC and taught Media Art at Keio University. He is known for his work with sensor instruments and network music installations, in artistic exhibition as well as scientific publications. He current work is focused on harnessing collective musical creativity on mobile devices, seeking the continuing place of the artist in democratized digital forms. He has received support from the Fraunhofer Institute, Japanese Telecommunications Ministry, and the Daniel Langlois Foundation. He has served on committees of the Audio Engineering Society (AES), New Interfaces for Musical Expression (NIME), and ISEA.  
<http://www.xmira.com/atau/>
- **Jenny Tillotson** is an artist and designer who invents clothes and jewellery with computerised scent-output systems for health and wellbeing. Her work focuses on Scentsory Design®, concerning the relationship between aromas and emotional wellbeing. Tillotson is a Senior Research Fellow at Central Saint Martins University of the Arts London and Fellow of the Institute of Nanotechnology. She gained her BA in Fashion Communication from Central Saint Martins and PhD in Textiles from the Royal College of Art. Prior to her academic work she was a fashion stylist and Sensory Designer for Charmed Technology. Jenny has exhibited and given lectures at Tate Modern, Victoria & Albert Museum, e-Culture Fair, Cheltenham Science Festival, NEMO Science Center, Dana Centre, Wired NextFest, SIGGRAPH amongst others. Dr Tillotson is Founder and Creative Director of Sensory Design & Technology Ltd, specialising in the research and development of wearable wireless sensor networks and microfluidic devices for fragrance delivery and therapeutic applications in "emotional clothing". [www.smartsecondskin.com](http://www.smartsecondskin.com)
- **Pablo Ventura** graduated in 1985 at the London Contemporary Dance School. In 1986 Pablo Ventura founded the Ventura Dance Company in London for which he created 21 choreographies and four dance videos to date, which were performed in London, Madrid and Zurich. He choreographs for contemporary operas, film, video, and in various collaborations with video artists, composers, software designers, and also with the robot artists collective Robotlab and Louis-Philippe Demers. In 1999 he receives the city of Zurich dance award for his work in the field of dance and new media in Zurich. In the year 2000, the CYNETart-festival of Dresden awarded him a prize for his work "MADGOD 2.001" and another for computer created performance. The Canton of Zurich gave him the dance prize in 2002 in recognition of his merits in dance-aesthetic research and innovative choreography. "Fabrica/Cluster III" is selected by Sitemapping.ch in 2005 and Tesla-Berlin commissions "Kubic's Cube" for Berlin's Transmediale 2006. <http://www.ventura-dance.com>

- **Richard Widerberg** is a media artist and designer. He has a background working with new media technology, organizing events, playing music and dj:ing. Widerberg's focus during the last years has been to investigate the many dimensions of sound. For example physical aspects of sound, such as architectural effects, as well as sound given by diverse materials. He is also an active musician, mainly in the experimental improvisation scene of Helsinki.  
<http://mlab.uiah.fi/improve>
- **Renate Wieser** graduated in sociology at Hamburg University for Economy and Politics with a work on film theory. Presently she is student of media at the Hamburg Academy of Arts, where she works on programming, media theory and philosophy. Her artistic works include short films, installations, algorithmic film music, and computer models.
- **Paul Woodrow** has been involved in a variety of inter-disciplinary and multi-media activities since the late 1960s, including performance art, installation, video, painting and improvised music. He has collaborated with many artists including, Iain Baxter (N.E.Thing Co.), Hervé Fischer (The Sociological Art Group Of Paris), Genesis P. Orridge (Coum Transmissions, England), Clive Roberstson (W.O.R.K.S, Canada). He has exhibited extensively in Japan, France, Italy, Sweden, England, Belgium, Russia, Puerto Rico, Argentina, and the United States, including the Museum of Modern Art, Stockholm and The Tate Modern , London. He has received numerous awards from Canada Council and the Alberta Foundation for the Arts. He is currently Professor of Art Theory, Art Department, at the University of Calgary. <http://www.ucalgary.ca/~einbrain/>

## DAW06 SYMPOSIUM SCHEDULE

Last update: July 07, 2006, at 12:14 PM

# THURSDAY JULY 13

## TALK BLOCK Ia "Interaction: Malleable Scoring to Conduction"

**Location: VisDome**

- 08:30 Registration
- 09:00 **Coffee** + [DRIFTINGS Exhibition 1a](#)
- 09:45-10:00 Introduction: Moderator (Steve Gibson, Interactive Futures, Canada)
- 10:00-10:45 Keynote: [HOW to MAKE SURE NOBODY CAN FIGURE OUT YOUR INTERACTIVE ART](#), Jan Borchers, RWTH Aachen University
- 10:45-11:00 Questions: Keynote
- 11:00-11:30 Talk: [CONDUCT YOURSELF!](#), Art Clay, ETH Zurich Computer Systems Institute
- 11:30-12:00 Talk: [GLIMMER: CREATING NEW CONNECTIONS](#), Jason Freeman, Georgia Institute of Technology
- 12:00-12:30 Talk: [FORMALIZED and NON-FORMALIZED EXPRESSION IN MUSICAL INTERFACES](#), Cornelius Pöpel, Academy of Media Arts Cologne
- 12:30-12:45 Questions: Clay, Freeman, Pöpel
- 12:45-14:15 Lunch Pause + [DRIFTINGS Exhibition 1b](#)

## TALK BLOCK Ib "Principles of Media Art in North America"

**Location: VisDome**

- 14:00-14:30 Talk: [MAPPING SPACES\(s\): DIGITAL MEDIA ART in CANADA in the 21st CENTURY](#), Steve Gibson, University of Victoria, Canada
- 14:30-15:00 Talk: [COLLECTIVE SURVEILLANCE PLAY](#), Will Pappenheimer, Digital Media Dept., Pace University, New York
- 15:00-15:15 Questions: Gibson, Pappenheimer

## PANEL SESSION I "ReScoring & Live-Coding"

Location: VisDome

- 15:15-15:35 Talk: [ARTIFICIAL, NATURAL, HISTORICAL: AMBIGUITIES of SYNTHETIC SOUND in DOCUMENTARY FILM](#), Julian Rohrhuber, University Cologne and Academy of Media Arts
- 15:35-15:55 Talk: [INTERREALTION: SOUND-TRANSFORMATION and RE-MIXING in REAL TIME](#), Hannes Raffaseder, University of Applied Sciences St. Pölten, Austria
- 15:55-16:15 Talk: [SOFTWARE, SURVEILLANCE, SCARINESS AND SUBJECTIVITY](#), Amy Alexander, Dept. of Visual Arts, University of California, San Diego
- 16:15-16:30 Questions: Rohrhuber, Raffsaeder, Alexander

## POSTER SESSION I (+ refreshments)

Location: VisDome

- 16:30-17:15 [Poster Session](#)
- 17:15-19:00 Dinner Pause + [DRIFTINGS Exhibition 1c](#) + [SOUNDSCAPE Session 1](#)

## FRIDAY JULY 14

### TALK BLOCK IIa "The Sixth Senses of Technology"

Location: VisDome

- 08:30 Registration
- 09:00 **Coffee** + [DRIFTINGS Exhibition 2a](#)
- 09:45-10:00 Introduction: Moderator (Simon Schubiger-Banz, Swisscom Innovations, Switzerland)
- 10:00-10:45 Keynote: [MUSICKING NETWORKS](#), Atau Tanaka, Sony CSL Paris
- 10:45-11:00 Questions: Keynote
- 11:00-11:30 Talk: [SCENTORY DESIGNS®](#), Jenny Tillotson, Central Saint Martins College of Art and Design
- 11:30-12:00 Talk: [FLUID INTERFACES](#), Stijn Ossevoort, ETH Zurich
- 12:00-12:30 Talk: [ACTIVIST DISCOURSES: INSIDE the LAB CONTEXT](#), Jill Scott, University of Applied Sciences and Arts, Zurich
- 12:30-12:45 Questions: Tillotson, Ossevoort, Scott
- 12:45-14:15 Lunch Pause + [DRIFTINGS Exhibition 2b](#)

## TALK BLOCK IIb "The Art of Technology & the Technology of Art"

Location: VisDome

- 14:00-14:30 Talk: [MAKING THE TOOLS THAT MAKE US](#), Jürg Gutknecht, Computer Systems Institute, ETH Zurich
- 14:30-15:00 Talk: [GRAMMAR-BASED ARCHITECTURAL DESIGN](#), Pascal Müller, ETH Zurich Computer Vision Lab
- 15:00-15:15 Questions: Gutknecht, Müller
- 15:15-15:45 Talk: [FUNCTORS FOR MUSIC: THE RUBATO COMPOSER SYSTEM](#), Guerino Mazzola and Gérard Milmeister, University of Zurich
- 15:45-16:15 Talk: [COMPOSING LIVE MULTIMEDIA](#), Stefan Müller Arisona, ETH Zurich Computer Systems Institute
- 16:15-16:30 Questions: Mazzola / Milmeister, Müller Arisona

## POSTER SESSION II (+ refreshments)

Location: VisDome

- 16:30-17:15 [Poster Session](#)
- 17:15- 19:00 Dinner Pause + [DRIFTINGS Exhibition 2c](#) + [SOUNDSCAPE Session 2](#)

## SATURDAY JULY 15

### TALK BLOCK IIIa "Gestures, Time and Media"

Location: VisDome

- 08:30 Registration
- 09:00 **Coffee** + [DRIFTINGS Exhibition 3a](#)"
- 09:45-10:00 Introduction: Moderator (Will Pappenheimer, Pace University, New York)
- 10:00-10:45 Keynote: [THE ASSASSINATION OF TIME](#), Prof. Dr. Johnny Golding, University of Greenwich, Maritime Campus
- 10:45-11:00 Questions: Keynote

- 11:00-11:30 Talk: [EXTENDING THE VIRTUAL: COMPUTER AIDED CHOREOGRAPHIE FOR DANCERS AND ROBOTS](#), Pablo Ventura, Ventura-Dance Company, Zurich
- 11:30-12:00 Talk: [READING\\_GESTURES](#), Irena Kulka, Zurich
- 12:00-12:30 Talk: [BODY DEGREE ZERO - THE ANATOMY OF AN INTERACTIVE PERFORMANCE](#), Paul Woodrow, Department of Art, University of Calgary and Alan Dunning, Alberta College of Art and Design
- 12:30-12:45 Questions: Ventura, Kulka, Dunning
- 12:45-14:15 Lunch Pause + [DRIFTINGS Exhibition 3b](#)

## TALK BLOCK IIIb "Wearable Audio & Video in Performance"

**Location: VisDome**

- 14:00-14:30 Talk: [SECRETS of the STAGE](#), Eva Sjuve, The University of Plymouth, Faculty of Technology
- 14:30-15:00 Talk: [PERFORMANCE WITH ELECTROACOUSTIC CLOTHES](#), Benoit Maubrey, Artist Berlin
- 15:00-15:15 Questions: Maubrey, Sjuve

## PANEL SESSION II "The Situated Body and Lived Space"

**Location: VisDome**

- 15:15-15:35 Talk: [OLD THOUGHTS ON NEW ARTS](#), Franziska Martinsen, University of Basel, Philosophy Department
- 15:35-15:55 [LANGUAGE PICTURES](#), Heinrich Lüber, University of Art and Design Basel
- 15:55-16:15 Talk: [THE SITUATED BODY](#), Linda Cassens Stoian, University of Art and Design Basel and Sabine Gebhardt Fink, University of Art, Media and Design Zurich
- 16:15-16:30 Questions: Martinsen, Lüber, Cassens Stoian, Gebhardt Fink

# POSTER SESSION III (+ refreshments)

Location: VisDome

16:30-17:15

[Poster Session](#)

17:15-19:00

Dinner Pause + [DRIFTINGS Exhibition 3c](#) + [SOUNDSCAPE Session 3](#)

## KEYNOTES

### HOW to MAKE SURE NOBODY CAN FIGURE OUT YOUR INTERACTIVE ART

Jan Borchers (RWTH Aachen University)

#### HOW TO MAKE SURE NOBODY CAN FIGURE OUT YOUR INTERACTIVE ART

First and foremost, Interactive Art is about art. Or is it? Have you torn your hair out at an "interactive" art piece because you couldn't, for the life of it, figure out how to use the stupid thing? But if most visitors can't figure out how to use an interactive art piece, then what's the point? In human-computer interaction, "fluid interaction" is the ultimate goal when designing interactive technology: Interfaces that don't get in the way of what you're trying to do, that feel "right". They disappear from your conscious thought. As Heidegger puts it: "We never perceive equipment that is ready-to-hand without already understanding and interpreting it". Now, art is often the opposite: it strives to confuse, unsettle, let you see new perspectives. And design is often in between the two: trying to look cool, but making things unusable. As interactive exhibit designers, we experience this dilemma all the time. Drawing from principles of human-computer interaction, I will try to shed some light on this conflict. I will share some wonderful examples of unusable technology, give both technologists and artists a view on usability, and invite everybody to wonder whether "artistic" and "usable" are actually mutually exclusive or not. I will shamelessly steal material from HCI and design luminaries such as Don Norman, Jakob Nielsen, Ben Shneiderman, Rich Gold, Terry Winograd, and others.

### MUSICKING NETWORKS

Atau Tanaka (Sony CSL Paris)

The live nature of music as an arts practice made it an interesting example for informing interaction design. Thus the rich field of interactive music, real-time audio software, instrumentarium of sensor-based musical instruments. Audio was at once an early application example for digital media technologies, as it is an order of magnitude less data intensive than video. At the same time music makes the most precise and subtle demands on timing resolution, responsiveness, and interaction performativity. These demands can often be generalized beyond music to benefit and inform interaction design in general. Networks, more recently wireless and mobile networks, are another domain that have been explored by musicians. However, has artistic practice on networks had the same impact that interactive music had? Networks present different temporal problematics, some unresolvable. Aside from time, networks present issues in the spatial domain, in

topology, and community dynamics. While it may at first seem that music, which also exhibits spatial and social characteristics, could also inform the development of these aspects of networks, the impact has been less direct. This talk presents a body of networked music artworks and research projects spanning a period of ten years. It will be seen that a related, parallel stream of work in interfaces and interaction in music often laid the groundwork for the qualities sought in making music on networks. While this performative approach makes specific performance demands on networks, the participative social qualities of networks interestingly worked to put basic tenets and traditional roles of established musical practice in question.

## **THE ASSASSINATION OF TIME (a messy little consequence of the digital arts)**

Johnny Golding (Creative, Critical & Communication Studies, University of Greenwich, Maritime Campus)

Let us take as a given that we are in the throes of a paradigmatic shift brought on by the advent of the technological age, with its iterant general and special relativities, 'smart' bombs and guerrilla-terror warfare tactics. It could be said, then that what constitutes contemporary aesthetics is not merely or only (or even specifically) a matter of machinic/electronic/media production, invention and play. It is a choreography of speed and distance, morphed into an accessible techne and libidinal code. Not only does this 'code' re-configure the very substance of 'the political' and 'the ethical', but it does so by assassinating Time. In its place: the art of the digital, in all its toxic and dirty manifestations.

## **MAIN SPEAKERS**

### **FUNCTORS FOR MUSIC: THE RUBATO COMPOSER SYSTEM**

Guerino Mazzola and Gérard Milmeister (Artificial Intelligence Lab, University of Zurich)

In abstract mathematical music theory, the data format of denotators is associated with set-valued presheaves over module categories. In this paper, we present an implementation of this concept framework in the Rubato Composer system, a Java application comprising a GUI for manipulation and combination of rubettes. These are plug-ins that can be added and connected for communication of denotator data. Rubato Composer is a GPL software and is accessible to the computer music community for download and collaboration. In this paper, the functionality, architecture, concept framework, and the implemented mathematical operators are presented and illustrated with a "functorial composition" However, the compositional components of Rubato have not been implemented in the NEXTSTEP and Mac OS X versions. In the present implementation, called Rubato Composer, which is a Java application, the original presto features are reconsidered and implemented within the framework of functorial mathematical music theory as described in (Mazzola 2002). This gives the compositional tools an unprece- dented conceptual power. Intuitively, complex musical objects, such as dodecaphonic series, chords consisting not of ordinary notes, but of collections of melodies, or ornaments of rhythmic patterns, and, more generally, macro-object con-

## **MAKING THE TOOLS THAT MAKE US**

Jürg Gutknecht (Computer Systems Institute, ETH Zurich)

This talk addresses a growing interest in the use of computers in the arts in general and a quite apparent need to accompany this growth with the development of new hardware tools and above all new programming languages to drive them. On the software side, programming languages must be intuitive to the artist and user in general; on the hardware side, today's devices must not only be flexible and powerful but also be manageable and mobile. Whether it be computer driven music, interactive dance or hyper narration in storytelling, the computer receives a much larger reception amongst the general consuming populace through the arts as it did in its early days, when it was employed almost exclusively by Government and industry. Today, the demands of scientific research can easily be mated with artistic ambition and collaboration between scientist and artist cannot only underscores the research concepts inherent in the work itself, but also brings about the unique situation of taking science out of the ivory tower situation of Academia and bring before an audience to enjoy in the form of a unique hybrid art form.

## **MAPPING SPACES(s): DIGITAL MEDIA ART in CANADA in the 21st CENTURY**

Steve Gibson (Visual Arts & Digital Media, University of Victoria, Canada)

This presentation focuses on the recent work of three Canadian Digital Media artists – Julie Andreyev, Rafael Lozano-Hemmer, and Steve Gibson. More or less loosely influenced by the Situationists these artists consider issues of space, the body, public interaction and mobility. Distinct from American popular media hegemony, but equally engrossed in North American media culture, Andreyev, Lozano-Hemmer, and Gibson present critical but engaged visions of technological art practice for the new millennium. Mapping Space(s) presents Four Wheel Drift (2003-05) by Julie Andreyev, Body Movies (2003) by Rafael Lozano-Hemmer, and Virtual DJ (2001-04) by Steve Gibson as divergent examples of populist but epic media experiences. Each of these pieces transforms public interaction and posits radically workable solutions to the problem of interactivity that reached a stalemate at the end of the 20th Century. Discarding the artificiality of hypertext and web-based corporate “interactivity” these artists opt for more naturalistic models of interaction based on play, personal subjectivity and aimless wandering.

## **GUEST SPEAKERS**

### **SOFTWARE, SURVEILLANCE, SCARINESS AND SUBJECTIVITY**

Amy Alexander (Visual Arts Dept., University of California at San Diego)

Technologies from Google to video surveillance promise an objective approach to analyzing data, free from the subjectivity of human interpretation. But who writes the software? To what extent do we separate the ideas of technology and human subjectivity on the one hand, while often conflating the idea of a technology with its purpose on the other? This talk will discuss the political and cultural implications of the common perception of software as mechanical, objective and mysterious. Various responses by software artists will be discussed, including livecoding performance and hacktivist proxy servers. The talk will also introduce the public space performance project "SVEN:

Surveillance Video Entertainment Network - aka 'AI to the People.'" The SVEN project develops computer vision algorithms to identify people with "desirable" characteristics instead of "undesirable" ones, as well as algorithms that implement film grammar in surveillance video - thus turning surveillance videography into music video cinematography. The project asks the question: If computer vision technology can be used to detect when you look like a terrorist, criminal, or other "undesirable" - why not when you look like a rock star?

## **THE SITUATED BODY II: BEING AFFECTED**

Linda Cassens Stoian & Sabine Gebhardt Fink (University of Art and Design, Basel)

The recent discussions on performativity and the body in media-enhanced performances is not a repetition of bodytheories of the 90ths, but a discousefield with new concepts and methods. In correspondance to "ambient intelligence" research it is urgent to theorize the body in relation to its situation or situatedness.

In my research field entitled "art theory"- I decided to combine the model of the "performative space" with actual theories concerning the episteme of the body. My aim is to deliver differing concepts of understanding embodiment. Including the multisite view of performance and the actual debate on mediality. The situated body is defined in a polyvalent sense. Subsuming understanding and affectedness under action. For the first time the body model of phenomenology is reworked under aspects of performance. How can we grasp this dynamic system called body image? In my lecture I will read media-enhanced performances through the looking-glass of "being affected", as accumulation-systems of commitments, actions and intentions.

## **CONDUCT YOURSELF!**

Art Clay (Digital Art Weeks, ETH Zurich)

With the redirection of music style caused by the introduction of aleatorics in combination with the recent developments in computer software for music and the miniaturization of hard-ware, there has been an increase of means for creating music works in which the previously unknown possibilities to explore new ways of creating cohesion in works played by ensembles. In accord with Thoreau's' idea that the best government is one that governs the least, a composer would agree that there are various methods for creating cohesive musical structures with-out hierarchical control by a conductor. In the past, these have included various forms of "stopwatches": the human stopwatch, or conductor, the digital video display of running time, the standard stopwatch and of course the metronome. In this paper, further possibilities of non-hierarchical, or individual conduction techniques using ubiquitous sensor networks are introduced and works performed with tools based on such methods will be demonstrated.

## **GLIMMER: CREATING NEW CONNECTIONS**

Jason Freeman (Georgia Institute of Technolgy)

Glimmer, a composition by the author for chamber orchestra and audience, seeks to actively engage orchestral audiences by creating new connections between composer, performers, and listeners that enable them to collaborate to create the music together

during each performance. Each audience member is given a battery-operated light stick that he or she uses to participate. Computer software, written in Cycling '74's Max/MSP/Jitter environment, analyzes live video of the audience and sends instructions to the orchestra via multi-colored lights on each player's stand. A simple video projection animates the activities of audience groups and the competition between groups. This paper outlines the theoretical background and motivations for creating Glimmer and describes the conceptual framework and technical realization of the work in detail. Two performances of the work are evaluated with respect to the audience, the musicians, and the resulting music that was created, and with respect to the project's design goals of accessibility, reliability, transparency, and sustained interest. The challenges of integrating new collaborative networks and technology into conventional orchestral performances are also addressed.

## **READING GESTURES: INTEGRATING SCIENTIFIC CONCEPTS and ART**

Irena Kulka (Free lance Dancer & Media Artist, Zurich)

This talk will point out concepts of gesture and gesture recognition from motor physiology and physics and juxtaposes them with artistic concepts of gesture. From this, novel ideas regarding gesture recognition for artwork will be discussed. Choosing individual pieces of art, the talk will present characteristic examples of different gesture-based concepts, their developments as observed in performative and visual arts, and how gesture-based concepts form our thinking in multimedia art. The last part of the talk will discuss visions and reality, based on concrete examples of gesture-based artwork realized at the Department of Computer Science of the ETH Zurich.

## **LANGUAGE PICTURES**

Heinrich Lüber (University of Art and Design, Basel)

Heinrich Lüber's work combines elements of performance with photography, video, installation and object-art. The various media are connected by the artist in order to create a situation in which the synergy of elements can be researched. The artistic extended length of the body and the creating an enhanced sense of presence through the use of language are of prime importance to his work, because in this way visual and acoustic impressions are interplay and form the performative image. Again, the connection to language is of prime importance. Fragments such as those in the language of children, the language of rituals, body language and lost words for example are picked up, removed from their semantic context and compressed to create a graphic basis of linguistic form. This involves the use of props, poles and scaffolding. Articulation is set towards the outside like a skin turned inside out. The "exhibits" take place in public space, thus extending the concept of the inside turned outward. The impossibility of either a standardised conception of truth or perception is physically present in the pursuit of modern language criticism. Following this line of thought, spectators are the intellectual receptor and it is indeed their experience, which plants individual acts in a field of recollection and assigns images to their proper place.

## **OLD THOUGHTS ON NEW ART**

Franziska Martinsen (Philosophical Seminar, University of Basel)

Die Raumparameter eines Kunstwerks ergeben sich nicht nur aus den physikalischen, die wir – für jeden anscheinend offenkundig – mit unserer Alltagswahrnehmung erfassen. Das Kunstwerk ist wie jedes Objekt unserer Erkenntnis ein Konstrukt, konstruierte Realität, die in Abhängigkeit unseres a priori und a posteriori mannigfaltige Dimensionen hat. Materialität und Virtualität gleichermaßen gestalten den Raum der Wahrnehmung, abstrakt und konkret. Die Strukturen und Möglichkeiten der Computertechnologie können diesen Sachverhalt einerseits verschärfen und veranschaulichen, andererseits ihn gänzlich auflösen. Echtheit und Simulation sind synonym, weil sich das Kunstwerk als Realität des Raumes offenbart und nicht umgekehrt. Das Kunstwerk ist verkörperter Raum, der Künstler sowohl Subjekt als auch – tritt er als Performer auf – Objekt dieses verkörperten Raums. Die Synonymität von Echtem und Simuliertem ist zunächst eine begriffliche, inwieweit sie auch eine (werkimmanente) Identität darstellt, soll anhand ausgewählter Beispiele von performativen Kunstwerken (u.a. „Going Publik“ von Art Clay, Schweiz), die sich der Computertechnologie wie z.B. GPS bedienen, aufgezeigt und im Kontext historischer und zeitgenössischer philosophischen Raum- und Virtualitätskonzeptionen diskutiert werden.

## **PERFORMANCE WITH ELECTROACOUSTIC CLOTHES**

Benoit Maubrey (Free Lance Artist, Berlin)

Electro-acoustic clothes are clothes equipped with amplifiers and loudspeakers, which make sounds by interacting with the environment. Often the electronics are adapted from one set of clothes into an entirely new ones. "Audio Uniforms" are "Sonic Costumes" that reflect local customs, themes, or traditions. "AUDIO GEISHA/Japan, AUDIO CYCLISTS/France, AUDIO HANBOK/Korea come to mind. In the more recent AUDIO PEACOCKS project wearable electronic instruments are constructed from polycarbonat plexiglass material shaped into a peacock's fan-like plumage. The plexiglass surface is equipped with 16 loudspeakers (150 watts power), amplifiers, and rechargeable 12 volt batteries. The "audio-plumage" is highly directional and functions like an electroacoustic radar dish. An Audio Peacock can use its own site-specific electronic instruments or amplify and alter its voice by using a built-in microphone, sampler, and digital filter. Also, The Peacock can receive sounds from outside sources via transmitter/receiver and disseminate them in a space by orienting its plumage. VIDEO PEACOCK is the most recent performance project. It's costume is based on the Audio Peacock, but is used as a mobile projection screen to visually enhanced it.. Video-taped images are projected simultaneously to the sounds on the costume. In a more spectacular sense the Peacock's own real-time image can be projected live onto its costume as a form of "video-feedback".

## **GRAMMAR-BASED ARCHITECTURAL DESIGN**

Pascal Müller (Computer Vision Laboratory, ETH Zurich)

Buildings are systems of high structural, spatial and functional complexity and their appearance is specified through arbitrary design choices made by architects. In this talk, we present a shape grammar for the grammar-based designing and modeling of buildings which is capable to encode formalisms of divers architectural styles. Furthermore, we introduce transformations in architectural design which allow combining existing designs to create a new one by using the grammar's semantic information. Various examples will be given which illustrate (1) the preceding analysis of architectural form and content, (2) the design process with grammars, and (3) the delicate task of finding the balance between emergence and predictability in such a computational design system.

## **COMPOSING LIVE MULTIMEDIA**

Stefan Müller Arisona (Computer Systems Institute, ETH Zurich)

Traditionally, interactive multimedia tools for artistic live performance adapt a conservative composition - performance scheme: Composition takes place during a preparation phase and typically results in a structural setup of the anticipated performance. For example, the structure is reflected by musical score excerpts, data flow networks for audio processing, or scene and effects graphs for graphics and video processing. During performance, the given compositional structure remains fixed, and artistic expression remains limited to parameter changes of individual network nodes. This talk addresses the problem of eliminating the gap between composition and performance and of employing compositional methods during live performance. We show how "live composition" can substantially contribute to the artist's freedom and expression. We further show how these methods are leveraged by the Soundium multimedia platform and will highlight concrete performance scenarios.

## **FLUID INTERFACES**

Stijn Ossevoort (ETH Collegium Helveticum & SOS Design Zurich)

Some call it "ubiquitous computing", others call it "pervasive computing" or "the disappearing computer". Regardless of the terminology, it has all brought about a new era of computing: i.e. wearable computing. In the near future designers will be able to add a behavior to objects and thus augment the nuances of the real world of the everyday with interactivity. For the area of wearable technology, there seems to be no technical limitations. However, the social aspects involved are challenging, the clothes we wear provide us with a certain amount of privacy, status, identification, self-adornment and self-expression. In this talk varied aspects of wearable technologies from fashion to the arts, including a brief touching on of many of the technologies that they embrace, will be discussed and demonstrated. Also, the social interaction in both private and public domains which result from the use of these embedded technologies, how they become an indispensable part of our lives and how they change our behavior in both private and public domains will also be covered: we think we use these technologies, but they also 'use' us - their behavior shapes our behavior.

## **COLLECTIVE SURVEILLANCE PLAY**

Will Pappenheimer (Digital Art Dept, Pace University, New York)

Network performance, especially conducted through technologies such as the web camera, suggests from the onset, a reversed emphasis on the subject. Conversely, if viewers or online participants are able to affect the performance, the resulting composition can be understood as collective. In a recent paper entitled, "The Plays and Arts of Surveillance: Studying Surveillance as Entertainment<sup>1</sup>," written for surveillance-and-society.org, authors, Anders Albrechtslund and Linsey Dubbeld explore the alterior potential of surveillance in playful, humorous, pleasurable and even caring practices. Adopting sinister social (and now socio-technological) interactions for pleasure, play, mimicry, and diversion is indeed a subversive tradition within the arts and culture at large. This paper will explore avenues within the arts, particularly the technologically based arts,

which further subvert this territory. I will look specifically at projects that confound one-way directives, suggest alternate motives for viewing, and collapse the concept of Panopticism by providing the subject with evidence of the presence of the hidden virtual viewer or controlling network (however distant and disembodied). Questioning traditional oppositions of virtual and corporeal, empiricism and representation, “embodiment” can take on more pluralistic or holistic dimensions. What might constitute avenues of caring and community within a surveillance apparatus and its artistic counterparts? The presentation will focus on network/collective artworks attached to, reaching towards, or in conjunction with performance/installation, engaging overlapping technological, virtual and public space in testing this trajectory.

## **FORMALIZED and NON-FORMALIZED EXPRESSION IN MUSICAL INTERFACES**

Cornelius Pöpel (Academy of Media Arts Cologne)

Many musical interfaces are designed to enable a musician for the creation of musical expression. In this process it is the task of the interface to generate data transmitting the expressivity of the players' gestures to the synthesis engine. The instrument has to be open or transparent for the players' actions. Building interfaces with this kind of openness may be seen as a problem in interface development because the actions of the player have to be translated from a phenomenological level to a formal level. This paper investigates the idea to create openness by leaving essentials non-formalized. Examples of implementations in the fields of musical instruments and computer games using this method are presented. The tasks of openness, transparency and flexibility for the user's intentions are discussed.

## **INTERREALTION: SOUND-TRANSFORMATION and RE-MIXING in REAL TIME**

Hannes Raffaseder (University of Applied Sciences, St Pölten, Austria)

Sound is definitely a transient medium. To hear a specific sound, you had to hear it “now or never”. That is why music was always considered to be a time-based art form. Of course this situation changed because of the possibilities of sound recording and sampling. CD, Walkman and of course the I-Pod superseded the concert as an important event. Nowadays we download music from the web just like water from the tap. Music is always available at any time and any place. We don't care about the beginning and the end of the music anymore. We are not aware of form, dramaturgy and structure of a composition. Simply playing a song again and again loses its time structure. But more often music and sound defines the atmosphere of a certain ambience as for instance in bars and clubs. While listening to music with headphones in public space, we try to create a world of our own. With music we define our private area within the public space. Taking these facts into consideration, the paper discusses the interrelation of time and space in electronic music and explains techniques for sound-transformation and re-mixing in real time as used in projects like staTdT\_kunst, SNAIL and the Boxberg-Sinfonie.

## **ARTIFICIAL, NATURAL, HISTORICAL: AMBIGUITIES of SYNTHETIC SOUND in DOCUMENTARY FILM**

Julian Rohrer (SFB Media and Cultural Communication, University Cologne and Academy of Media Arts)

The relations between cinematic image and cinematic sound are by no means symmetric. Corresponding to their specific features in experience, their interplay brings about a multitude of cinematic spaces. Structuring diegetic space, typically there are various levels of authenticity attributed to them. Documentary film maintains a relation to this authenticity, which, without doubt, has to be full of tensions. In a characteristic way, its natural sound forms a plane of physicality in which the separation between artificial and natural elements is essential for its common diegetic structure. This talk will discuss the role of synthetic sound in the authenticity / historicity construction of documentary film in the light of the documentary "All that we have" (Kamensky, 2004) and its making.

## **ACTIVIST DISCOURSES: INSIDE THE LAB CONTEXT**

Jill Scott ( University of Applied Sciences and Arts, Zurich)

By now a number of artists-in-residence projects have taken place and it has become apparent that in art and science no ground rules exist about life in the lab context. However, in this presentation I would like to start to lay some guidelines for discourses about social responsibility, ethics and creativity for media artists, which are based on two experiences, one as an artist (e-skin) and one as a curator (The Artists-in-labs Project). Beginning with eight guidelines, my main premise is that immersive science lab contexts in combination with interactive media art technologies, may offer some very unique potentials for both artists and scientists to affect social change. Such discourses might seem difficult to implement, but I would like to illustrate them with actual experiences in the life, physics, computer, and engineering sciences. The general public is mostly uninformed about many scientific debates. Perhaps by using these discourses, artists can leave religious morals aside and speak more clearly to the public about ethical and social controversies, rather than resort to the use of scare tactics and shock value. The results can be highly skilled and reflective artworks, which might not only gain more respect from science but also be more relevant to the holistic view of sustainable life. What is central, indeed crucial to this view, is that both art and science try to retain a solid and informed commitment towards humanities social improvement.

## **GESTURES, INTERFACES AND OTHER SECRETS OF THE STAGE**

Eva Sjuve (Faculty of Technology, University of Plymouth)

This talk is examining the use of wearable technology, augmented performance and the use of interfaces, from the 1870's use of electricity until today's computational devices, which have been documented. In the 1870's, the combination of unmediated (face-to-face) and mediated (via a medium) performance in the performing arts, was made possible by the creative use of electricity, the Victorian era's enhanced performance. The performing arts, with a long tradition of collaboration in art & technology, where engineers created electrical devices using gestures to generate light and sound, they built interfaces for light and sound control, and introduced wearable technology. The performativity of early scientific experiments is explored, as a background to the contemporary development of wearable technology using gestures, sound and light, with demonstrations

from academic lectures, public displays and demonstrations. The focus of this talk, is on the performative aspect in the use of interfaces, its art and scientific diversions is explored, with a starting point in the two different strands, the performing arts and scientific experiments, and ending with a discussion of today's wearable interfaces using gestures, light and sound, with the interoperability of devices and convergence of technology.

## **SCENTORY DESIGN®**

Jenny Tillotson (Central Saint Martins College of Art and Design)

Scentsory Design® is a multisensory project that adds aroma to fashion design by creating radical, active, 'scentsory' properties. The project chooses olfaction and vision as the two sensory modalities to target in order to improve quality of life, by exploring smart-fabrics that are not as passive as current microencapsulated techniques. Scentsory Design® creates 'Emotional fashion': responsive clothes integrated with wireless sensor networks that offer social and therapeutic value in a desirable fashion context. The clothes are engineered for psychological end-benefits such as stress-reduction, by incorporating body sensors and microfluidics to initiate fragrance delivery. The sensors detect stress physiologically and the microfluidics produce benefit chemicals in controlled ways responding to personal needs. The smart fabrics imitate the human body as they have their own nervous system, which allows the user to experience and control the different emotional states of a garment as a holistic 'healing platform'.

## **EXTENDING THE VIRTUAL: COMPUTER AIDED CHOREOGRAPHIE FOR DANCERS AND ROBOTS**

Pablo Ventura (Director, Ventura-Dance Company, Zurich)

Dance is an extension of the body by natural means. But if dance is also an expression of contemporary body-consciousness, it must transform itself artistically by opening up to the new technological possibilities. And it possesses a particularly sensitive means of responding to them: movement. The wish to find new, contemporary dance figures that, rather than ennobling human beings as beautiful creatures of nature, show them in conflict with their technological environment led Ventura to work with technology. The point is to question traditional aesthetic norms and expand the formal vocabulary. The resulting creative choreographic process is both formally and thematically at the interface of the relationship between human being and machine.

## **BODY DEGREE ZERO - THE ANATOMY OF AN INTERACTIVE PERFORMANCE**

Paul Woodrow (University of Calgary, Canada) & Alan Dunning (Alberta College of Art and Design, Canada)

The Project's works establish a recursive loop in which the invisible actions of the body are manifest and an inhabitant is required to monitor both the changing environment and the body that manifests it. This is achieved through the use of a relational vocabulary of representation, in which identities are lost and gained, subsumed by a non-identifiable collection of other identities. One interesting consequence of this is that body-degree-zero

comes to represent a functional alternative to the Cartesian or Lacanian constructions of self. No longer are minds fed back onto the self-reflection of psychology or philosophy, but rather "bodies" are fed back upon themselves - experiencing the data derived from a physical presence that at one and the same time is theirs and not theirs. Heartbeats form not only the internal rhythm of living, but an external soundscape; brainwaves, stripped of privacy, begin to girate on electronic screens; and McLuhan's prophecy fulfilled as the data-skeleton of autonomic bodily processes becomes clothing worn, subject to all the same rules of designer fashion and aesthetic self-fashioning.

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## DAW06 DIGITAL PARCOURS

Last update: July 11, 2006, at 09:19 PM

### WEDNESDAY JULY 12

*The Digital Parcours consists of series of performances, installations and artworks, that have been either realized with a computer or will be performed with the aid of one or more computers. In addition to experiencing the variety of works and the versatility of today's computers, visitors will have the chance to meet many of the artists and scientists behind the works and also to visit those institutes which are partners in this years Digital Art Weeks.*

*You are welcome to join the organizers of the Digital Art Weeks in a specially planned guided tour that will begin with **coffee at 13:00** at ETH Zurich, RZ Building, Floor H, Clausiusstrasse 59, 8092 Zurich. The tour will then commence and continue through to all stations of the Parcours listed in the order below. Travel is by foot and tram. Some visitors may like to bring their bikes. The duration of the event is circa two hours. Persons interested in participating in the Symposium may also register at this time.*

*The Works by L. Paul, E. Maesaki & W. Pappenheimer will be on view for the duration of the DAW06 from July 12th to the 15th at the below given hours. The guided parcours tour finishes off with a second **closing apero at 17:00** in the VisDome.*



### PARCOURS PROGRAM

#### Location: ETH Zurich, RZ Building, H Floor

13:00-14:00 [RECEPTION & REGISTRATION](#), The DAW06 Team & Invited Guests (INT)

#### Location: ETH Zurich, ETF C106

13:30-14:30 [ROSEBUD \(3D Film, 4 min/looped\)](#), Pablo Ventura (ESP/CHE)

#### Location: Platzspitz (Behind Landesmuseum)

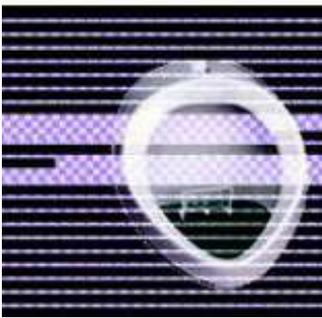
14:30-15:30 [CHINA GATES \(Sound-Art Performance\)](#), Art Clay (USA), Dennis Majoe (ENG) & Ensemble (INT)

#### Location: School of Art and Design Zurich

11:00-17:00 [WATER BELL PROJECT \(Installation\)](#), Etsuko Maesaki (JPN)

# PERFORMANCES & INSTALLATIONS

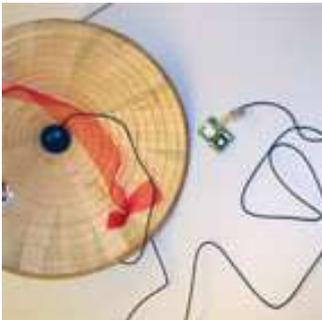
## GBA CORE DUMP V2.0



Leonard J. Paul (CAN)

This installation consists of a GBA with a flash ROM running custom-made software, which explores issues of public and private space. The GBA will be mounted in the bathroom within a small security picture frame to encourage viewing and listening, but discourage un-hygienic interaction. The software creates recombinant images and sounds from the real world samples and the work's title shows that the GBA's CPU will be "dumping" out recombinant and pseudo-random generative images and audio from its internal memory. Instead of dumping out memory to a printer, it displays it visually and through sound. The notions of intimate space and the fetishization and anthropomorphizing of handheld game units is explored in a real-time audiovisual experience shared by both the GBA and the bathroom occupant. Version 1 of this installation was shown in the women's washroom at the Open Space Gallery for Interactive Futures 2006 in Victoria, Version 2 of the installation will include new music, audio samples and images specifically suited to the new site of Computer Systems Institute ETH Zurich and further challenge conventional notions of hand-held gaming systems.

## CHINA GATES



Art Clay (USA/CH), Dennis Majoe (ENG) & The China Gates Workshop-Ensemble (INT)

The early experiments of Charles Ives's father with marching bands crossing at intersections and his son's adoption of it, proves that interest in exploring mobility has fascinated even before electronic devices. As with Ives's marching band polytonality, we also have the opportunity using modern technologies from the Walkman to the Wearable not only interact with local surroundings like Ives, but for the first time also on a world wide level. Global networking systems such as GPS amongst others have created a ubiquitous environments in which we can now make art in. China Gates is a work for GPS Wrist conductors and tuned gongs for an ensemble. The work addresses the concept of audience in public space through the possibilities of the GPS Wrist Conductor and an acoustic concept of music making in public space. Anyone interested in joining the workshop is welcome. It is open free of charge to those interested. The performance will be held regardless of whether conditions at Platzspitz and will be performed by a group of artists and musicians who took part in the DAW06 Mobile Music Workshop.

## ROSEBUD

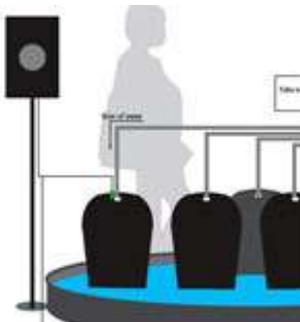


Pablo Ventura (ESP/CHE)

Rosebud is the result of a 4 minutes pilot film created to investigate the possibilities of 3D technology in Video Dance. The title makes reference to a famous film sequence in Orson Welles' film "Citizen Kane": A crystal ball drops out of the protagonist's hand and as it rolls into a close up shot, it establishes a rather bizarre perspective. At this moment the protagonist speaks out "Rosebud". In the 3-D Rosebud film, a dancer starts out from an orange transparent ball and dances a sequence which traces a diagonal in space, allegorically making the same journey as the mentioned crystal ball in "Citizen Kane's" sequence. 3D imaging accentuates dramatically the relationship between the dancer and the space she inhabits, achieving a fascinating hyperrealist synergy of dance and space. Space in the context of 3-D dance film is not perceived simply as a flat background or backdrop in which a dance takes place, but via the filming technique, space itself is as important as the dancer's movements. The film was created at the Computer Systems Institute ETH Zurich with students of that Institute.

Special thanks are due to Prof. Luc van Gool and his Computer Vision Laboratory who kindly helped us to play the film on their stereo system.

## WATER BELL PROJECT



Etsuko Maesaki (JPN)

The Waterbell Project is a sound installation based on the Japanese 'Suikinkutsu'. Suikinkutsu ("Water Harp") is a unique feature of Japanese gardens. It consists of a large earthen jar with a hole in the bottom. This jar is buried upside down into the ground next to a water basin. When the waterdrops seep from above into the jar, they make a sound somewhat similar to what you would hear in an underground cave. The Waterbell Project consists of five vessels standing in a basin. A tube directs drops of water to the top of each of these vessels. When they drip into the water inside the vessels a sound can be heard. The frequency of the drops and the amount of water in the basin is controlled by a computer. At the same time this computer gathers realtime data from the internet: The price of oil in Japan and the temperature of the ocean. The frequency of the waterdrops dripping into the vessels corresponds with the temperature of the ocean, the water in the basin raises and drops with the price of oil, hence changing the quality of the sound made by the drops.

## SVEN



Amy Alexander (USA)

SVEN (Surveillance Video Entertainment Network) is a system that can be set up in public places - especially in situations where a CCTV display might be expected. The system can be configured for either a mobile unit or stationary location, and consists of cameras, video display, speakers and software. The software consists of a custom computer vision application that tracks pedestrians and detects their characteristics, and a real-time video processing application that receives this information and uses it to generate music-video like visuals from the live camera feed. The resulting video and audio are displayed on a monitor in the public space, interrupting the standard security camera type display each time a potential rock star is detected. The idea is to humorously examine and demystify concerns about surveillance and computer systems not in terms of being watched, but in terms of how the watching is being done - and how else it might be done if other people were at the wheel...

## MOTION STILL LIFE 1



Will Pappenheimer (USA)

Motion Still Life 1 extends the artistic tradition of the picturesque and spatial object arrangement into the domain of the Internet. A live Web camera frames a physical still life scene with vase, flowers and still life objects. Through its counterpart website, aesthetic controls allow internet viewers from anywhere to adjust the composition telematically in the distant space of the gallery. The Internet user is the surrogate artist. The time and space of the scene is ever-changing and accessible for the moment that becomes the still life. Exhibition visitors are able to see virtual participants configuring the still life through object movement, blinking LEDs connected with online activity, and multi-colored lighting for night time or alternative illumination. The mechanism is constructed from a self-contained network pan and tilt surveillance camera which has been disassembled and reconfigured for a more friendly gesture. <http://www.motionstilllife01.thruhere.net/>

## ALMOST LOST



Heinrich Lüber & Corebounce (CH)

"In der Performance spreche ich über zwei Stunden endlose Wortketten und projiziere diese gewissermassen von Innen an eine meinen Kopf umgebende Sphère. Die sich selbst dekonstruierende Sprache wird durch eine interaktive Technologie umgeformt und in Lichtform auf die Sphère und den Umgebungsraum zurückgeworfen. Die Projektionen zeigt eine Virtualität im Sinne einer "plastischen" Verformung in Möglichkeitsräume hinein. Das die Figur umgebende Halbrund bildet eine Andeutung einer zweiten Schicht dieses dynamischen Raumsystems, die begehbar ist und worin der Zuschauer sich als formender/aktiver Mitspieler in diesem System erleben kann." (Heinrich Lüber) ⇒ [www.heinrichlueber.ch](http://www.heinrichlueber.ch) | ⇒ [www.corebounce.org](http://www.corebounce.org)

## DAW06 EVENT SCHEDULE

Last update: July 05, 2006, at 09:15 PM

# WEDNESDAY JULY 12

Also see → [Digital Parcours](#) for the afternoon program.

## PERFORMANCE WINDOW I: "ReScored Films and Malleable Scores"

**Location: Cabaret Voltaire**

- 20:00-21:30      Screening: [ALLES WAS WIR HABEN](#), Volko Kaminsky (DEU)  
Performance: [SIGNIFIKANTENSTADL](#), drb (Julian Rohrhuber and Renate Wieser) (DEU)  
Performance: [VIDEO GAME AUDIO LIVE](#), Leonard J. Paul (CAN)
- 19:30-23:00      Bar

# THURSDAY JULY 13

## PERFORMANCE WINDOW II: "Wearable Audio and Video"

**Location: Cabaret Voltaire**

- 20:00-21:30      Concert: [The HANDYDANDY](#), Bernhard Bauch, Luc Gross, Nicolaj Kirisits, Gordan Savicic, Florian Waldner (AUT)  
Performance: [13 VOLTS and A CARROT](#), Eva Sjuve (SWE)  
Performance: [VIDEO PEACOCK](#), Benoit Maubrey (USA/F)
- 19:30-23:00      Bar

# FRIDAY JULY 14

## PERFORMANCE WINDOW III: "Stadt, Statt, Staat oder Satt?"

**Location: Cabaret Voltaire**

- 20:00-21:30 Performance: [IMPROVe](#), Zeenath Hasan (FIN) & Richard Widerberg (FIN)  
Performance: [staTdT\\_kunst\\_ZURICH](#), Hannes Raffaseder & Kurt Hörbst (AUT)  
Performance: [TUNINGS for String Instrument and Computer](#), David Kim-Boyle (USA) Cello: Martin Merker (DEU)  
Performance: [GRENZE](#), Patrick Fontana, Emeric Aelters and Pierre-Yves Fave (FR)
- 19:30-23:00 Bar

# SATURDAY JULY 15

## PERFORMANCE WINDOW IV: "SENSES AND SENSORS AT WORK" & "DANCE & DANCING"

**Location: Kunstraum Walcheturm >>**

### Session I **Senses and Sensors at Work I**

- 20:00-20:30 Dance: [STRANGER](#), Disappearing Acts Dance Company (USA)  
20:30-21:00 Performance: [4WHEEL REMIX](#), Julie Andreyev & Team (CAN)

### Session II **Senses and Sensors at Work II**

- 21:15-21:45 Performance: [HUDDLE GOINGPUBLIK](#), Art Clay (USA/CH) & Erratum Ensemble (INT)  
21:45-22:30 Performance: [S.S.S. Trio](#), Atau Tanaka (FRA)

### Session III **Senses and Sensors at Work III**

- 22:45-23:30 Performance: [VIRTUAL DJ](#), Steve Gibson (CAN) & Corebounce (Visuals, CH)  
23:30-00:45 Closing Performance: [JUMP'N'RUN](#), Steve Gibson (CAN), Leonard J. Paul (CAN), Randy Adams (CAN) & Corebounce (CH)

# PERFORMANCES

## ALLES WAS WIR HABEN



Volko Kamensky (DEU)

The film "Alles was wir haben" (All That We Have) focuses on a small German town, Rothenburg/Wümme. Its museum of local history is driven by the attempt to provide the area with a sense of identity by representing its history. This process of conservation takes on actual character through the endless chain of destructive arson attacks on the museum and each of its reconstructions. The somewhat ironical fact that representing history requires its very construction becomes increasingly evident in the film. Acoustically, this evidence is supported by the film sound, which can not be linked back to any form of original sound source. In contrast, all of the sounds used in the film have been generated by artificial means by using present forms of algorithmic sound synthesis. By playing with the ambiguity of origin, it blurs the distinction between diegetic and extradiegetic elements, thus avoiding the impression of 'natural', 'unconstructed' reality that is typically associated with atmospheric sound recordings, and with documentary film.

<http://swiki.hfbk-hamburg.de:8888/MusicTechnology/491>

## SIGNIFIKANTENSTADL



drb: Julian Rohrer & Renate Wieser (DEU)

Signifikantenstadl is a piece that plays with the different perceptions of film sound, technical vs. atmospheric, diegetic vs. extra-diegetic, psychological vs. material, natural vs. artificial. It combines purely synthesized sound with (visual) cinematic quotes from silent movies. The literature of writing code is combined with moments of filmic narrative, creating an ambiguity between distant and near, between extra-diegetic and diegetic sound. The piece is played with two networked laptops running SuperCollider sound synthesis language. While the DVD (edited found footage, 20 min) is played back (DVD soundtrack is only a simulation of a film projector sound), code is executed and modified. The whole soundtrack is purely synthetic (algorithmic) without the use of any recorded sound. It is composed to relate to the film setting in such a way that it moves between atmospheric sound and film music.

## VIDEO GAME AUDIO LIVE



Leonard J. Paul (CAN)

As his alter-ego 'Freaky DNA', Leonard Paul is known for making electronic music which combines the dance floor with video game sounds. In a January 2005 interview, German Public Radio stated: "Doch Len Paul kommt immer wieder zurueck zu den guten alten Zeiten des Commodore 64, zumindest privat und fuer seine Musik." The show will consist of dance influenced electronic music with plenty of classic game audio references and techniques in the mix. Similar to his work on The Corporation there will be extensive use of granular synthesis and layers of processed location recordings. Visuals will be tightly tempo-sync'd via Pure Data's Graphics Extension for Multimedia (GEM) to the audio triggered by custom patches in Audio Mulch.

## THE HANDYDANDY



Bauch Bernhard, Gross Luc, Kirisits Nicolaj, Savicic Gordan, Waldner Florian (AUT)

The Handydandy consists of five media artists from Austria making music on their mobile telephones instead of using usual music-instruments. The mobile telephones are used only as interfaces and they are connected, via Bluetooth, to a computer network, a virtual opposite to the "human network" music-band. The entire instrument served by the musicians, is thus divided into the mobile telephones, the Bluetooth connections and the laptops acting together over WLAN. Thereby different feedback systems on social and digital level, which are used for the compositions, develop. The selection of this configuration makes possible to use not only the movement in space as temporally akusmatic category but also to connect the powerful aesthetics of a Rock performance with the intellectual requirement of the electronic music. The Handydandy is at the same time a RocknRollband and a computer network - music group. The poet Charles Baudelaire wrote that an aspiring dandy must have "no profession other than elegance... no other status but that of cultivating the idea of beauty in their own persons. . . he must live and sleep before a mirror."

## 13 VOLTS AND 1 CARROT



Eva Sjuve (SWE)

13 Volts and 1 Carrot is an improvised interactive performance using real-time sound processing. The narrative in "13 Volts and 1 Carrot" is a surreal response to cultural issues of the stranger and the local community, based on various sources as folklore from Northern Europe, and police films from the 30's, communicated through sound and movements. It is movements and gestures that change the sound. There are in the current version nine sensors are attached to the body, which responds to gestures. The whole performance is improvised and interacts with the environment and the audience. "13 Volts and 1 Carrot" is a narrative field - to be examined in terms of movements, gestures, tempo, loudness and silence. The sounds used are all processed in real-time. The gestural interface is built on a PIC micro controller, and the sound is processed using MAX/MSP. The length of the performance varies from 10 - 20 minutes.

## VIDEO PEACOCK



Benoit Maubrey (USA/F)

In the more recent AUDIO PEACOCKS project wearable electronic instruments are constructed from polycarbonat plexiglass material shaped into a peacock's fan-like plumage. The plexiglass surface is equipped with 16 loudspeakers (150 watts power), amplifiers, and rechargeable 12 volt batteries. The "audio-plumage" is highly directional and functions like an electroacoustic radar dish. An Audio Peacock can use its own site-specific electronic instruments (see Ballerinas) or amplify and alter its voice using a built-in microphone, sampler, and digital filter mechanisms. The Peacock can also receive sounds from outside sources via transmitter/receiver and disseminate them in a space by orienting its high-tech "plumage". VIDEO PEACOCK is the most recent performance project from Benoit Maubrey. An Audio Peacock costume made from white plexiglass is used as a mobile projection screen. In this audio-visual performance the electro-acoustic quality of a Peacock is visually enhanced via a video projector. Video-taped images are projected simultaneously to the sounds on the costume. In a more spectacular sense the Peacock's own real-time image can be projected live onto its costume as a form of "video-feedback". Additionally its own voice and sounds can be used to manipulate the projected images: in effect the Peacock "wears" its own sound.

## **IMPROVe**



Richard Widerberg & Zeenath Hasan (FIN)

This mobile music work is an aural architecture for socio-cultural exchange. Sonic realities of the everyday are improvised live in a non-linear mode. Local and remote audiences contribute and access open content. IMPROVe explores the role of the mobile phone user as a creator of her/ his own content. It attempts to define the mobile device as a tool for environment awareness by making the user conscious of their immediate sonic surrounding. By exploring the role of the mobile phone as a medium of sonic content creation and exchange, we propose the understanding of the music making mobile device as a medium of empowerment.

## **staTdT\_kunst\_ZURICH**

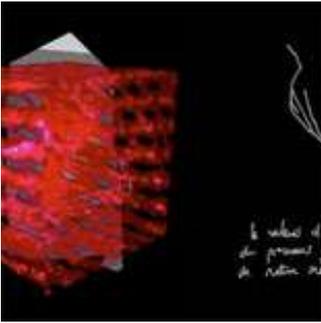


Hannes Raffaseder & Kurt Hörbst (AUT)

Zürich\_14.07.06 is part of the ongoing project staTdT\_kunst. The title has two different meanings: 'statt Kunst' (instead of art) deals with the role and significance of (contemporary) art in our society, while 'stadt kunst' (city art) uses field recordings of specific sounds and voices, photos and videos sourced in the city or documentary-style interviews with people passing by as basic material for an audiovisual live-performance. Filtered through the artists subjective point of view, this footage is deconstructed, categorised, transformed, and then re-assembled into a site specific multimedia live performance. The project 'staTdT\_kunst' began with a performance in Linz in March 2002 and has grown to include new cities and new results. A 'snapshot' of a specific day will be developed further for Zürich. On July the 14th audio and video materials will be collected during the course of a single day. These materials may include city sounds and voices, videos, photos and recordings of the workshops and lecture of the Digital Art Week that focus on the theme of the day, Malleable Scores, ReScoring and Live- Coding. These will then be transformed and remixed during their performance in real-time into the newest version of a staTdT\_kunst project. For past projects, please visit:

<http://www.stadtkunst.com>

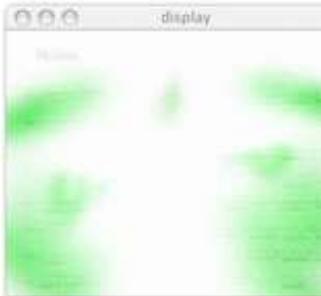
## **GRENZE: Lectures of the Capital by Karl Marx**



Patrick Fontana, Emeric Aelters and Pierre-Yves Fave (FR)

You are invited to discover the video performance Grenze (2D and 3D computer animation) according to the Capital of Karl Marx. Our generation's experience : Capitalism won't die of natural death. We intend through these particular lectures of Marx's Capital to open interrogations about social and economics context of today's Capital. In GRENZE, the principal question thus goes on the movement, the circulation of capital and its transformations. It places progressively series of metamorphic movements. It articulates with it. It gives it a visual translation. Our look, our waiting, time respond together to this construction of an infernal mechanism which holds everything. It opens a range of questions as how today's capital catches ours lives, our subjectivities there "Your capacity" to be put in images "words found a form and a space which enable him to appear in all its power. I imagine that a multitude of singular forms are possible starting from the elements thus assembled. I do not know if thus Eisenstein would have put out of film the Capital, but you undoubtedly found a manner strong and tempting to carry out its dream" Jacques Rancière, professor of philosophy.

## **TUNINGS**



David Kim-Boyle (USA)

Unlike many of my compositions which are concerned with the slow transformation of timbre, in tunings I was interested in discontinuity, fragmentation and an exploration of the space between the gestures. Of particular interest was a musical model based on the idea of a radio tuning into different stations, sometimes pausing, often moving on. During a performance, the cellist reads a score from a computer monitor - sometimes they are asked to perform from traditional notations and sometimes to interpret various graphical gestures. Unlike a traditional score, this 'score' dynamically changes in real time ensuring a spontaneity from performance to performance. The sounds produced by the cellist are modified by a separate computer running Cycling '74's MaxMSP which is also used to generate sonic textures which complement the cellist and extend the tuning metaphor further. tunings was written for cellist Franklin Cox in the Spring of 2006. Many thanks to Frank for sharing his enthusiasm and passion for all things unorthodox in the world of the cello.

## STRANGER



Smith/Wymore Disappearing Acts (USA)

Stranger is a dance theater multimedia work for three dancers, three suitcases, laptop and a video camera. The work explores identity in this time of information saturation via hundreds of images from Google image searches, random text generators, audience questionnaires and manipulated live feed video. The work asks us to consider what is happening to our sense of ourselves as we dive deeper into the electronic sea. What is our identity in this non-corporeal, unpredictable, unsecured and insecure, massively tethered yet infinitely diverse and pan cultural environment?

Smith/Wymore Disappearing Acts is a Berkeley, California based dance-theater company founded and directed by Sheldon B. Smith and Lisa Wymore. Their performance works create abstract narratives built on a foundation of physical experimentation, improvisation, text, song and digital image. The result is a new aesthetic that is at once oddly familiar, and beautifully odd.  
[www.smithwymore.org](http://www.smithwymore.org)

## FOUR WHEEL DRIFT [REMIX]



Julie Andreyev & Jordan Benwick (CAN)

Four Wheel Drift [remix] is site-specific in that it relies on the unique urban qualities of the host city. Influenced by the artist group Situationists International (1957 - 1972), the project employs the tactic of the 'derive' (translates as 'drift') to cruise the city seeking out unexpected urban performance. In preparation for the FWD [remix] performance, cameras and microphones provide video imagery and sound of the car's environment that is manipulated by the interaction of the car and driver to provide an audio/visual storytelling of the city's street culture. These records become the playlist used by software and the DJ and VJ (visual jockey) to generate live video panoramas and soundscape during the [remix] performance. Each time it is performed, Four Wheel Drift [remix] involves collaborative processes that provide audio and video data unique to the host performance city. Originally produced in 2004 by Julie Andreyev in technical collaboration with Jordan Benwick, the project involves additional modes of collaboration, such as those between the car and driver, between the production team and a local participant, and between the [remix] performers. Creation takes place 'on-the-fly' in a public setting rather than in the isolation of the studio.

## HUDDLE [GoingPublik]



Art Clay (USA/CH) & Erratum Ensemble\* (INT)

GoingPublik is a sound art work for distributive of trombones ensemble and wearable computers. The core idea behind the work is a strategy of mobility by employing the wearable computer system to run a software based electronic score, allowing for what might be termed 'composed improvisation'. This lets improvisational elements mix within a compositional structured music. By electronically monitoring the performer's physical position in and movement space during performance using universal inputs such as geographical positions obtained via satellites and sensors using the earth's magnetic field, the score program can make suggestions and demands on the performer to various degrees and at various times. The contents of the score thereby linked directly to the movements of the performer and thus creating a unique choreographic metaphor of sound dispersing in space. \*The players of the ensemble are **Roland Dahinden** (CHE), **Günter Heinz** (DEU) & **Thierry Madiot** (FRA) and have performed the work at various festivals and events since 2000.

## S.S.S TRIO



Atau Tanaka, Cecile Babiole & Laurent Dailleau (FRA)

This trio with artists Cecile Babiole, Laurent Dailleau, and Atau Tanaka create together a dynamic sound and image environment. S.S.S is a trio performing visual music with sensors and gestures. They create a work of sound and sight, a laptop performance that goes beyond with the intensity of bodies in movement. Going beyond media: music that is more than a soundtrack, images going further than video wallpaper. A three-way conversation modulating sonic and luminous pulse and flow. Sensors capture gesture and corporeal movement, translating them into digital data: Ultrasound sensors measure the distance between the performer's hands and her machine, allowing her to articulate 3D imagery, navigating in color, scale, texture? The Theremin, historical electronic instrument invented in 1919, an oscillator responds to perturbations of electrostatic fields based on the distance of the hands and body to the instrument? The BioMuse places gel electrodes on the performer's forearms, analyzing EMG biosignals. Muscle tension through concentrated movement allows the musician to sculpt sound synthesis. S.S.S's singular approach brings them to present their work in a wide range of contexts in music and the digital arts. They are equally at home performing in galleries or underground spaces, in arts centers or research laboratories.

## VIRTUAL DJ



Steve Gibson (CAN)

This work uses the tracking capabilities of the Gesture and Media System to allow one or more users to use space as an audio remix or performance tool. Users literally wave their arms, and as if by magic new audio loops are accessed, synthesizer filters are opened, samples are played, and drum loops are started. Simultaneously robot lights follow the users, dynamically changing in relation to their position and the audio. Virtual DJ is part of a larger research project entitled Moveable Feast, which was sponsored by CANARIE, Canada's high-speed research network agency. The primary intent of this research project was to create innovative and meaningful projects for presenting content over high-speed networks. The secondary intent was to explore the use of the Gesture and Media System (formerly the Martin Lighting Director) as an expressive tool for performance and audience interaction with lights, sound and images. The Gesture and Media System allows artists to 'map' an interactive space with sound, light and images, and to have user-movement dynamically control these elements via a small 3D tracker.

## JUMP'N'RUN



Live Visuals by Corebounce (CH)

Sounds and Bits by Steve Gibson (CAN), Randy Adams (CAN) and Leonard J. Paul (CAN)

The closing performance of DAW06 will let you immerse into a space of pixels and samples and...