

## **ACCOMPANYING EVENTS**

Wed, Dec 5	18:00   <i>Gallery of the National Technical Library</i>   Exhibition Opening Karel Dudešek: EXAMPLES
Fri, Dec 7	19:00   <i>BrmLab</i>   Live coding performance   <b>Robert B. Lisek in cooperation with Marta</b> Heberle & Przemek Sanecki: ERS - CRAWLING HIDDEN SPACES
Fri, Dec 7	20:00   New Stage   Multimedia performance   WONDERFUL CIRCUS Directed by Evald Schorm, Jiří Srnec, Jan Švankmajer   Premiered in 1977
Sat, Dec 8	22:00   Sample Room   Performance Marko Batista: H220 & Maciej Ożóg: FERAL SOUND KITCHEN
All days	New Stage   Conference mood participatory experiment Manuela Naveau: ARS WILD CARD
All days	New Stage   Participatory experiment in image data mining Dalibor Stys & Dita Malečková: MIND ATTRACTORS IN ARTIFACTS
All days	New Stage   Therapy experiment in the field of paraplegy CATCH Crew: Verticalizer

Venues

Gallery of the National Technical Library | Technicka 6, Praha 6

New Stage of the National Theatre | Narodni 4, Prague 1

BrmLab | Bubenska 1, Prague 7

Sample Room | Bartolomejska 13, Prague 1

Map: http://goo.gl/maps/rGj7H

Dec	5

18:00 | *Gallery of the National Technical Library* | Exhibition Opening Karel Dudešek: EXAMPLES

Karel Dudesek was born in Prague. He studied in Vienna and Düsseldorf, worked as an artist and musician and performed in the UK, the USA, Germany, Austria and France. He co-founded Minus Delta t, a performance and music group, which later initiated the "Bangkok Project". In core the transport of a stone weighing 4.5 tons from Wales to India, this was a mobile art project that lasted continuously for about six years.

Twenty years ago, Karel Dudesek proposed a media experiment titled "Piazza Vir- tuale" to the curator of the documenta 8, Jan Hoet. Van Gogh TV consisted of Karel Dudesek, Benjamin Heidersberger, Mike Hentz and Salavatore Vanasco in those days. After sponsors and directors of German and Austrian television stations could be convinced to provide their broadcasting infrastructure, a container city was set up beside the Fridericianum in the center of Kassel. More than one million viewers per day could participate in this interactive television project which lasted for one hundred days. Van Gogh TV broadcasted all over Europe and was a forerunner pre- diction of social networks, which emerged a couple of years later.

In his academic career, he held university teaching positions in Vienna and London and was the initiator of numerous festivals and projects in Europe.

In addition to the digital work, his drawings and paintings—abstract works—round up the exhibition. They express his inspirations gathered in Asia, where he has lived since 2008 (mainly in Beijing and Yogyakarta).

In the frame of this exhibition, which is titled "Examples", room 1 is reserved to Piazza Virtuale videos and an installation. Room 2 features gouaches, oil paintings and prints. In room 3, bookbinding works by Karel Dudesek senior are on display and room 4 is dedicated to a timeline visualization that provides an overview of most of the works and the overall context of what happened in the world in the year each work was created. This work of art has been created in cooperation with Mike Hentz.

http://dudesek.ciant.cz/en/

Dec 7	19:00   <i>BrmLab</i>   Live coding performance   <b>Robert B. Lisek in cooperation with Marta</b> Heberle & Przemek Sanecki: ERS - CRAWLING HIDDEN SPACES

Robert B. Lisek is an artist and mathematician who focuses on systems and processes (computational, biological, social). He is involved in the number of projects focused on radical art strategies, hacktivism and tactical media. Drawing upon conceptual art, software art, critical and meta-media, his work intentionally defies categorization. Lisek is also a composer of contemporary music, author of many projects and scores on the intersection of spectral, stochatistic, concret music, musica futurista and noise. Lisek is a pioneer of art based on AI and bioinformatics. He explores the relationship between bio-molecular technology, code and issues arising from network technologies by combining his DNA code with codes of viruses and recently by testing influence of radioactive materials on biological entities. He is also working on human enhancement: extensions through the use of radical transgressive methods that arise at the intersection of disciplines such as AGI, bioengineering, and nanotechnology. Lisek is also a scientist who conducts a research in the area of foundations of mathematics and computer science. His research interests are theory of partially ordered sets in relation with artificial general intelligence and complexity theory. Lisek is a founder of Institutefor Research in Science and Art, Fundamental Research Lab and ACCESS Art Symposium. Author of many exhibitions and concerts, among others: TERROR ENGINES - WORM Center Rotterdam, Secure Insecurity - ISEA Istanbul; Manifesto vs. Manifesto - Ujazdowski Castel of Contemporary Art, Warsaw; NGRU - FILE, Sao Paulo; NEST - ARCO Art Fair, Madrid; Float - DMACHarvestworks and Lower Manhattan Cultural Council, NYC; WWAI - Siggraph, Los Angeles; Falsecodes - Red Gate Gallery, Beijing; Gengine - National Gallery, Warsaw; Flextex - Byzantine Museum, Athens, FXT- ACA Media Festival, Tokyoand ISEA, Nagoya; Transhuman - Entropy Gallery, SSSpear –17th Meridian, WRO Center, Wroclaw.

http://fundamental.art.pl/ | http://vimeo.com/46303695 | http://www.youtube.com/watch?v=iy7pXcRtowQ

Marta Heberle is a theoretician of culture specializing in issues related with bioart and transhumanism. Currently she is preparing her PhD at the University of Poznan. She is also an artist focused on transgressive sensory experiments located on the border of audio and performance. Her actions are composed of subliminal violent brain stimulations through sound. Heberle also creates her own special fashion design projects, some of which are functionalized in her performances.

http://martaheberle.pl/

Dec 7

20:00 | New Stage | Multimedia performance | WONDERFUL CIRCUS Directed by Evald Schorm, Jiří Srnec, Jan Švankmajer | Premiered in 1977

A permanent resident of Laterna magika's repertory, a piece that has, since its first night in 1977, bred generations of dancers. Despite its age, it hasn't ceased to lure spectators by its poetic character and subtle humour. It is, among other things, a story about the unchievable character of the perfect, about the eternal desire, and, last but not least, it is a probe into human soul...

"Inside the modern circus, we are chilled by a rush of sea waves, amazed by the beauty born in the eye of the sea, seduced by the wild passion of gypsies, enchanted by the perfume of fallen leaves and cooled down by the fresh snow; we sense the fragrance emitted by an old puppet show theater, by the smoke coming from a caravan, surely also by the sawdust from under the hoofs of trained horses, and even from the make-up of the equestriennes... Images follow images, characters pass from the stage onto the screen and vice-versa, and credulous clowns experience before our eyes many wonderful adventures." (Svobodné slovo)

http://www.novascena.cz/en/repertoar/5.html

Dec 8	22:00   <i>Sample Room</i>   Performance Marko Batista: H220 & Maciej Ożóg: FERAL SOUND KITCHEN
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An experimental audio-visual explorations from the series of projects entitled "Displaced Objects and Hybrid Structures ". Using technology, the author focuses on shaping a hybrid environment of non-linear structures and displaced matrixes. Particular audio systems form a so-called network of travelling objects and, through the use of modern realtime technology, intertwine with temporary digitally generated visual processes. Besides an experimental approach and a succession of visual images, Batista's intermedia performance offers a specific spatial experience of audio sequences that are intricately intertwined and generated from low-frequency electromagnetic spectres. Using specially made electronic tools and control elements, the author forms a platform that enables a rhizomatic environment of hybrid displaced units.

Marko Batista is Ljubljana based mixed-media artist born in Tito's Yugoslavia. At the end of the year 1997 he is accepted to ACADEMY OF FINE ARTS in Ljubljana under the guidance of professor BOJAN GORENEC. The result of collaboration with professor Borut Vogelnik, Bojan Gorenec, Joze Barsi, Sreco Dragan and artists Vasja Lebaric, Andrej Kamnik was a participation at the LA BIENNALE DI VENEZIA 50th International Art Exhibition: VV2 in June 2003. Texts, discussions and photo documentation was published in a book entitled PHOTOFINISH (Batista M., Kamnik A., Lebaric V.; 2004) in collaboration with Tomaz Kucer. In 1998 together with Miha Horvat (son:DA) founded multimedia group KLON:ART:RESISTANCE. Exploring moving

images and digital sound environments they presented several projects at festivals, galleries and different urban places.In December 2000 FORUM STADTPARK (Gratz - Austria) and MKC Maribor invited Klon:Art:Resistance members in Gratz as a part of the introducing young conceptual artists of slovenian contemporary video art. As mixed media artist he is interested in image transformation processes, technology, networking data, sound layering and displaced sound-scapes, collaboration, linking concepts, hybrid spaces, contemporary society, diversity of art systems, politics of art and other fields of contemporary mixed media art.

Concept and realization: Marko Batista | Collaborators: Nataša Muševič, Primož Juvan, Miljenko Kadič, Vlado Kurtuma | Tachnical support: Jure Sajovic | Executive Producer: Marcela Okretič

## http://www.aksioma.org/h220/

Feral Sound Kitchen (aka Maciej Ożóg) – bending, DIY, mash up, collage, remix, recycling, field recordings, found objects, bio and techno data sonification. No limits! FSK explores all possible sound sources as a raw material for endless transmutation. Mutation, manipulation, metamorphosis. Difference and repetition. Open form. Fluid structure. Indeterminacy. Chance. Process...

Maciej Ozog, PhD, media theorist, researcher and musician. His research focuses on history and theory of media arts, panoptic / postoptic surveillance culture, information society, bio art and posthumanism. He has published a number of articles on aesthetics of interactive art, history and theory of avant-garde film and video art, and experimental music. In 2007 he received postdoctoral grant from the Ministry of Science and Higher Education for the project "Surveillance as Theme and Method of New Media Art". The book of the same title will be published in 2013. In 2012 he has obtained a grant of the National Science Centre for the research project entitled "New Media Art as Critical Praxis".

All	New Stage   Conference mood participatory experiment
days	Manuela Naveau: ARS WILD CARD
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Ars Wild Card is a Smartphone app to enable visitors to enjoy exhibitions, conferences and similar events. Using the app, visitors can capture a QR code beside each work or conference session and access a frame that reveals information about the piece. Within this frame the visitor can photograph the work, including themselves, friends and family to record their experience of the work. The photos are stored on their iPhone and can be shared to a cloud service and optionally shared via social media networks. Visitors can also use a printing service in the exhibition or conference. Ars Wild Card dynamically generates a photographic archive of visitors' daily interactions and experiences of the art works or talks.

Ars Wid Card is a project by Ars Electronica (Hideaki Ogawa, Emiko Ogawa, Manuela Naveau) | Software development by Memetics GmbH | Design by Stefan Eibelwimmer

http://awc.aec.at/

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*New Stage* | Participatory experiment in image data mining Dalibor Stys & Dita Malečková: MIND ATTRACTORS IN ARTIFACTS

Projection of creator's mind attractors into artifact: experiment and computer analysis

Dita Maleckova (New Media Studies, Institute of Information Studies and Librarianship, Charles University, Praha CZ), Dalibor Stys, Tomas Nahlik, Dalibor K. Stys (School of complex systems, FFPW, University of South Bohemia and FME Czech Technical University, Nove Hrady CZ)

The project is a result of fruitful cooperation of system biology and the information theory. The notion of information gain is currently one of the most advanced measures in image data mining. PIG (Point Information Gain) image transformation and PIE (Point Information Gain Entropy) are theoretically well substantiated concepts, an analogy of the transfer entropy – information contribution – assessed in multidimensional state/phase space (Stys et al. 2012).

PIG/PIE were primarily applied to analysis of microscopic images of living cells but may be in principle utilised to exploration of many structured datasets wherefore they are basically the measures of information in a structured experimental dataset. They were developed for information analysis of multifractal objects (Stys et al. 2012). Their concept is based on the assumption that the observable multifractality of natural objects is the reflection of the structure of the internal attractor(s) which is responsible for dynamic structuration of observed stable objects – i.e. biological or societal structures. By PIG/PIE we measure the state of the multifractal object as a projection of the generalized dimension spectrum component – the Rényi entropy of an object in given point in the multidimensional state space – into two-dimensional image plane.

PIG/PIE was until this moment never used to research in the field of art. In this project we use PIG/PIE to image analysis of a set of paintings of Czech 19th century artist Frantisek Kupka. The application of the method to classification of objects of art has multiple motivations. First, we state that the image itself is a reflection of the attractor(s) defining the state of artist brain. Second, we aim to describe the perception of the piece of art as a reflection of an Lyapunov stable object – human brain in given state – in interaction with perceived image of the object. One may eventually also think about a third aspect which is public perception dependent on the crowding behavior/swarm intelligence of the society. And last but not least this can be also considered a contribution to Lev Manovich's question: "How can we discover interesting things in massive media collections?"

The goal of the project is to calibrate, i.e. to map the most proper spectrum of order coefficients  $\alpha$  needed to map the perception of the given human sample to statistically most appropriate projection of values obtained by analysis of image samples. We may also play with projections of known multidimensional chaotic attractors into two dimensions (Sprott 1993 a,b) to obtain adequate approximation of examined phenomena.

Goals:

1. Calibration of the calculation to human perceptions 2. Chaotic attractor projection

Method:

1. Clustering of images by art lovers present at Mutamorphosis 2012

A. Structural similarity/analogy (arbitrary numbers of clusters) | B. Periods of creation (arbitrary numbers of clusters) | C. Structural similarity (given number of clusters: feed back from previous reconnaissance)

2. Computer analysis: clustering of images (structural similarity/analogy), exploration of different sets of order exponents

3. Feed back (in real time):

A. Visualisation of transformed images in different colour channels | B. Visualisation of clusters determined by computer and by art lovers, comparison of clusters

## References:

Stys D., Jizba P., Papacek S., Nahlik T., and Cisar P., On measurement of internal variables of komplex self-organized systems and their relation to multifractal spectra, 2012, IWSOS 2012, LCNS 7166, pp. 36-47, Kuipers and Heegaard eds. Springer: Heidelberg Dordrecht London New York, ISBN 978-3-642-28582-0

Sprott, J. C. Strange Attractors: Creating Patterns in Chaos. New York: Henry Holt, 1993a

Sprott, J. C. "How Common Is Chaos?" Phys. Lett. A 173, 21, 1993b

All days New Stage   Therapy experiment in the field of paraplegy CATCH Crew: Verticalizer	
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Traumatic, degenerative and post-operative states require efficient, economical, individual and home-use equipment. One of the most efficient physiotherapy and rehabilitation devices that enables upright standing of people with paresis of lower limbs and trunk are standing verticalizers. Verticalizers are based on a simple idea that the sitting/lying position is not the position of the body for which man evolved; the physiologically desirable posture is the standing position. However, basic verticalizers do not guarantee medium- and long-term maintenance of attention and motivation of the user. We attempted to solve this issue by creating an innovative prototype of a tilting verticalizer that serves as an experimental art/technology platform tailored for handicapped individuals. We constructed an original tilting frame that has been equipped with various hardware and software components. The hardware part consists of a tilt sensor attached to the retaining portion of the device, LCD monitor mounted on the verticalizer and a computer. The software part presents a wide combination of cognitive, gaming and therapeutic activities that create a link with the outside world, which is normally unreachable for the user. The final aim is to connect multiple devices via network, which will enable regular online consultations between a therapist and his/her group of users and also interaction among the users in the group. The possibility to compete with other members of the group in fulfilling tasks given by the therapist introduces yet another level of motivation for the users.

Miloslav Klouda | Jan Pfeiffer | Martin Zrcek | Andrej Boleslavsky | Michal Masa | Pavel Smetana & CATCH consortium | http://catch.ciant.cz/