

»Space and Time«

LAC2005 – 3rd International
Linux Audio Conference

ZKM | Institute for Music und Acoustics
Saturday, April 23, 05
ZKM_Kubus 8:00 pm

Jan Jacob Hofmann: Tensile Elements

Paul Davis: Shimmer (Premiere)

Ivica Ico Bukvic: Symmetries (Premiere)

---Intermission---

Jan Jacob Hofmann: Oscillating Fields

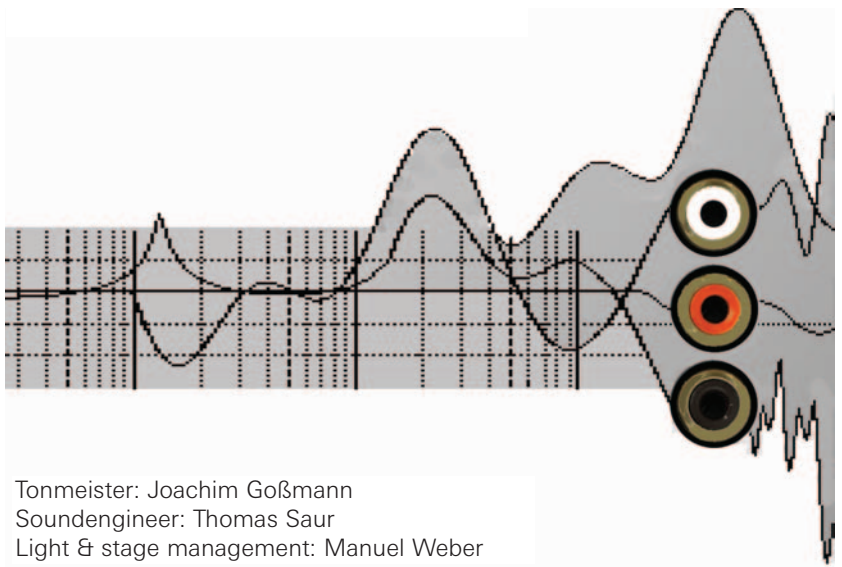
Panayiotis Kokoras: SLIDA

Ludger Brümmer: Xronos

»motion« - an audiovisual installation

by Ludger Brümmer, Joachim Goßmann
and Chandrashekar Ramakrishnan
is running before the concert commences.

Admission EUR 5 [concessions EUR 3]



Tonmeister: Joachim Goßmann
Soundengineer: Thomas Saur
Light & stage management: Manuel Weber

Tensile Elements

spatial composition
Jan Jacob Hofmann
2001

I regard my compositions as architecture made out of sounds. The acoustic material generates sonic space. I am trying to create an unlimited sonic space surrounding the listener in every direction. Thus, an architecture of sounds is created which evolves in an unpredictable way.

Sounds turn into freely moving elements, which get involved in a process of development as they take shape, define and modify space.

Being an architect, I'm particularly interested in position and movement of sound as well as the material, the sound refers to. Some of the sounds I use remind the listener of wood being knocked on, breaking glass, steel that is beaten. This is because I use similar oscillations as the ones that are originated by such actions. But I also go further than that by creating oscillations of materials which could theoretically exist but have not been invented yet.

In "Tensile Elements" the sound material is made out of constantly changing sonic objects which are characterised by their movement and interaction. These elements pass through the space, defining it, almost taking shape but still remaining disembodied. They come together in clusters and disintegrate again, nearly having an own way of behaviour, as it seems.

This is an originally periphonic, architectural sound- composition done with Csound in 2nd order Ambisonic. Both, the electronic sound and the spatialisation were created using Csound. 2nd order Ambisonic is a method to create the spatial impression of sound, using an encoding and decoding process. I transferred the Ambisonic- equation into Csound myself. For the performance at the ZKM I decoded the pieces for eight speakers. I work with 2nd order Ambisonic for several reasons. It offers me precise control of the position of the sound source and gives the impression, that the sound moves independently between the positions of the speakers. It offers as well precise localisation of the sound for many listeners inside the set-up, and last but not least, it even simulates height, if arranged on an appropriate rig.

Shimmer

tape piece
Paul Davis
2002

Shimmer is a short exercise in live phase shifting inspired by some of the early works of Steve Reich. It was performed live using SoftWerk, a Linux-based MIDI pattern sequencer driving a Kawai 5000S synthesizer. Audio processing was carried out using Tapiir, a Linux-based highly configurable multi-tap delay processor, and the piece was recorded using Ardour, the open source digital audio workstation. The piece consists

of two short ostinatos whose length varies between 2 and 8 notes, with traditional major scale intervals. Dynamically altering the length of each ostinato, the relative volume of each sequence, and the note attack characteristics was done live using a MIDI control surface; modifications to the delay system were performed via a computer GUI. You are encouraged to recall Reich's comments about his (early) minimalist music being similar to standing at the tide's edge as it slowly rises around your ankles.

Symmetries

for computer and violin
Ivica Ico Bukvic
2005

Violin: Anna Zielinska

Action and reaction, Ying and Yang, war and peace, white and black, round and square, similar or yet opposite, you and I, all or nothing, motion and tranquillity, sour and sweet, order and chaos, Are we really that different?

Is it really possible to reach a perfect balance between the outwardly irreconcilable polarities to seize the moment in a graceful dance of perfect symmetry? As we sit inside this enthralled sphere of influence, our differences wither away leaving only the pure, innocent communal quintessence. What used to separate, now connects us. So let us bask in this but a moment of our triumph knowing soon the spell will be broken and all that has been in the making, is undone in a blink of an eye. Are we really that different? – Sure.

Symmetries (for computer and optional violin) is an experiment in relegating musical structure and expression to the inherently stupid box of transistors. By concurrently utilizing various GNU/Linux audio software (Fluidsynth/QSynth, Pd, LADSPA, Jack-rack, JACK) it was the intention of the composer to generate a lush interactive texture whose frail balance engenders a consistent forward drive. In an ever-changing array of hierarchical probabilities, two instances will never be the same.

Oscillating Fields

spatial composition
Jan Jacob Hofmann
2002

The piece starts with a slightly inhomogeneous field of noise. Gradually, actual pitches evolve and start vibrating. Suddenly several sound objects occur, which get denser and denser. The sound objects become alive, move around in space, as they take on a shape and change it again. In this process they define and modify space.

»Oscillating Fields« is realized with the same technique as »Tensile Elements«. It is programmed in Csound with 2nd order Ambisonic. Both pieces belong to the series »Sonic Architecture«, which are electroacoustic compositions in the cross-over area between architecture and sound.

SLIDA

tape composition
Panayiotis Kokoras
2002

Slida is a piece for tape alone in which all the sound material comes from the classical guitar. I explored in depth unusual sounds that can be generated with a guitar. I played the instrument by scratching on the strings, knocking on the back of its body, hammering and sweeping, and even breaking the strings themselves. I played the guitar with unconventional objects, such as brass or glass slides, metal sticks or brushes, in order to obtain a better control, development and transformation of the sounds. By this and with the help of computer digital tools, I tried to reveal moments that the ear would hardly hear normally. I tried to isolate fragments which are rarely perceived by the listener or even the performer in the course of a performance. Then I tried to take the sound further from its true nature and make it suitable for the particular composition.

Every second in the work is very detailed and carefully elaborated. Each acquires its own importance; however, the dramatic succession of each particular moment in the structure of the work assumes an essential role within it. Every gesture justifies both: the next and the preceding one, and all join together to create phrases, then sections, and finally the composition itself.

The realization of the work took place at the electroacoustic music studio of York University. The main sound editing and mixing of the work was made with an IRIX Silicon Graphics O2 system.

Xronos

for 4 channel- tape und video tryptichon
Ludger Brümmer
2002

movement: Nick Haffner, Katja Büchtermann
video, computer animation, music: Ludger Brümmer

There are many different ways to look at the flow of time, from static, dynamic or philosophical perspectives.

In Xronos a simple dynamic tendency is used to derive energy out of the initial minimal content presented by the first event. The musical form of this piece is created out of the idea to perform a single accelerando, a continuous process of intensifying density, speed and loudness.

The video is used to amplify this crescendo together with the music. It is showing animations of moving bodies as well as natural phenomenons such as water and clouds. The video is creating a polyphony out of a three-stream video that is dealing with parallelism and asymmetry, topics that are fundamental in music as well. So the video can be regarded as an extension of musical expression – bearing in mind that the usual preference of perception imposes a very different hierarchy.

Both, video and sound transform time into movement and speed. Both deal with the topic of movement or standstill but each of them finds different solutions for the use of movement. As a consequence the formal construction is quite different: while the music uses a symmetrical form (A B A), in the video the idea of symmetry is used in its spatial construction so that movement plays a different role in the visuals than in the audio. This result is a self-centered attention for each of the spheres, music and video. The connection between the acoustic and visual sphere is densified by the use of computer animations of dynamic models, the entire music is created by physical models.

Xronos was made possible through a generous commission by the French ministry of Culture. It was created with the help of the physical modeling software Genesis, created by ACROE Grenoble as well as the public domain programs Common Lisp Music and Sound by William Schottstaedt and Common Music created by Heinrich Taube.

Ludger Brümmer

was born in 1958 in Werne, Germany. After a degree in education, he studied from 1983 to 1989 composition at the Folkwang Hochschule Essen where he received the Folkwang Award for his degree. In 1991 he was commissioned to compose for the Ballet Ruhrort, later he worked with the Nederlands Dans Theater Den Haag and the Het Symphonie Orchester Amsterdam. Till 2000 he taught composition, synthesis and analysis at the Folkwang Hochschule Essen, the electronic Studio of the TU Berlin, the Archimedia Kunsthochschule Linz, the Hochschule for Design Karlsruhe, the Institute for New Music Bremen and the Institute for Sonology Den Haag. After that he was lecturer at the Darmstädter Frühjahrskurse and in 2003 guest professor at the Sonic Art Research Centre/Queens University Belfast.

Since 1994 he focused on research and composition. He also started giving workshops at the ZKM, Center for Art and Media Karlsruhe, where in April 2003 he became the head of the Institute for Music and Acoustics.

Ludger Brümmer received various awards, for example the Golden Nica at the Prix Ars Electronica for »The gates of H.«, 1997 the Larry Austin Price of the International Computer Music Association, ICMA San Francisco, and in 2003 the first prize at the Festival »Reflexionen« of the Institute for New Media Frankfurt.

Ivica Ico Bukvic

was born in Croatia and has recently completed his residency as a guest lecturer at Oberlin College. At the moment he is finishing his PhD at CCM, University of Cincinnati, College-Conservatory of Music. His compositions comprise diverse media and have been performed at music festivals (MusicX, IEMF, LAC, OCEAN, SEAMUS, ICMC, Spark, EMM) and radio stations.

Recently, Ico received the national student award by the Croatian National Ministry of Science, Education, and Sports. He has a strong interest in research and has made several software contributions (RTMix, Soundmesh). He is a performer and a devout open-source advocate. His current compositional interest is in interactive multimedia art. For more info please visit: <http://meowing.ccm.uc.edu/~ico>

Paul Davis

Paul Davis is a software developer who has spent the last 6 years writing open source tools for audio professionals and musicians. Before that, he was a founding programmer at Amazon.com, and prior that worked in a variety of research and commercial software settings, including the University of Washington, Schlumberger Cambridge Research and EMBL in Heidelberg. When he's not writing software, Paul is either riding his bicycle hundreds of kilometres in a day, or wrecking someone's kitchen.

Jan Jacob Hofmann

was born 1966 in Düsseldorf. He studied architecture at the University of Applied Sciences Frankfurt am Main and graduated in 1995. After this he worked at H.G.+P, Frankfurt, an architecture firm. From 1995 to 1997 he took a postgraduate course in conceptual design and architecture at the Stedelschule - Art College Frankfurt/M, studying in the class of Peter Cook and Enric Miralles. Currently, he works as a composer, photographer and architect. For more info please visit: <http://www.sonicarchitecture.de>

Panayiotis Kokoras

was born in 1974 in Greece. He completed his musical training in composition and in classical guitar in Athens. Afterwards he continued in England where he obtained a Master and a PhD in composition at the University of York.

Panayiotis Kokorasís has a deep interest in sound morphology and its chronotopological precision as well as the physical structure of sound and its perception. His music ranges from acoustic works to mixed media and tape. He received commissions from many institutes and festivals such as FROMM, IRCAM, MATA, York University and he received 19 prizes and distinctions at international composition competitions.

He is founding member and general secretary of the Hellenic Electroacoustic Music Composers Association (HELMCA). Currently, he is teaching at the Technological and Educational Institute of Crete, Department of Music Technology and Acoustics.

Anna Zielinska

was born 1977 in Pozna, Poland and received her musical training at the Academy of Music in Pozna. She is a young violinist who has been working both as a soloist and in orchestras, in chamber music as well as in improvisation.

In 2000 she was a member of Bayerischer Rundfunk, took part in the Eastern Festival 2002 in Bayreuth, and was member of the Jeunesses Musicales World Orchestra 02/03. In last two years she played in the RIAS Jugendorchester, the Nationaal Jeugd Orkest and the Dresdner Sinfoniker. In 2001 she received a scholarship from the German musicFabrik Ensemble. In June 2004 she received a scholarship from the Polish Ministry of Culture.

At the moment she participates in a series of concerts within the ElectromAnia Project which aim to promote electroacoustic music for violin. In this series Anna Zielinska will premiere several new pieces by Polish and international composers.

ZKM | Institut für Musik und Akustik in Spring 2005:

Fr 13.05.05

An der Staffelei

Konzert für Saxophon und Elektronik

Werke von N. Kawakami, Y. Yamaguchi, D. Capyrin,

F.J. Herferth und M. Ockert

ZKM_Kubus, 20 Uhr

Eintritt EUR 5 [ermäßigt EUR 3]

Sa 28.05.05

Claudia Robles :: upDate

mit Tejo Janssen: »Butoh«

Vortrag

ZKM_Kubus, 18 Uhr

Eintritt frei

Sa/So 28./29.05. 05

Claudia Robles: SEED/TREE

Installation/Live Elektronik/Butoh Performance

ZKM_Kubus, 15–18 Uhr

Eintritt frei

Fr 03.06.05

»Ich träumte John Cage jodelnd im Züricher Hauptbahnhof«

Hörstück von Alvin Curran

ZKM_Kubus, 20 Uhr

Eintritt EUR 5 [ermäßigt EUR 3]

In Zusammenarbeit mit:



Do–So 09.–12.06.05

»next generation«

Treffen elektronischer Studios

der Hochschulen Deutschlands,

der Niederlande und der Schweiz

Festival mit Konzerten und Symposium



**ZKM | Zentrum für Kunst
und Medientechnologie
Karlsruhe**

**We would like to thank
for their kind support:**



Lorenzstr. 19
www.zkm.de