DEREK HOLZER
SELECTED WORKS
2001–2018

Derek Holzer
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http://macumbista.net
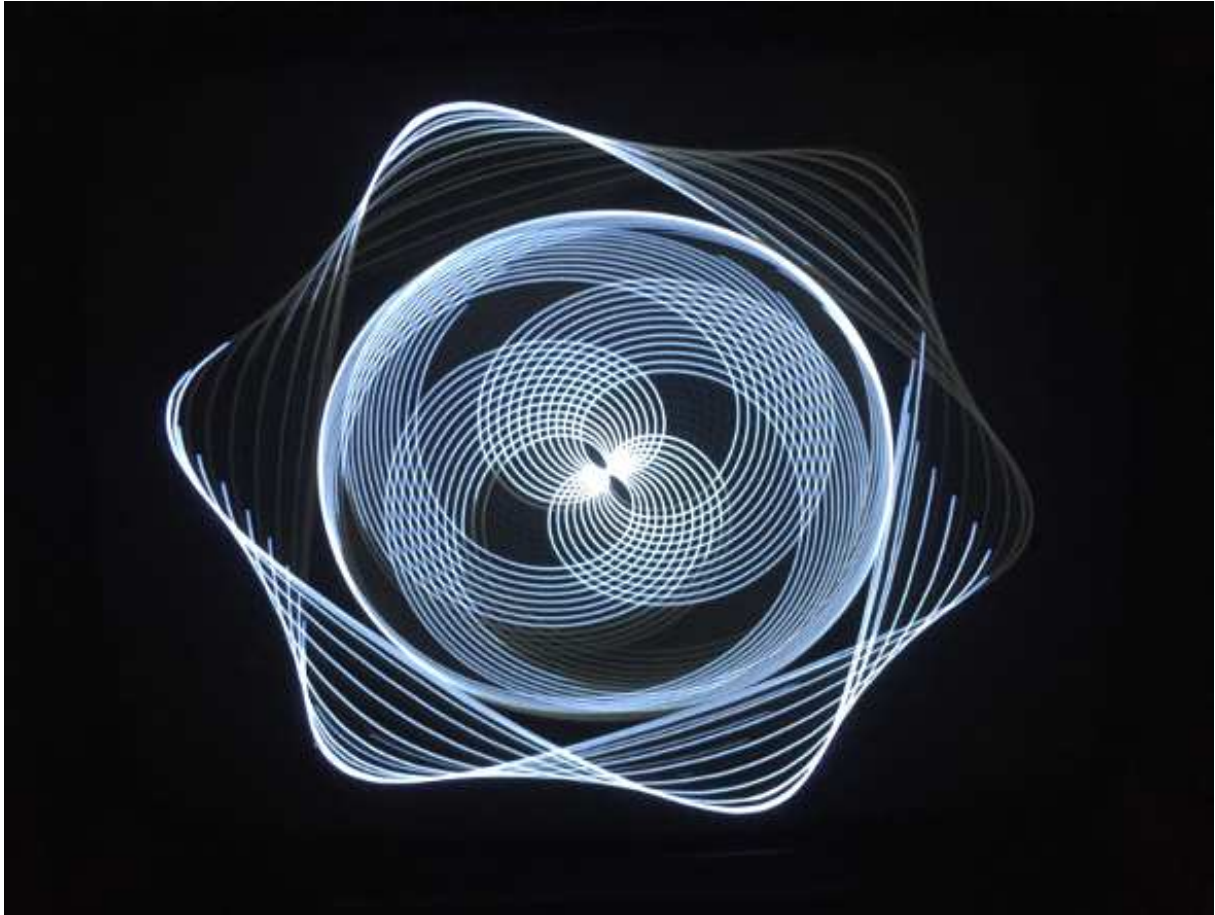
VECTOR SYNTHESIS
LIVE PERFORMANCE FOR SOUND + LIGHT
2015-Present

Vector Synthesis is an audiovisual, computational art project using sound synthesis and vector graphics display techniques to investigate the direct relationship between sound+image on an analog vector monitor display. As opposed to conventional video monitors, which rasterize an image into a series of pixels along a succession of scan lines, vector monitors employ the unconstrained vertical and horizontal movement of a single beam of light to trace shapes, points and curves with near-infinite resolution. When driven by the waveforms of an analog synthesizer, this shifting, realtime sonic light sculpture opens a hypnotic window into the process by which the performed sound is created.

Vector monitors represent an early phase of the development of video technology, and were initially used to visualize the calculations of analog computers. As Cathode Ray Tube monitors are rapidly replaced by more efficient flatscreens, the look of the CRT becomes an icon at the same time as the object itself becomes e-waste. Informed by the discourse of media archaeology, my own personal interest in analog vector graphics isn't merely retro-for-retro's-sake. Rather, it is an exploration of a once-current and now discarded technology linked with specific utopias and dystopias from another era. .

FURTHER INFO: http://macumbista.net/?page_id=4869

DELILAH TOO
SPEECH ENCRYPTION SYSTEM INSTALLATION
2014-15

Taking it's name from the advanced speech security system developed by the pioneering English computer scientist and cryptanalyst Alan Turing in the Second World War, **DELILAH TOO** presents a media-archaeological model of voice encryption as a method to protect privacy while still speaking in the public sphere. Technologically, DELILAH TOO is based on the voice-scrambling capabilities of the vocoder--a device far better known for its role in the history of electronic music than for it's cryptologic potential.

The DELILAH TOO installation itself is comprised of two Private Spaces (isolated sound booths), communicating through an enciphered acoustic channel through a Public Space (the exhibition space). Inside each Private Space is a matching vocoder-based enciphering and deciphering matrix, allowing private communication through the Public Space. In the Public Space, participants in the installation can hear and manipulate the encipherment process to affect the overall character of the sound they hear. However, they have no way to decipher the speech being transmitted.This project has been graciously supported by a grant from the Foundation of Lower Saxony at the Edith-Russ-Haus 2014 and was presented at the CTM Festival, Berlin DE in early 2015.

http://www.ctm-festival.de/archive/festival-editions/ctm-2015-un-tune/transfer/un-tune-exhibition/derek-holzer/

RAINFOREST
WORKSHOP / PERFORMANCE / INSTALLATION
(with MADS BECH PALUSZEWSKI-HAU)
2010-PRESENT

The Rainforest workshop, by Derek Holzer and Mads Bech Paluszewski-Hau, is a contemporary re-interpretation of David Tudor's series of compositions from the 1970's entitled "Rainforest". It uses various types of sonic transducers to play live sounds through commonplace, found resonant metal objects in the performance space, as well as through architectural features of the space itself. Additionally, an 8×8 matrix mixer allows the sound from any of the performers to be sent to any of the objects, making the whole space a an orchestra of resonant voices to be played.

Each re-interpretation will be developed in a workshop format with up to 8 participants over a period of several days. The resulting work should shift between relatively static installation-like moments and performative sections where the artists seek new relationships with the objects and each other. The audience is free to move around the performance space, engage in conversations and explore the resonant objects, thus adding new life to the rainforest.

Rainforest has been realized previously at BYiBY Festival (Aarhus DK), LAK Festival for Nordic Sound Art (Copenhagen DK), Full Pull Festival (Malmö SE), Club Transmediale (Berlin DE) and Piksel (Bergen NO).

Project Info: http://macumbista.net/?page_id=2447
Danish Radio Interview for LAK Festival: http://soundcloud.com/janstricker/snykradio-indslag-om-lak
Performance Video from LAK Festival: http://youtu.be/9YChH0GC-1o

BIS ZUM TOD
Live Sound Performance for Theater Play
(w/ Markus Öhrn, Nya Rampen and Institutet)
2014-16

Bis Zum Tod (2014) completes a triptych dealing with the western middle class nuclear family structure: **Conte d'Amour** (2010) described a story of stepping down into the psychotic cellar of romantic love, while **We Love Africa and Africa Loves Us** (2012) dealt with an outsourcing projection of inner chaos on a far away, imaginary continent. In this "opera" inspired by satanic black-metal, a guest approaches a haunted house and a 13 year old son chooses the dark path of self-destruction inherent to the psycho-logic of the family.

Bis Zum Tod is a co-production between Swedish director Markus Öhrn, Swedish-Finn theater company Ny Rampen and Swedish group Institutet. It was performed between 2014-16 at Theater der Welt (Mannheim DE), Volksbuhne (Berlin DE), Culture Center Zamek (Poznan PL), Baltic Circle Festival (Helsinki FI), Inkonst (Malmö SE), Nowy Teatr (Warsaw PL) and Théâtre de Gennevilliers (Paris FR). I am credited with instrument-building, composition and music performance in this piece.

http://institutet.eu/productions/biz-zum-tod/

MACUMBISTA
LIVE ANALOG SYNTHESIZER IMPROVISATION
2008-PRESENT

  I make live improvisations on self-made, analog sound equipment. I do this because I never learned how to play the guitar, and because no one can tell you that you are playing an instrument "wrong" or "badly" when you have invented it yourself. My live sets are often quite loud, as I believe that the primary physicality of sound is far more important than the meager, extra-sonic avenues provided by (over-)intellectualization.

  That said, I also believe in presenting the kind of sonic complexity which can only be obtained by creating, intervening in and observing chaotic systems at work–whether these chaotic systems be produced electronically (in the case of my analog synthesizers, or of a microphone placed in the path of a speaker), organically (Iannis Xenakis' *"collision of hail or rain with hard surfaces, or the song of cicadas in a summer field"*) or even socially (the schizophrenic power dynamics of crowds observed by Elias Canetti). Other reference points might include the pioneering work of electronic art innovators and inventors such as David Tudor, Steina and Woody Vasulka or Dan Sandin, the dense electroacoustic compositions of Maryanne Amacher, Bernard Parmegiani and Eliane Radigue and contemporary movements in the fields of noise, experimental, improv and extreme heavy metal music.

  In 2008, I largely abandoned the digital sound world to spend time building a modular analog synthesizer which reinterprets and hybridizes the forms and functions of the famous Serge and Buchla systems of the 1970s. Many of the sounds produced by the synthesizer result from a process of non-linear feedback between the various functions within it. Playing the instrument is often about making interventions into this feedback loop, to destabilize it and allow new chaotic patterns to arise and develop -- a constant struggle between finding and losing control. Without the risk of failure, no art can be called "experimental".

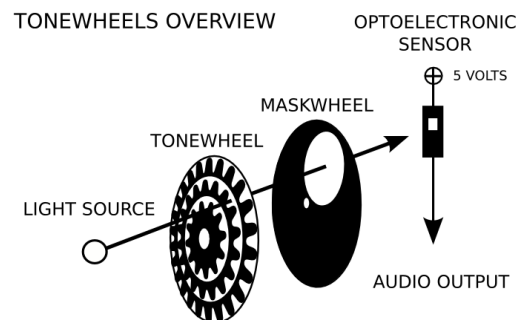 **Project info: http://macumbista.net/?page_id=529**

  Performance recording: https://soundcloud.com/macumbista/derek-holzer-experimontag-set

TONEWHEELS

OPTO-ELECTRONIC

AUDIOVISUAL PERFORMANCE

2007-PRESENT

TONEWHEELS OVERVIEW

OPTOELECTRONIC SENSOR

5 VOLTS

MASKWHEEL

TONEWHEEL

LIGHT SOURCE

AUDIO OUTPUT

Derek Holzer 2010 (after J. Dudon)

TONEWHEELS is an experiment in converting graphical imagery to sound, inspired by some of the pioneering 20th Century electronic music inventions such as the Variophone (Scholpo USSR 1930), the Light-Tone Organ (Welte DE 1936) and the Oramics system (Oram UK 1957). Transparent tonewheels with repeating patterns are spun over light-sensitive electronic circuitry to produce sound and light pulsations and textures. This all-analog set is performed entirely live without the use of computers, using only overhead projectors as light source, performance interface and audience display. In this way, TONEWHEELS aims to open up the "black box" of electronic music and video by exposing the working processes of the performance for the audience to see.

TONEWHEELS was developed during a series of residencies at the Moltkerei (Cologne DE), Tesla (Berlin DE), STEIM (Amsterdam NL) and ACCESS Space (Sheffield UK). The project has been presented as both a performance and a workshop at the Passengers International Festival of Public Art (Warsaw PL), the PhoenixHalle (Dortmund DE), the DA Fest (Sofia BG), Club Transmediale (Berlin DE), Goldsmiths College (London UK), the Bent Festival (New York USA), the Almost Cinema Festival (Ghent BE), the NETMAGE Festival (Bologna IT), KUMU (Tallinn EE), the Danish Institute for Electro/Acoustic Music (Aarhus DK) and the Rhode Island School of Design (Providence USA), among others.

Project info: http://macumbista.net/?page_id=476
A Brief History of Optical Synthesis lecture: http://tinyurl.com/optical-synthesis
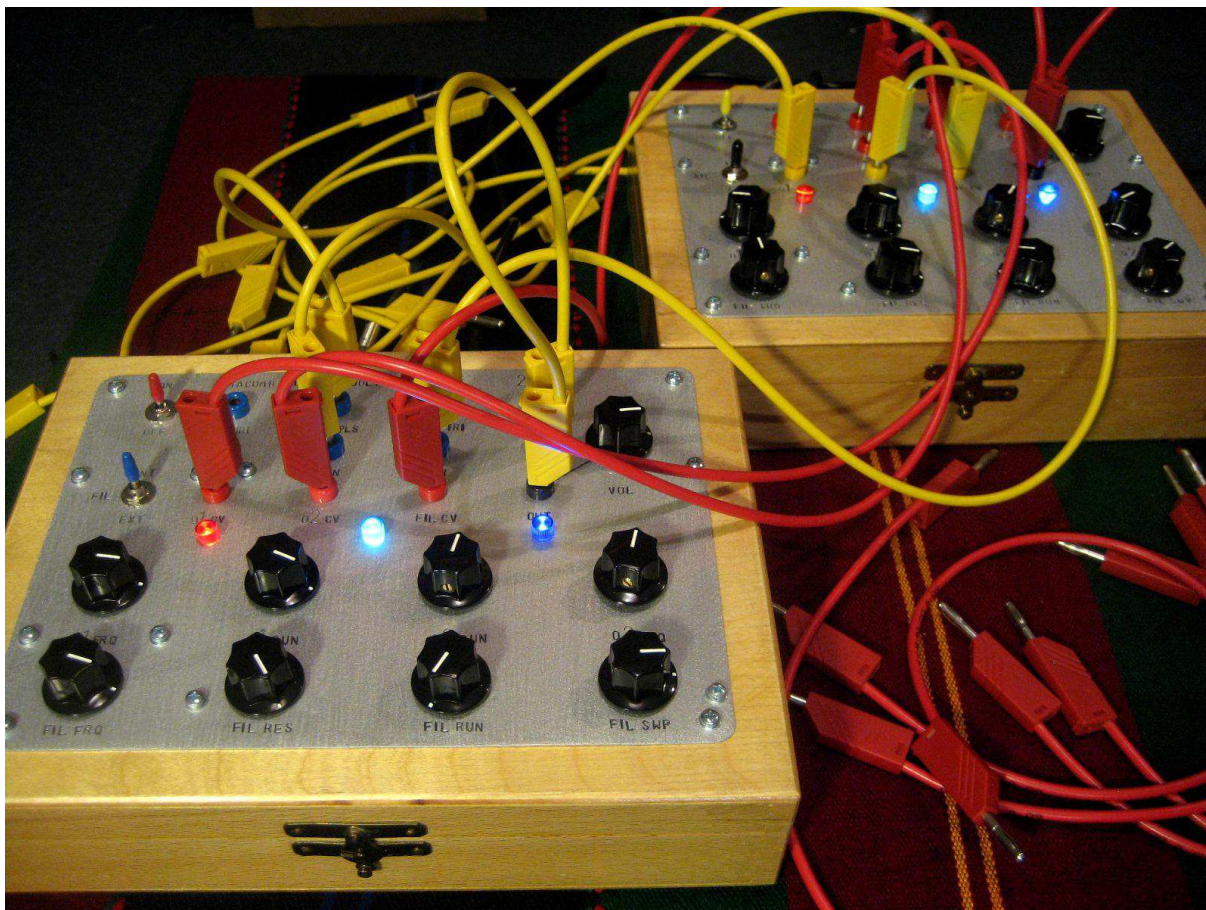
HANDMADE ELECTRONIC SOUND INSTRUMENTS
OBJECTS / INSTALLATIONS / PERFORMANCES
2008 - PRESENT

Over the past few years, a strong reaction against the sterile world of laptop sound and video has inspired a new interest in analog processes, or "hands dirty" art. With this renewed analog interest comes a fresh exploration of the pioneers of the electronic arts during the pre-digital era of the 1960s and 1970s. In 2008, I left the world of digital audio and simultaneously decided to return to my own roots as well--my formal training as a jewler and metalsmith. Taking the craftsman's approach I learned in the early 90's, I applied this to the task of creating one-of-a-kind, unique and handmade electronic sound instruments both for my own use and as commissions for others. I was also determined not to simply reproduce in my own way the same kinds of instruments already available, much more cheaply made, in the marketplace. But rather, my aim was to explore new interfaces and paradigms of how to make sound. This includes the relationship of light and sound, the use of found objects and feedback to generate chaotic patterns, and the construction of semi-autonomous "self-playing" synthesizer systems.

These instruments have appeared in my own performances ever since, as well as in hands-on, playable exhibitions at the MUU Gallery (Helsinki FI) and the Acces(s) Festival at le Musée des Beaux-arts (Pau FR). In addition, they have been used in several major theater productions by Swedish playwright Markus Öhrn with Institutet (SE) and Nya Rampen (FI).

"Schematic as Score: Uses and Abuses of the (In)Deterministic Possibilities of Sound Technology", Vague Terrain Journal 19, 02/2011: http://vagueterrain.net/journal19

EXPERIMENTAL INSTRUMENT BUILDING
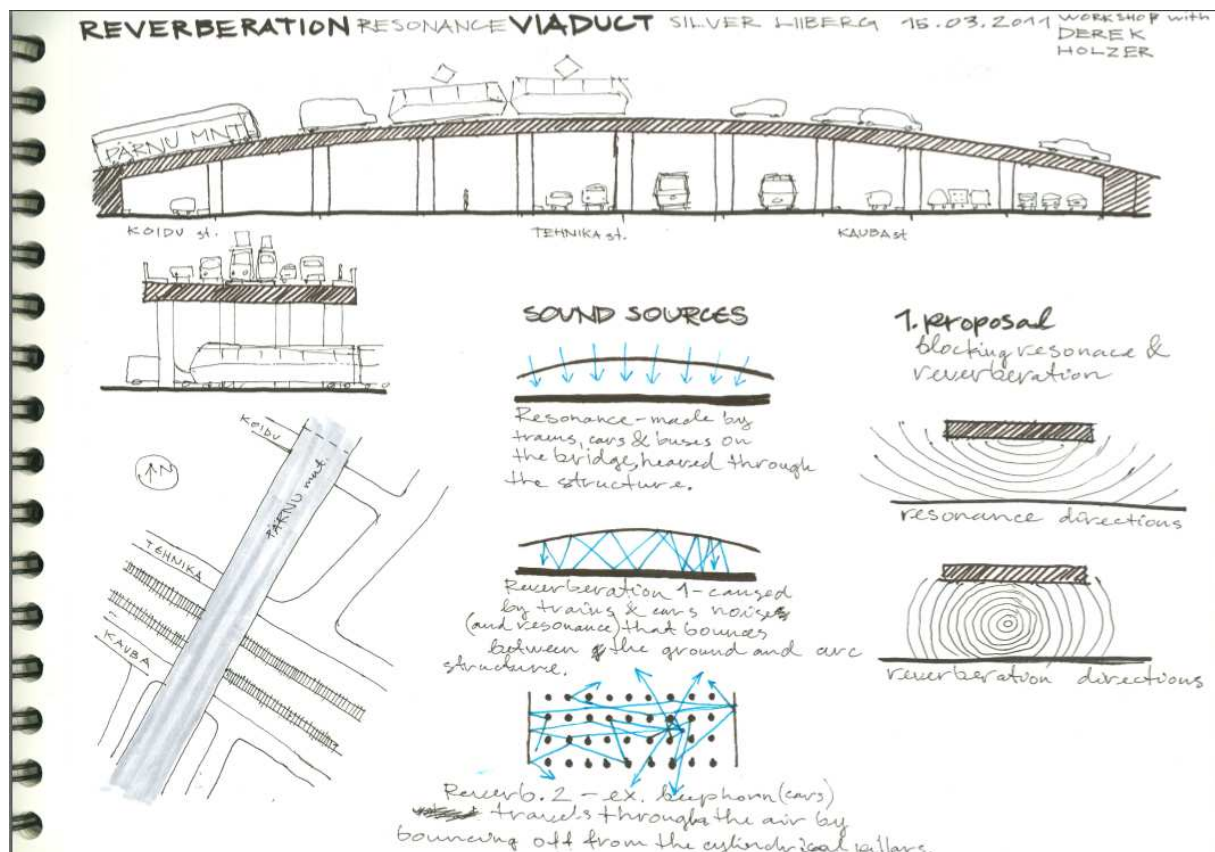# WORKSHOP
2009-PRESENT

My Experimental Instrument Building workshops come under various titles, such as "Neanderthal Electronics", "SoundBoxes" or "Mechanical Orchestra". The overall concept of each is learning to use simple objects from our modern, electronic environment (resistors, capacitors, transistors, LEDs, integrated circuit chips…) as well as various basic technologies (acoustic pickups and transducers, resistive sensors, CMOS electronics, motors, solenoids, relays and the circuits to control them), possibly combined with one of the four types of traditional music instruments (idiophones/struck objects, aerophones/winds, membranophones/drums and chordophones/strings) and often inspired by folk music forms (such as the opto-electronic hurdy-gurdy I designed, above) to design and build a personal, customized sonic instrument.

While the participants often have some background in sound, no previous experience in electronics is required. The resulting instruments are often as interesting to see as they are to hear, as students bring their own visual, sculptural and design sensibilities to their projects as well. The workshop concludes with a group performance and an invitation to the audience to experiment with each of the created instruments, which inevitably gives the participants new feedback and insight into the natures of their own creations.

This workshop is regulary offered at the Media Lab of Aalto University (Helsinki FI), and has been hosted previously by Piksel (Bergen NO), Det Kongelige Danske Kunstakademi (Copenhagen DK), the Danish Institute for Electronic Music (Aarhus DK), Sibelius Academy (Helsinki FI), the Nordic Sound Art Masters Program (Copenhagen DK), Det Jyske Kunstakademie (Aarhus DK), Det Jyske Musikkonservatorium (Aalborg DK), Sonic College (Haderslev DK) and the Norberg Festival (Norberg SE).

Video Aalto University: http://vimeo.com/60032779
Video Tartu Art Week: http://vimeo.com/3260197

INSTRUMENT COMMISSIONS
2009-Present

Since 2009 I have been active designing and building custom instruments for musicians and sound- and visual-artists for their own projects, recordings, performances, and installations. Notable clients include:

* Tobias Kirstein
* Carl Michael von Hausswolff & Mark Fell
* Phillip Sollmann
* Erik Skodvin (Deaf Center/Svarte Greiner)
* Markus Öhrn
* Thomas Ankersmit
* Hildur Ingveldard Guðnadóttir & Elín Hansdóttir

Each project I undertake for another artist begins with a detailed consultation which both explores their wishes and requirements for the instrument, and provides a technical framework upon which these requirements can be realized in unique and sometimes idiosyncratic ways. In the words of Dutch instrument maker Rob Hordijk, these creations are "bent by design".

SOUND+SPACE AWARENESS
WORKSHOP
2008-PRESENT

This workshop introduces concepts currently affecting the areas of sound recording, sonic arts, installation, architecture and sound design, using environmental recordings, listening exercises, writing and drawing as the basis for discussion and practice. This cross-disciplinary workshop has been successful with students of music composition, cinema, architecture, game design, new media, anthropology and visual arts in providing an entry-point to the study and use of soundscapes in these various practices.

OBJECTIVES:

1) To learn how to listen to a given soundscape without any preparatory information (visual, verbal, text...) and pick out the relevant features and information in it (the "art of listening", or what Pauline Oliveros calls "deep listening").

2) To learn how to use field recording equipment and techniques in combination with this heightened sense of hearing-awareness to capture the features and information we hear (the "art of field recording").

3) To learn how to present these soundscapes to others as environments, compositions or in other forms (drawings, text, architecture, installations, interventions, sculpture etc).

This workshop has been offered at Harvestworks (New York City USA), Kunsthochschule für Medien Köln (Cologne DE), the Media Arts and Architecture departments of the Estonian Academy of Fine Arts (Tallinn EE), Aarhus University (Aarhus DK), Det Jyske Musikkonservatorium (Aarhus DK) and De Paviljeons (Almere NL), among other locations.

Workshop Info: http://macumbista.net/?page_id=499

TUNED CITY: sound + space speculation
# CONFERENCE / EVENT SERIES
2008-2011

Between 2008 and 2011, I was involved in the Tuned City project, co-curating and organizing site-specific concerts, workshops, presentations and symposiums in Berlin, Nuremberg and Tallinn.

Tuned City is a platform which proposes an examination of the relations between architecture and sound, drawing on the discourse and practices of architecture, urban planning and the sonic arts to explore the spatial and communicative properties of sound as a tool and means of urban practice by re-using existing spaces or conceiving and opening new ones.

The first exhibition and conference project Tuned City – Between sound and space speculation took place from July 01.-05. 2008 in Berlin, where almost 100 artists, architects and thinkers gathered together in a variety of locations around the city and discussed a new evaluation of architectural spaces from the perspective of the acoustic. Further editions have taken place in Nuremberg, Brussels and Tallinn as part of the Cultural Capital 2011. The book "Tuned City – Between Sound- and Space Speculation" was published in a bilingual English/German edition in conjunction with the first event by Kook Books in 2008.

Project Info: ttp://www.tunedcity.net/
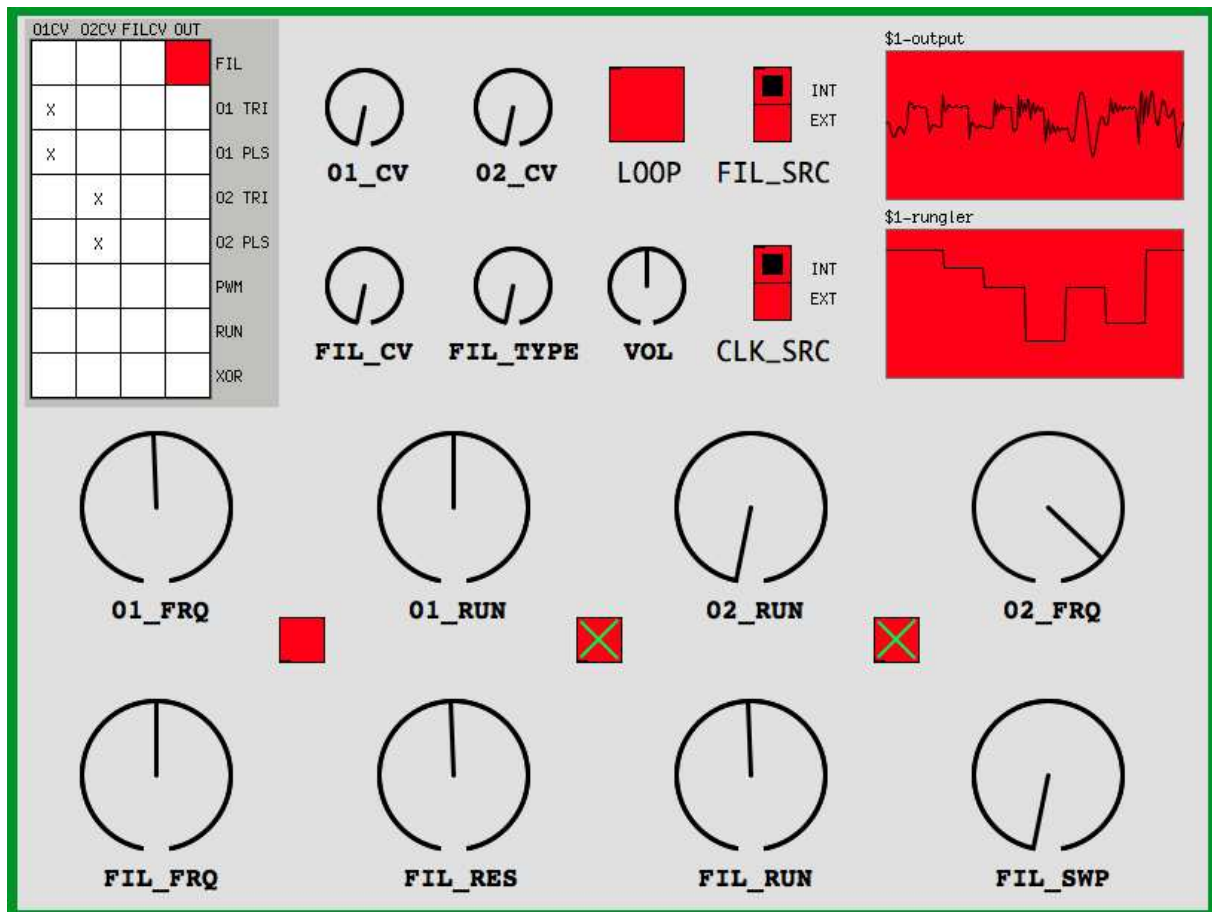
FLOSS MANUALS

Open Source Beginners Software Tutorials

2008-9

FLOSS Manuals is a non-profit foundation founded in 2006 by Adam Hyde and based in the Netherlands. The foundation is focused on the creation of quality documentation about how to use free software. I was invited twice by FLOSS Manuals to lead what they call a "book sprint"; a collaborative writing and editing session intended to produce a finished book in 3-5 days. The first manual, covering the multimedia programming environment **Pure Data** (2008), filled a much needed gap in entry-level tutorials for new Pd users. The second manual, on the digital audio workstation **Ardour** (2009), was produced as part of an introductory workshop for new users, and thus reflected the kinds of questions and problems they would have beginning with the software.

http://flossmanuals.net/pure-data
http://flossmanuals.net/ardour
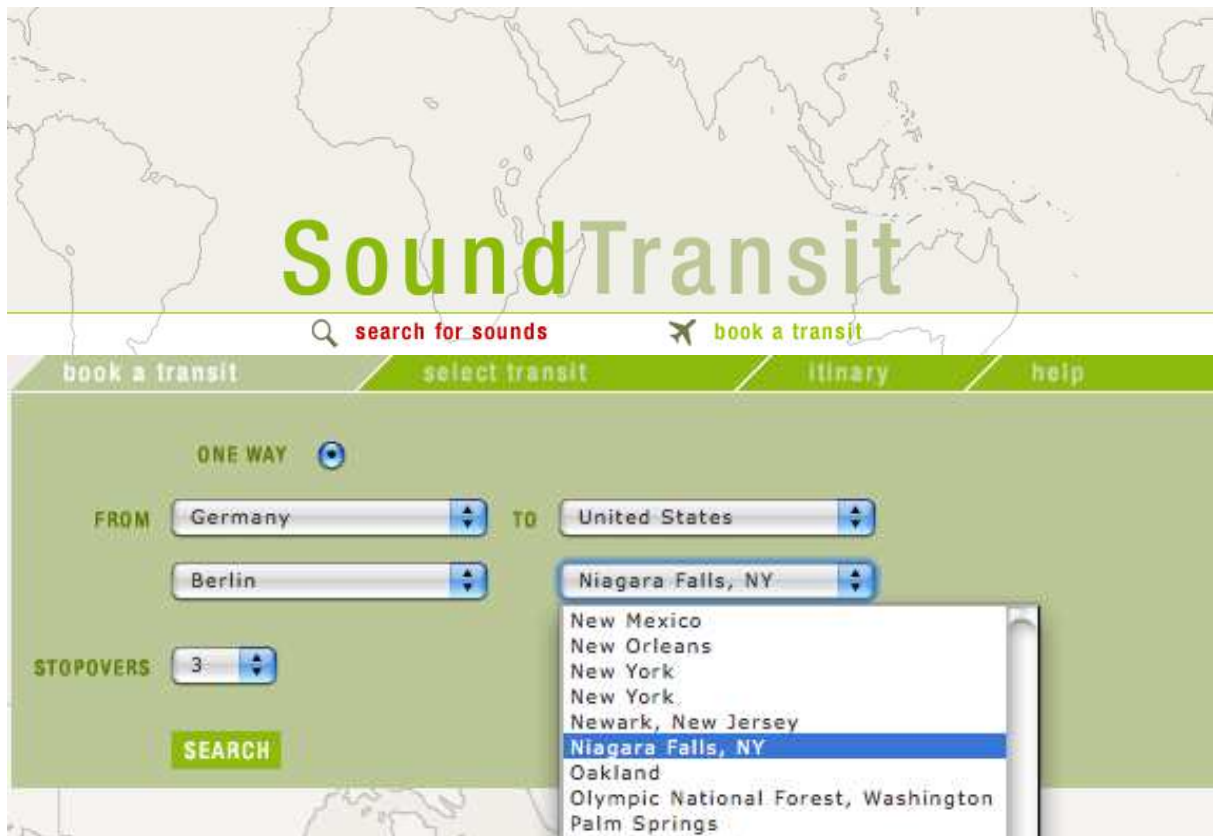
SOUNDTRANSIT WEBSITE
(with SARA KOLSTER + MARC BOON)
2005-2016

SoundTransit is a collaborative, online community dedicated to field recording and phonography, or the sounds from the environment around us, with an emphasis on the unintentional sounds which often go unnoticed in our daily lives. On this site, you can plan a sonic journey through various locations recorded around the world, or you can search the database for specific sounds by different artists from certain places. If you are a phonographer, you can also contribute your recordings for others to enjoy. The Creative Commons Attribution license encourages the sharing and reuse of all sounds on this website.

On the "Search" page, users can browse through hundreds of sounds already uploaded to SoundTransit, and select recordings based on Keyword, Country, Location or Artist. These sounds can be downloaded, shared and reused under the terms of the Creative Commons Attribution license. On the "Book" page, users can create a SoundTransit by choosing a location of departure and arrival, as well as several stopovers along the way. Based on your selections, an intinerary with details about the selected sounds and a soundfile are generated, which can be downloaded as an MP3 or sent to friends.

Concept: Derek Holzer / Graphic Design: Sara Kolster / Web Programming: Marc Boon

SoundTransit currently includes nearly 3000 recordings from 471 artists around the world, is hosted by Turbulence.Org in the USA, and has been exhibited in Germany, Croatia, Korea and New Zealand, as well as taking the 2006 NetArts.Org prize in Tokyo, Japan.

http://turbulence.org/soundtransit/

resonanCITY
LIVE CINEMA PERFORMANCE
(with SARA KOLSTER)
2004-6

Many sounds and images in our everyday lives slip past our notice simply because they are too small, or because we lack the proper receivers to pick them up. *"resonanCITY"* is an ongoing project to gather these microscopic sounds and images from various cities, and to amplify and transform them. The goal is to build a new city of sound and visuals inside the old one, and to inspire curiosity and exploration of one´s own environment.

This audiovisual performance by Sara Kolster and Derek Holzer explores contemporary ideas about "Live Cinema". Sound and image gathered in various locations around the world are rendered into a dreamlike journey in a live improvisation where sound and image are interrelated.

Both artists find inspiration in the history of experimental cinema and electroacoustic music, as well as in contemporary video and microsound practices, and a variety of live sources such as photographic film and found objects are used to generate the visions and sounds.

Visually, Kolster´s work deconstructs the analog/digital dichotemy by presenting carefully prepared film positives in a software-manipulated environment. Similarly, Holzer´s realtime digital sound treatments highlight and enhance rather than obscure and distort the phonographic sources he collects.

resonanCITY has been performed live in Holland, Brasil, the Baltic States and the Transmediale 05 in Berlin. ResonanCity also took the Second Prize at the 11th International WRO Media Art Biennale in Wroclaw, Poland in May 2005.

All performances included into the competition appeal to the microsound aesthetics...existing on the verge of hearing physiology and musical composition. They all start from creating their proper software (including breaking off with the until recently fundamental musical composition term of the time line). Instinctively we can also feel the economic and political context of microsound understood as a movement boycotting commercial music technologies and distribution channels... The 2nd prize goes to "resonanCITY" by Sara Kolster and Derek Holzer, Netherlands and United States, for the exceptional quality of improvised live performance, intermediating concrete and electroacoustic sounds with experimentation of image.

— from the Jury Statement, WRO 05 Biennale
Wroclaw, Poland
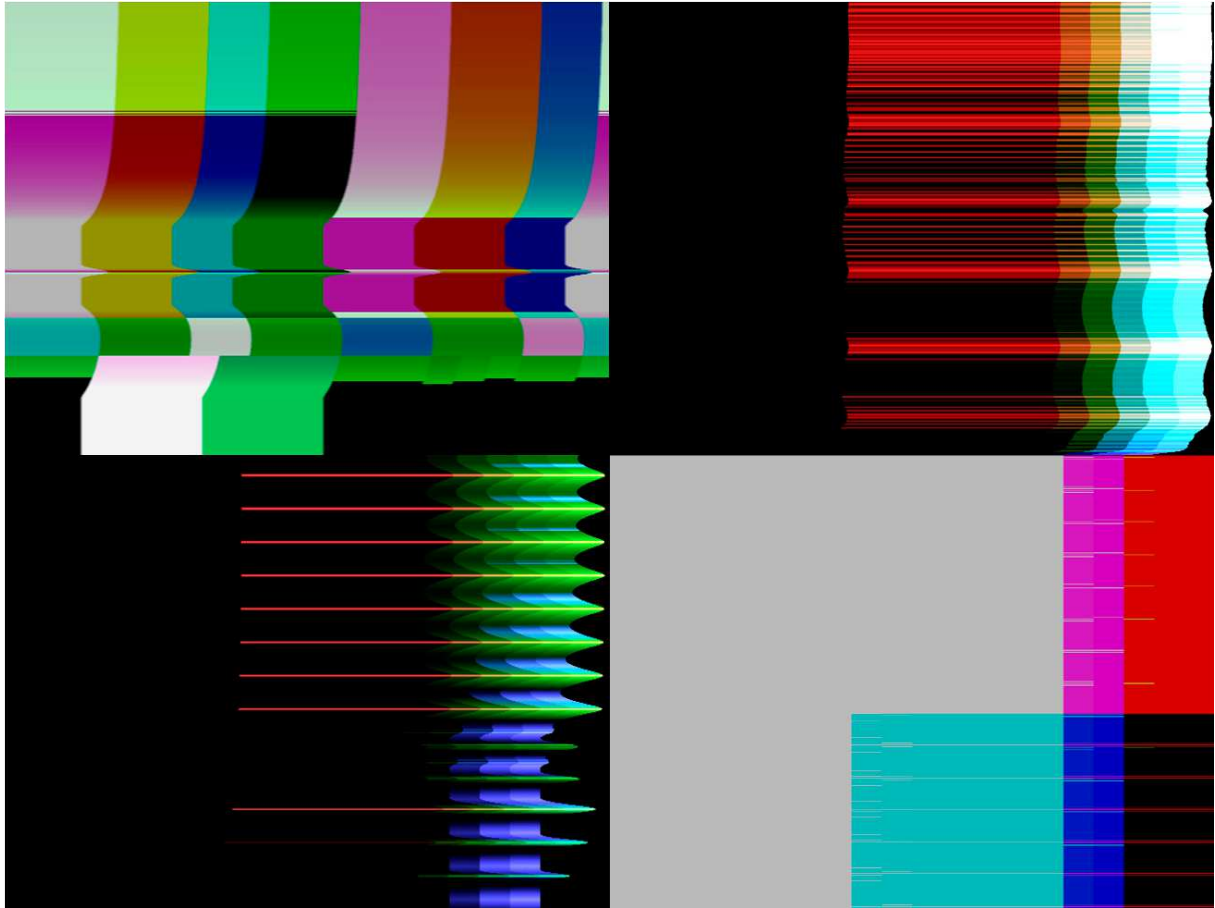
OZONE

AUDIOVISUAL INSTALLATION / PERFORMANCE
(with BAS VAN KOOLWIJK)
2003-2006

OZONE is an environmental installation created by video artist Bas van Koolwijk and sound artist Derek Holzer, to explore the shifting tide of signals, frequencies and codes passing through our bodies every day. The video of van Koolwijk examines the 'disturbances' which can be induced in the hardware of the video format, while Holzer's sound projects seek to make physical the radiation which is emitted by the many of the objects in our everyday world. Four video monitors display an ever-changing array of video signal interferences. The electromagnetic waves these monitors create are captured by a series of specially-constructed 100m wire antennae, and then translated into sound. When this sound is sent back to influence the video further, it creates a storm-cloud of electromagnetism in the exhibition space. This work reflects an approach beyond the usage of radio waves in the sense of mass communication, but rather as comprehensible signals and as basic material of artistic intervention.

OZONE was developed during a 2003 residency at the Medienturm, Graz AT and presented during the Steirischer Herbst festival in October of 2003. A special broadcast was made in conjunction with Kunstradio for the occasion. It was later presented at the Earational Festival (S'Hertogenbosch NL), the European Media Arts Festival (Osnabrück DE) and the WAVES Festival (Riga LV).

Artist feature in Camera Austria 83/2003, with catalog essay by Kim Cascone (pp 14-19):
http://c3o.org/portfolio/raw/camera_austria.pdf

ACOUSTIC SPACE LAB
(w/ RIXC, VIRAC, Project Atol, radioqualia)
SYMPOSIUM + WORKSHOPS
2001

My work with the online net.art and net.radio communities of the XChange network (winners of the 1998 PRIX Ars Electronica "Award of Distinction") led to the Acoustic.Space.Lab symposium (2001), which I co-organized on the grounds of the Ventspils International Radioastronomy Center (VIRAC) in Latvia with the support of the Daniel Langlois Foundation. Here, radio astronomers have restored a 32-meter dish radio telescope left by the Soviet Army in 1994. Participants in this symposium investigated both the receiving and transmitting capabilities of this powerful radio antenna, and conducted workshops in related artistic, social and technological issues. Materials gathered during the workshop were later edited into a CD and DVD release.

http://www.fondation-langlois.org/html/e/page.php?NumPage=245
Press in The Wire: http://www.ambienttv.net/2001/asl/wire.html