RDEX

Claude Heiland-Allen

A presentation on the art and tech behind my project
RDEX – covering aesthetics of higher dimensions,
emergent behaviour, GPU programming for audio-visuals,
using databases for image similarity, and so on...
RDEX (reaction–diffusion explorer) is an installation
and performance piece that explores in an autonomous
hyperspace mathematical model, searching for
interesting emergent behaviour (life-alike, alife).

The model is a kind of continuous non-linear cellular
automaton, based on partial differential equations
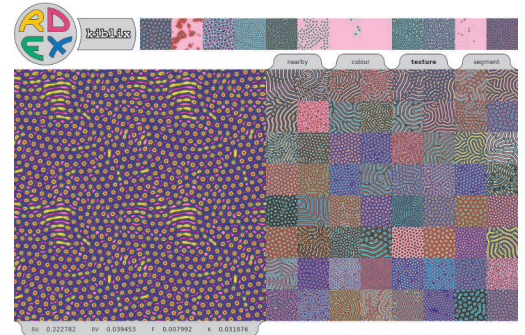representing chemistry of two reagents involving
reaction and diffusion.

The mathematical equations of the model have four
parameters, that need to be set to concrete values when
running the simulation. rdex-client explores this 4D
parameter space at random.

rdex-client analyses the behaviour that emerges from
the system, moving on to a new set of parameters if it
fades into unchanging uniformity or explodes into
erratic numerical instability. Much more time is spent
evolving the cellular automaton when neither of those
alternatives occurs: when it finds something really
quite interesting...
When rdex-client finds interesting behaviour, it
uploads a snapshot to rdex-server along with the
results of a few image analysis algorithms. The most
recent interesting patterns found by rdex-client are
shown at the top of the page.

rdex-server provides an interface to browse this
collection by similarity to a chosen target or focus
point. The target is shown full size on the left of the
page, with the most similar patterns displayed to the
right.

http://rdex.goto10.org

CARTOPGRAPHIA SONORA ANTARTICA

Alejandra Perez

Cartografia Sonora Antartica,   (Noise Lecture
Performance)

It uses sound recordings and footage from expedition to
Antartica in december 2010. Very Low Frequencies and
transduced hydrophone sound from Wedell seals were
recorded during 10 days journey in an icebraker. The
project collects sounds in remote places, antartica,
atacama and isla robinson crusoe (previous to feb2710
tsunami). The project focus is the monitoring of remote
places, often only occupied by scientist and military.
*the means to monitor pollution and hear the invisible
in the hands of elpueblo*
Activities in remote areas are often performed by
scientists or the military. It is one instance where
universities, research laboratories and defense
complexes meet. It is a situation to claim
participation of civil society.
The project indagates into the geopolitical
implications of these places, who is using it and for
what purposes? Recordings in Greenwich island takes
notice that is a disputed territory claimed by at least
3 countries, Argentina, Chile and United Kingdom. It
seems the dispute for 1 million square km of bedsea in
Antartica is being demanded by UK since 2003. The
conflict dates from long before and may relate to the
Falkland (UK vs AR) war in 1982. s the end of the world
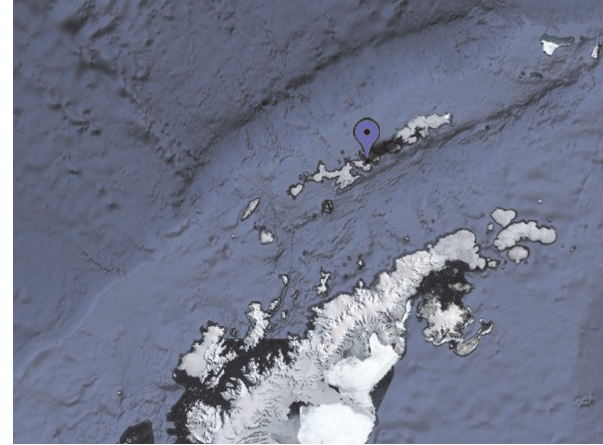disputed over oil or is it water?

http://cartografiasonora.org

SOFTWARE: Pure Data, Raven, Open Hardware (DIY noise
circuits), Drupal

recording of performance in lima march_2010 can be
found here:
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http://200.73.80.59/~elpueblo/cartoson_perf/

recording of performance in lima may_2010:

http://ljudmila.org/~pueblo/lima_urnu.ogg

REFLECTING ABOUT ARTE

Letizia Jaccheri

The vision of project ArTe (www.artentnu.com) is disseminating information technology (IT) issues to teen-agers (13-15), their teachers, and decision makers in the society, with focus on creativity, cooperation, and openness of processes and content. ArTe makes IT visible by help of art. ArTe encourages people to work in meaningful cooperative projects with the goal of producing novel forms of new media art. There is an additional emphasis on involvement of girls.

ArTe has produced a web site that provides texts, pictures, and videos about new media art and open source software. ArTe has organized a set of dissemination events with the purpose of increasing awareness about information technology with focus on open source. The story of these events is documented in the project blog by text and pictures.

How can one evaluate the effects of a dissemination project like ArTe? Did ArTe make IT more visible?

In this presentation I will use a choice of the 64 pictures of the ArTe website as raw material to start a conversation about structure, achievements, challenges, and future of the project.

GOLDEN SHIELD MUSIC: SONIFICATION OF IT CENSORSHIP TECHNOLOGIES

Marco Donnarumma

Golden Shield Music - Description

2009 | Multi-channel generative sound piece for censored
Internet Protocol (IP) addresses

Golden Shield Music (Marco Donnarumma, 2009) is a
generative composition for eight audio channels that sits
somewhere between net.art and sound art originally created
for Zeppelin 2009 exhibition at the Barcelona Center for
Contemporary Culture.
The work is inspired by the Golden Shield Project,
sometimes referred to as the 'Great Firewall of
China'.According to Wikipedia "it is a censorship and
surveillance project operated by the Ministry of Public
Security (MPS) division of the Communist government of
China. The project started in 1998 and began operations in
November of 2003".
It involves the massive use of web technologies such as IP
(Internet Protocol address, a computer's network address)
blocking, DNS filtering and redirection, URL filtering,
Packet filtering, Connection reset) to censor specific
contents - mostly, but not only, political or historical
subjects - through the most common web search engines such
as Google, Yahoo and Msn.
This same technology has been semantically displaced and
re-used by the author to create a generative piece of music
which doesn't focus on the structure or aesthetic of the
composition, but simply makes a free, creative use of a
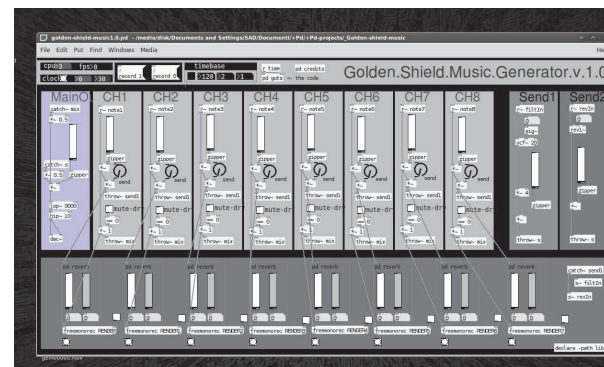technology ideated to subtly constrain the freedom of Man.

Technical information

Golden Shield Music collects the twelve website's IP that
are most screened by the Golden Shield.
Therefore IP numbers are listed in a text file which feeds
an automated MIDI polyphonic synthesizer. The latter
translates each IP in a single note formed by 4 voices with
a specific velocity.
Resulting notes are ordered by the amount of pages the
Golden Shield obscured for each IP address: the website's
IP obtaining the highest page result on Google.com becomes
the first note of the score and the others follow in
decreasing order.

Data organizes the musical notation, establishing an
abstract relationship between Internet information and
musical algorithms which sounds harmonious and
"handcrafted".

A stereo audio recording can be found at
http://soundcloud.com/thesad/thesad-golden-shield-music

This work can be viewed on-line at
http://marcodonnarumma.com/works/golden-shield-music/

HOW TO BUILD A CAPITALISTIC ROBOT

Richard Spindler

Building upon the vivid discussion about capitalism during last
years piksel, a concept and toolset was developed to provide
some knowledge, entry points and mindsets into building a
capitalistic robot.
A capitalistic robot is a machinery that acts in a capitalistic
way and does so mostly autonomous. That is, a machine that earns
money, or somehow interacts with money in a more or less
meaningful way.
The use of a capitalistic robot can be either to make money to
realise other projects that matter to the robot builder, to
build a robot as an artwork itself, or to simply make money to
earn a living without doing any work at all.
While being a rather personal and individual endeavour,
capitalistic robot building is a challenge that cannot only be
tackled through technical knowledge, but rather it appeals to
spiritual, social and creative skills as well. Approaches and
material will be presented that allows to discover, develop and
hone those. Rather than to provide the listener with a finished
and reusable project, inspiration, motivation and the most basic
toolset necessary will be explained. A socio-technical
foundation to expand the artists and technologists toolbox to
build new and innovative projects. Advancements in knowledge and
technology are at a point today that allows almost anyone to get
started immediately.

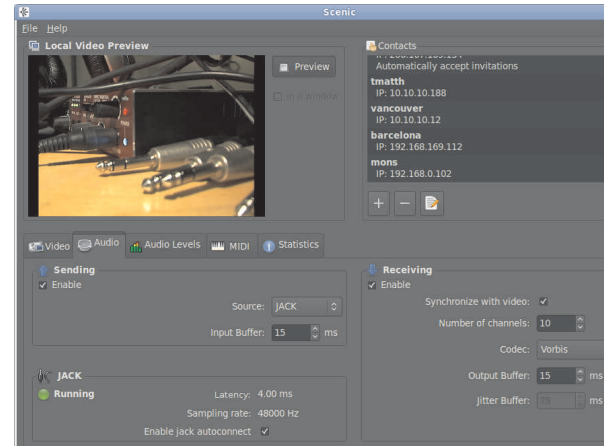# SCENIC: TELEPRESENCE SOFTWARE FOR LIVE PERFORMANCES AND INSTALLATIONS

Alexandre Quessy, Tristan Matthews

Scenic is a free software suite for streaming audio, video and MIDI between live events. It was created at the Society for Arts and Technology (SAT) to give artists a powerful tool for telepresence in live arts contexts and new media installations.

The streaming is done over RTP with the GStreamer multimedia framework. Users can also choose low-bandwidth or high-quality codecs, depending on what is available on their system. It offers up to as many audio channels as your audio device supports.

In this presentation, two of the authors will explain and demonstrate the usage of Scenic for live transmission of audio, video and MIDI over networks.

See http://svn.sat.qc.ca/trac/scenic/

THE WHITE PEOPLE

Federico Bonelli

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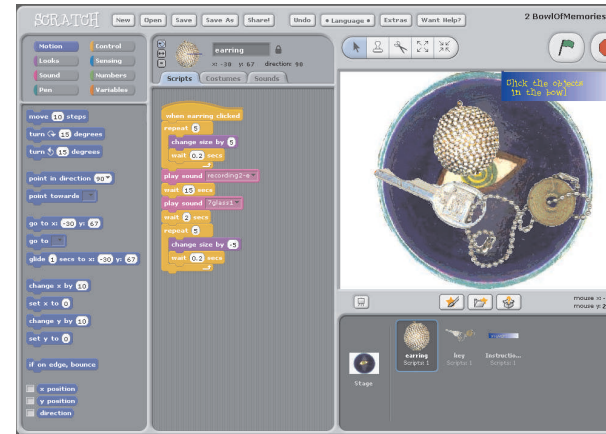See http://svn.sat.qc.ca/trac/scenic/

SCRATCH

Audun Eriksen

Audun Eriksen will do a presentation of two workhops
in Scratch ,a graphical
programming language for teens, held for 7th graders in
Trondheim
october 2010.

http://scratch.mit.edu

NAKED ON PLUTO

Aymeric Mansoux, Dave Griffiths, Marloes de Valk

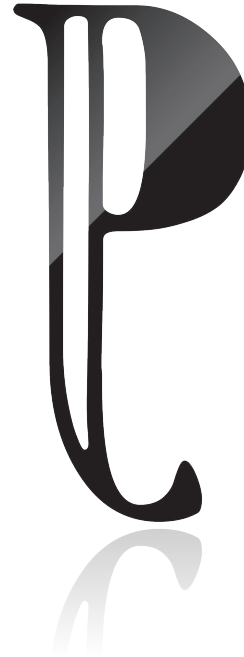"You are our goldmine, we are your stage"

Naked on Pluto is a Multiplayer Text Adventure Game on Facebook. You wake up on Pluto, in a city under the rule of Elastic Versailles revision 14, a corrupted Artificial Intelligence and former entertainment colony. It used to be the Las Vegas of the Solar System, a true paradise for consumers and corporations alike. Until something snapped... What happened and how to escape?
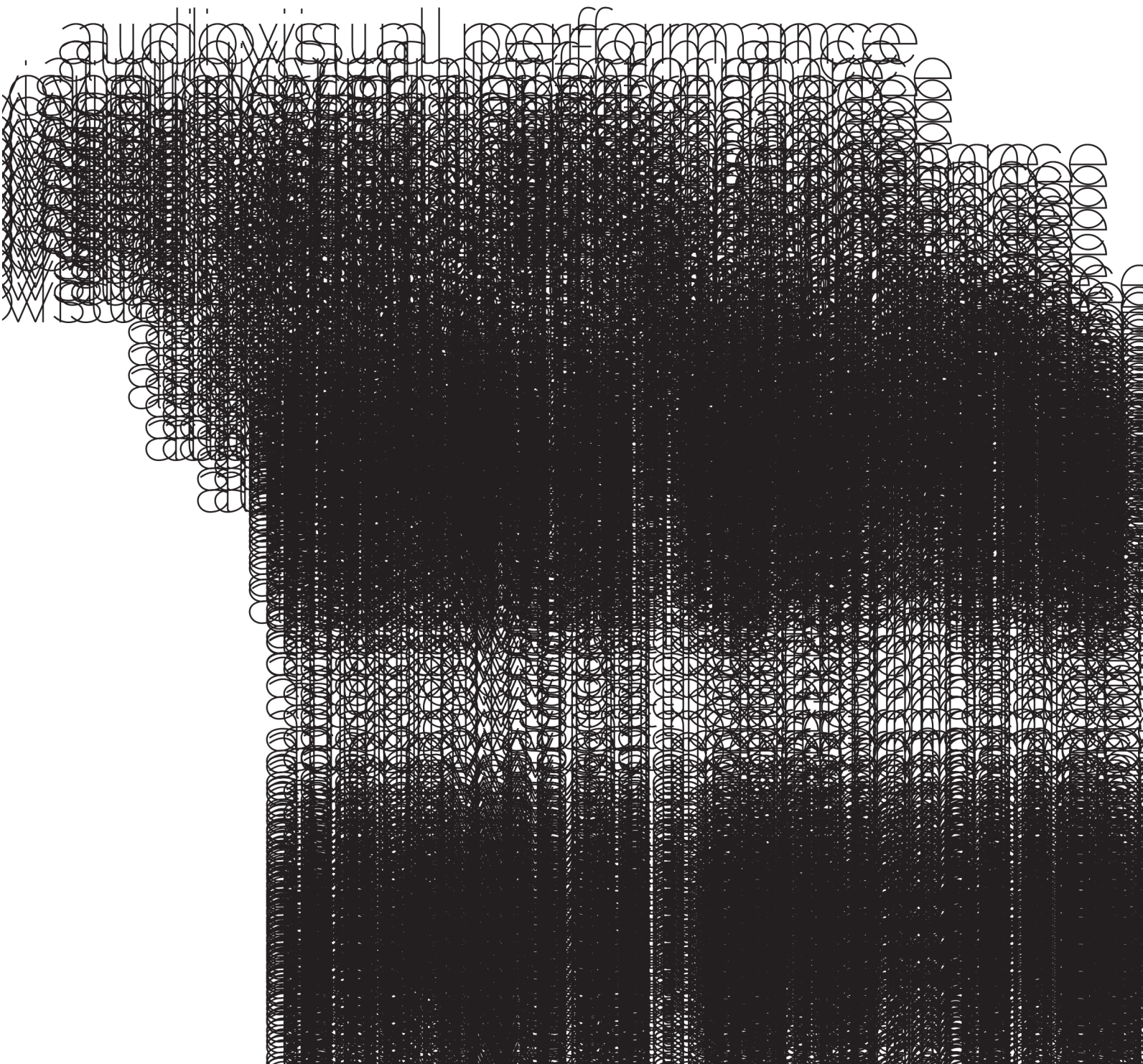
Versailles is a capital of convenience, a non stop 24hr zone of endless pleasure, provided by Pluto's huge entertainment corporations. Amuse yourself and your friends for hours on end collecting meaningless tokens, talking to our bland robots, or simply relax and take in the staggering conformity of your new home. Take absolutely no notice of the areas you aren't allowed to go into, even if it were possible to break out of the zone around the Palace, why would you possibly want to – or indeed why change the core structures of this world when they have been so excellently taylored to fit your every desire?

The game explores the limits and nature of social networks from within, slowly pushing the boundaries of what is tolerated by the companies that own them, carefully documenting this process as we go. Story and play are combined with an investigation on how exposed we are on social networks, and how our data are being used.

Naked on Pluto is developed during a shared residency at NIMk, BALTAN Laboraties and Piksel, between June and November 2010, by Dave Griffiths, Aymeric Mansoux and Marloes de Valk. The project is licensed Copyleft. The research and development process is documented and can be followed on http://pluto.kuri.mu and http://facebook.com/is.so.convenient. The game can be played on http://naked-on-pluto.net (teaser only a.t.m.).

Naked on Pluto is also part of the international touring exhibition Funware, opening November 12 at MU Eindhoven.

audiovisual performance

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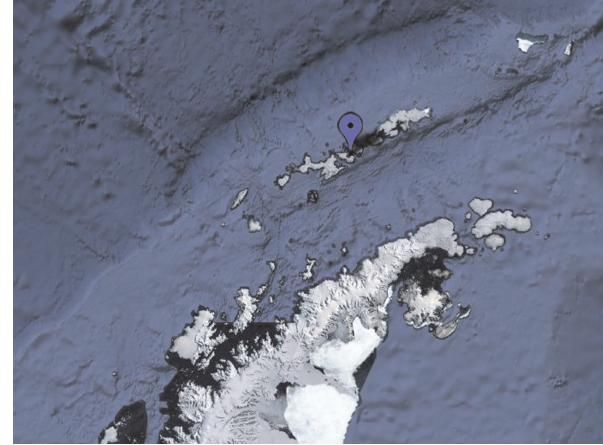disputed over oil or is it water?

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UKI

Shu Lea Cheang

UKI is a sequel to my scifi cyberpunk film I.K.U.
[http://www.i-k-u.com], produced by Tokyo's Uplink Co.,
premiered at Sundance Film Festival 2000. I.K.U. sets
up GENOM corporation as Net sex data empire which
dispatches IKU (orgasm in Japanese) coders to collect
human orgasm data. Made into I.K.U. chips for
mobilephone plug in, GENOM introduced orgasm on the go
and made a huge profit. The year 2030 brings down the
NET, GENOM takes up human body for BIONET construct,
yet another orgasm scheme for the bio-trend ORGANISMO.
The IKU coders from I.K.U., sex data retrieved were
retired and dumped at E-trashscape where coders, open
source networkers inhabited. Trading sex for codes to
reboot their hard drive bodies, UKI, borne out of E-
trashscape, emerge as infectious virus.

UKI as a viral game is a rail shooter style hack game.
The post-netcrash GENOM's BIONET reformats erythrocytes
(red blood cells) as computing units to reprogram and
generate self-responsive ORGANISMO (Organic Orgasmo),
bypassing body contact. UKI, the virus motivated and
mobilized, take up the mission to infiltrate BIONET, to
stop ORGANISMO production, to reclaim collective
orgasm, raw and original.

UKI, a project in dvelopment, is conceived in 2 parts:

[part 1] - live cinema live coding performance -
developed at hangar medialab, barcelona, 2009

[part 2] - a viral game in 2 levels - developed at
medialab prado, madrid, 2010

For Piksel10, i would like to present UKI part ONE as
work-in-progress. The UKI live cinema part consists of
digital videoclips shot at hangar artist in residency
studio filled with 4 tons of E-trash collected in one
day by Barcelona city's electronic recycle plant. The
code part is authored by lluis gomez i bigorda and
Yves Degoyon. 17 local barcelona queer extreme
performers participating in
scenario/character/performing of the video.

The project has a wiki for developing notes:

http://scrying.org/doku.php?id=uki_a_viral_game

specificly some video documents can be viewed at

http://richair.waag.org/uki/video/ukivideoclip.html

HYLICS

Ryan Jordan, Geraldine McEwan

lowest portion of human nature. It is considered living
by instinctual drives with no sublimation. Hylics,
choikus, sarkics, etc. are said to be below Psychics
which are below Gnostokoi, the highest order of
transcendence."

A modern day witchcraft, techno-mysticism, electro-
hallucination; electronic alchemy.
Hylics use base materials such as the body, wood, and
metal, feeding them with electricity, home-made
circuitry, and pure data, to control brutal sound
objects colliding through the ether.

PHANSTASMATA

Eleonora Oreggia

Live synaesthetic performance.
Empiric noise-at-a-distance, electronic circuits,
pulsating lights.

Quasi-perceptual experience occurs in the absence of
the appropriate external stimuli.
"nothing can ever be present to the mind but an image
or perception, and the senses are only inlets" (Hume,
Enquiry XII.1)

http://xname.cc/phantasmata

ANDY BOLUS / MIHO

Andy Bolus, Miho W

Audio performance using two identical 4track tape
machines and home made electronics

A/V

Jorge Luis Crowe

A/V   is an audiovisual performance with found, hacked
and handmade hardware. It uses radios, 78 RPM (shellac)
records, old telephones, motors, and different
materials (amplified via piezo) as audio source, all of
them controlled by an electromechanical sequencer I've
designed and built. It focuses on a search of balance
between randomness and rhythm. A/V set doesn't include
digital sound processing (with the exception of a
simple 1-channel sampler from the hacked mixer),
computers, or any kind of professional musical
hardware. A handmade robotic camera (also controlled by
the performed) shows the activity over the table. The
(also found) turntable had to be hacked in order to
play shellac records. It now has speed and direction
control (PWM & H-Bridge). Portable radios offer music,
speech and noise and leave many of the sound moments of
the performance at random.

There are also actuators such as recycled DC motors and
solenoids that hit or scratch different materials and
surfaces, also in a rythmic way

The total time of the performance is about 20 minutes
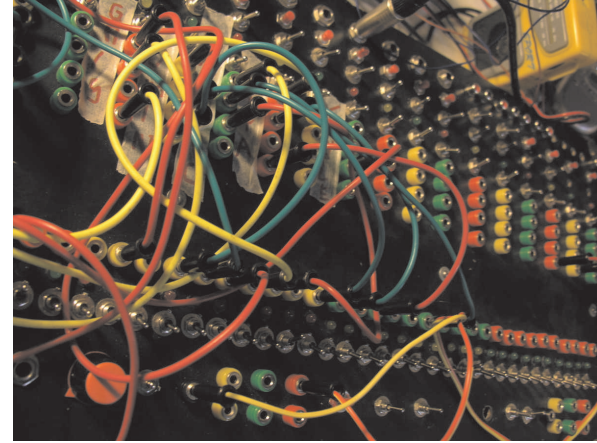
exquisite_code

Brendan Howell, Sabrina Small, Jonathan Kemp

For Piksel 2010 we propose to do an experimental 8-12
hour collective writing experiment mediated by
despotic, automatic editing software.

exquisite_code is an algorithmic performance system for
heterogeneous groups of writers.

For video, text and code please view our web site:

http://exquisite-code.com

Text chunks will be produced, written over variable
time-length rounds in response to a set of prompts
generated by participants throughout each day.

At the end of each round, bespoke and reconfigurable
edit-software will worm through the chunks, adding to
the text repository to elaborate the exquisite_code
life novel.

The edit-software is interrogated and re-written in
scheduled code writing sprints by the participants.

Output will be display live and hardcopy will
continuously spit from line printers.

Publication of all code, prompts and text will be
available on the next day in the form of artist-
produced chap-books as well as online PDF.

For Piksel, we would like to have Jonathan Kemp,
Sabrina Small and Brendan Howell present as the core
performers. We would like to then invite additional
participants from among Bergen locals and other guests
already invited to the festival for a total of 6 to 10
writers.

We would also like to have a short 20 minute reading of
our text during the evening A/V performances.

SLUB

Alex McLean, Dave Griffiths

Slub sound emerges from slub software; melodic and chordal studies, generative experiments and beat processes. Process-based sonic improvisations; live generative music using hand crafted and live coded apps, scripts and l-systems in networked synchrony. With roots in UK electronica and tech culture, slub build their own software environments for creating music in realtime. Only custom composition and DSP software is used. Everything you hear is formed by human minds.Slub project their screens so that the audience are able to appreciate their live software development process, which does not adhere to industry quality control standards. They communicate using OSC over UDP and eyebrow gestures. The output ranges from extra slow gabba, through intelligent ambient to acid blues glitch.Slub have performed widely across Europe including Sonic Acts Amsterdam, Sonar Barcelona, Club Transmediale Berlin, leplacard London and Ultrasound Huddersfield.

For Piksel, Dave and Alex from slub propose to perform with their free software live functional programming platforms, respectively SchemeBricks, a lisp with colour block notation, and Tidal, a live pattern language embedded in Haskell. Screens will be projected live for the audience, and every edit recorded in revision control and later released under the GNU Public License version 3.

RDEX

Claude Heiland-Allen

RDEX (reaction-diffusion explorer) is a piece that explores an autonomous hyperspace mathematical model, searching for interesting emergent behaviour (life-alike, alife).

The model is a kind of continuous non-linear cellular automaton, based on partial differential equations representing chemistry of two reagents involving reaction and diffusion.

The mathematical equations of the model have four parameters, that need to be set to concrete values when running the simulation. RDEX initially explores this 4D parameter space at random, building up a database of behaviours.

RDEX analyses the behaviour that emerges from the system, moving on to a new set of parameters if it fades into unchanging uniformity or explodes into erratic numerical instability. Much more time is spent evolving the cellular automaton when neither of those alternatives occurs: when it finds something really quite interesting...

RDEX for live audio-visual performance has a sequencer to choose 4D parameter points from the database, with the resulting evolving patterns converted to sound using a variant of wave-terrain synthesis.

Demo session video:

http://www.archive.org/details/ClaudiusMaximus_-_rdex_2010-05-22

Audio from first performance:

http://www.archive.org/details/ClaudiusMaximus_-_Live_At_OpenLab_OpenNight_5_2010-05-19

Project website:

http://rdex.goto10.org/

My website:

http://claudiusmaximus.goto10.org/
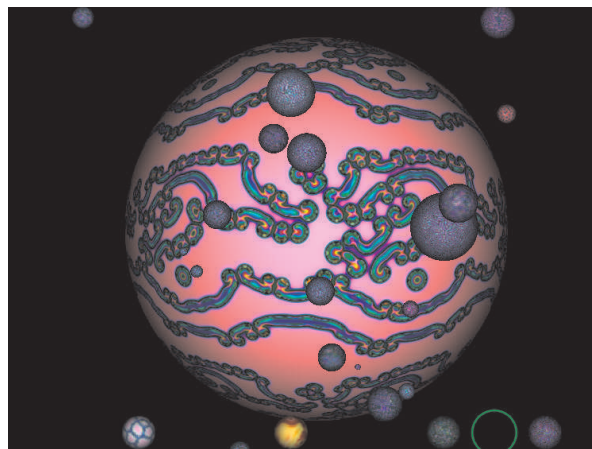
FACA-VOCÊ-MESMO+HÀGALO USTED MISMO+DIY

Cristiano Rosa

Is an audiovisual performance that uses unique electronic instruments, delicate and unstable, built by the combination of assorted materials found at electronic debris, using Circuit Bending. These devices when played together generate electrical signals that reach a wide range of frequencies (from audible to ultrasonic). Depending on the combination of these signs, to locate its source is impossible, because the space is filled with this mass of sound that resonates in our body.

The instruments are unstable, sometimes they can simply stop, creating a constant risk during the presentation. All these malfunctions or glitches turn part of the improvisation.
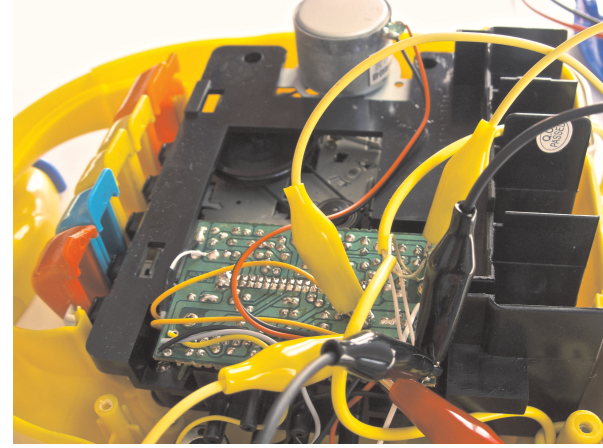
SOMETHING STUCK IN MY THROAT

Alexandre Torres Porres

This is a very simple noisy improvisation performance. Piezo microphones are stuck on the performer's throat with black duct tape. Wires coming out of it evoke an eerie bionic look, and is the feature that gives the name to the performance. A camera is used to focus on the performer's face and project it on a screen.

The feeling of having something stuck in your throat is that of not being able to express yourself properly. Most of all feelings of anguish and frustration are depicted in the performance. The performer's mouth is also covered with duct tape. This increases the visual tension, and restricts the sounds to be solely produced by the the throat, and to be captured by the cheap Piezo microphones. Final visual elements of the performance are yet more restrictions to the performer's body and senses. Black Duct tape is also covering the eyes, and the body is partially tied to restrict movements, as he sits on a chair. This is all thought to be a development of the concept of having something stuck on your throat, the sensation of not being free, and struggling to do so. During the performance, we witness the performer trying to make the most out of this limitation, trying to outcome the feeling of having something stuck on the throat, taking it out!

The sound quality is low fi, and sounds are mainly gutural, high pitch moanings, and screams. This is a noisy performance with not much fancy live electronics. The main tool used is the Phase Vocoder Abstractions developed by the performer, which are free open source tools developed in Pure Data, and freely distributed as an end user oriented software. The Phase Vocoder ad the didactical work of the author is also part of a workshop submission to piksel by the performer (ID 278), and, therefore, related.

The Phase Vocoder Abstractions are innovative as they allow phase vocoding to be made on the fly, in realtime, as the buffer is being fed – whereas this is usually a processing that is only operated over a buffer that needed to be first filled out.

The Phase Vocoder Abstractions capture the sounds from the performance and loop it in different tempos and pitch shifts, and also as a harmonizer, and canonizer. The computer acts as a mean to maximize and echo the restricted sources. It expands the tied and muted body and generates a dialog, it transposes the imposed barriers of having something stuck on your throat. The processing works as a "maximizer" also by amplifying the sounds captured by the throat, as if we were zooming into the sound. this concept is also present on the close up image captured by the camera.

The performance is intense, and lasts from 5 to 10 minutes. It has been performed in 2009 not as a solo project, but as part of a noise improv group called "Live Noise Tupi". It has been just debuted as a solo performance during the ICMC 2010 at Stony Brooke University, on june 5th. This performance is also scheduled in Montreal on the following month, and at a couple of events in Brazil before Piksel.

Important link:
http://www.myspace.com/alexandretorresporres

COLLECTIVE OF FOOTBALL RADIO NOISE INTERFERENCES

Julien Ottavi

Based on radio hacking devices, Radio Noise Interferences Collective extracts the essence of radio waves through unexpected revelations of their micro-activities. The combination of electricity and electromagnetic resonances, through the interaction of bodies and machinic connections, reveals the invisible fluidity within a noise-cloud. The participant/performers are picked at random at the beginning of the Live Performance. The Performers are asked to interpret a noise-cloud, all acting as a modulation of the same organism, decoding and recoding the universe in one movement. Detuning the radio frequency, playing with the fundamental lights of our life, interlayering of world sounds and using flesh to connect to an alternate sound world.
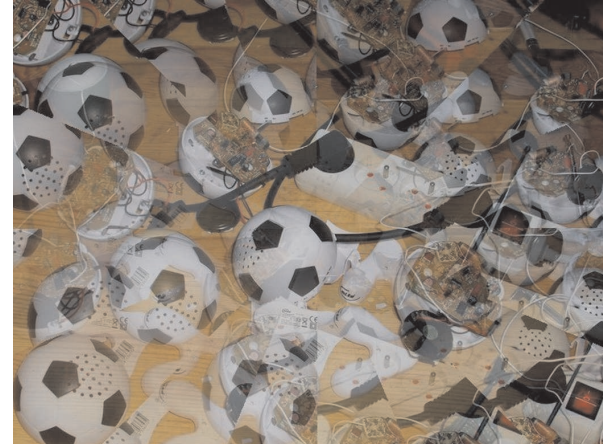
Direction for the performers :

1. Get a hacked radio device
2. Produce some radio interferences within the cloud of noise
3. Think of your body before the sound
4. Play like you are the movement of radio waves

THE CARTOGRAPHER

Luca Carruba, Oscar Martin Correa

The cartographer is a performance proposal about
the power of cartography, the possibility
througt map visualization to colonize mental-
space. It's a 20 minutes long experimental
live-coding documentary using puredata language
as a mind-Maps tool.
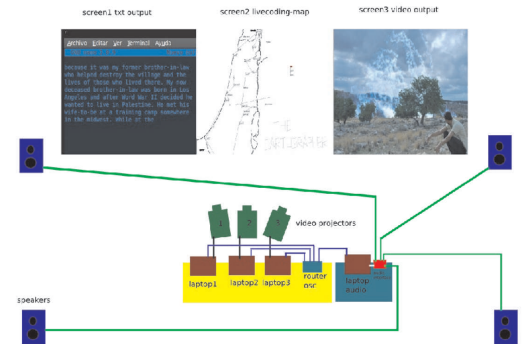
TRANSCODE

Oscar Martin Correa

Realtime audio-performance (30 min)

Is sound work containing materials originated by
playing and experimenting with (bash) linux console
and using one simple command:

cat /dev/mem >> /dev/dsp.

This action will dump a file (in this case a file
like "/dev/mem" which is related to the computer
memory) towards our sound device "/dev/dsp". It will
start then interpreting this input data transforming
them into sounds.A raw and 8-bit sound is generated
containing its evolutions,dynamic changes, rhythms,
silences, textures, etc. Sometimes it sounds like
loading old fashioned spectrum cassette games.

At this time, I was reading an essay by Simon Yuill
about the concepts and the relation between brutalism
architecture and computing art science

(http://1010.co.uk/code_brut.pdf)

This article somehow influenced me at the very
beginning of the creative process, but afterwards I
decided to work in other directions with these raw
materials: cooking them by using mutant mathematics
generative processes, iterative and fractal functions
applied to granular synthesis parameters.
Simultaneously I was also programming all the
software (patches) needed in PureData frameworks
generating feedback between product and process.

During the audio-performance i will procces and mix
the sound blocks obtained from the transformations
explained above.

What fascinates me the most from digital media, is
having the possibility to transform whatever you can
decode into 0 and 1, and been able to dump it into
different shapes and even languages (audio can be
turned into image, DNA from a cauliflower into a
sonora piece...) I find here a retroflavour of poetic
absurd DADA; some kind of situationism deviation, or
perhaps a shoot of machine desire connection....

enjoy here >>
http://www.tecnonucleo.org/index.php?page=release&rel
ease=22
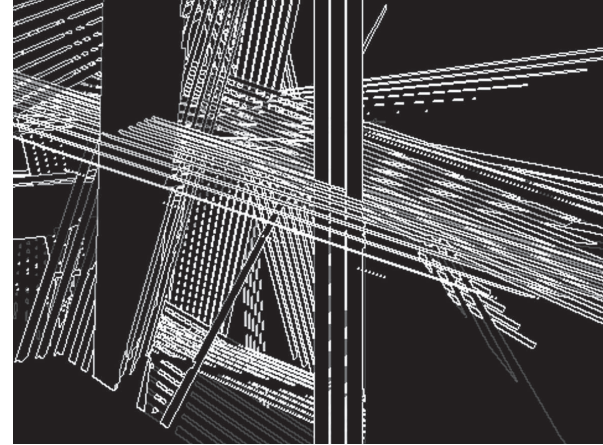
DEGENERATIVE ILLETRISM

Joachim Montessuis

this is a piece i started to create this year, an
audiovisual visual psycho-poetry de/generative work
using PD and IanniX and wireless sensors.

The aim of my performances is usually to use the what
is called sound and visual "poetry"post avant garde
system, to create and reach a trance state - at least
for the performer, then for the public to feel how
voice, computer processes, sound, text and video
flickerings can bring together a higher state of
consciousness by experiencing directly some subtle
perceptions of our multi-dimensions experience
through a vibratory shock possession. This awareness
process is the core of my work for the last 15 years.

DYSTOPHONIA

Alexandre Quessy, Tristan Matthews

Cities lie and die. Buildings are built, destroyed and rebuilt, like respiration. People are stacked up in layers, living their lives on top of each other, in their own office or apartment. Living or working in a space that is being constantly torn apart and reconfigured has an intense impact on one's psyche. The dust and noise are so habitual that it becomes hard to imagine life without them.

In Dystophonia, two musicians, artists and developers offer you an experience with noise and light. Their live sampling of music involves atonal clusters, dissonant runs and contrary movement. The images are sampled with Toonloop and the sounds with Sooperlooper.

Toonloop is a live stop-motion animation system created by artist and developer Alexandre Quessy. It consists of a free software suite for video performance which shows the audience the creation process as well as the results. The Toonloop project has benefited from the support of the Society for Arts and Technology and the Université du Québec à Montréal.

F(X)

Alo Allik

f(x) is an audiovisual exploration of 3-dimensional
continuous spatial functions derived from the concept
of continuous valued cellular automata. The functions
form the basis for sound and visual synthesis
mappings that create a complex and dynamic parameter
network. The audio and the visuals are independent
from each other both physically and conceptually and
the reciprocal influence flows in boths ways in a
non-linear manner. The segmentation of the visual
space and acoustic time is controlled in the
performance by affecting the behavior of the automata
world in real time to reveal the complex, organic
three-dimensional patterns that emerge and modifying
the mapping space in response to them. The
spatialization concentrates on composition and
transformation of ambisonic fields rather than point
sources. The audio and visual synthesis as well as
the performance interface have all been developed and
implemented in open source software (SuperCollider,
liblo, OpenGL). The piece is comprised of 4 distinct
audiovisual zones.
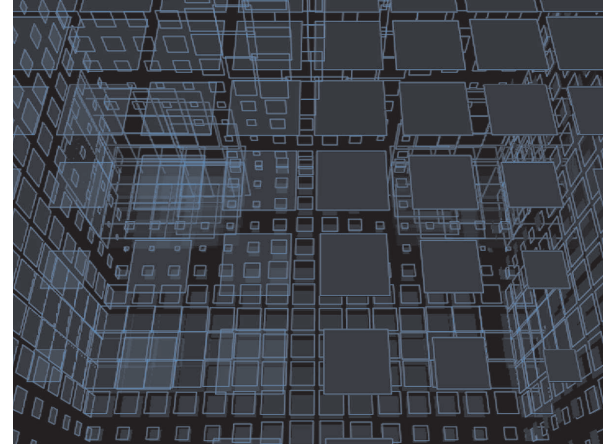
The construction of situations

Martin Howse, Shu Lea Cheang, Anthony Iles

During six hours within an open space, the
construction of situations proposes the destruction
of software as architecture (of abstractions),
environment, and language (a conversation) which
describes and constructs the systematic world. The
unknown and programmed event bears witness to the
expansion of re-constructed code as a new framework
of discussion within the creation and organisation of
moments.
A situation is constructed starting from this
description, a large room with people, a few tables
and chairs, drinks, audio equipment, esoteric
technologies; the symbolic destruction of any
framework as
new codes work towards the collective initiation and
fragile construction of a truly unforeseen site of
execution.
Participants: Shu Lea Cheang, Martin Howse, Anthony
Iles

ANGULAR MOMENTUM - FINNISAGE CONCERT

Signe Lidén, Michal Kindernay

Lidén and Kindernay makes metal sing and moments of
momentum seeable. The installation is built up by
resonated metal objects embodied by strips of
interacting images. The objects are both microphones
and speakers and their feedback agitates continuously
new layers of sound. The singing, hauling, droning
scrap metal modulates numerous of moving pictures
that are projected on the objects. Natural patterns
mutating in abstract generative forms. Sometimes the
sound draws and the image sounds. Tiny granular
insects revive contemplative wired environment.

CELLULOSE

Audun Eriksen, Arnfinn Killingtveit

CELLULOSE (NO) is a duo consisting of Audun Eriksen
and Arnfinn Killingtveit exploring the psychoacustic
tangents of new and old technology through th use of
acoustic and digital didgeridoo. The didgeridoo is
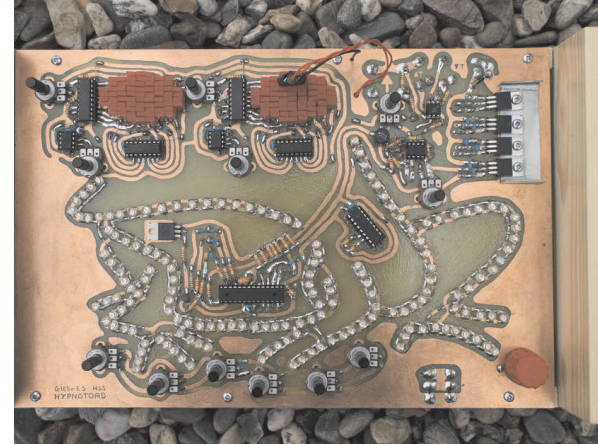used as a transcending tool for connecting the inner
self to noise.

audiovisual performance
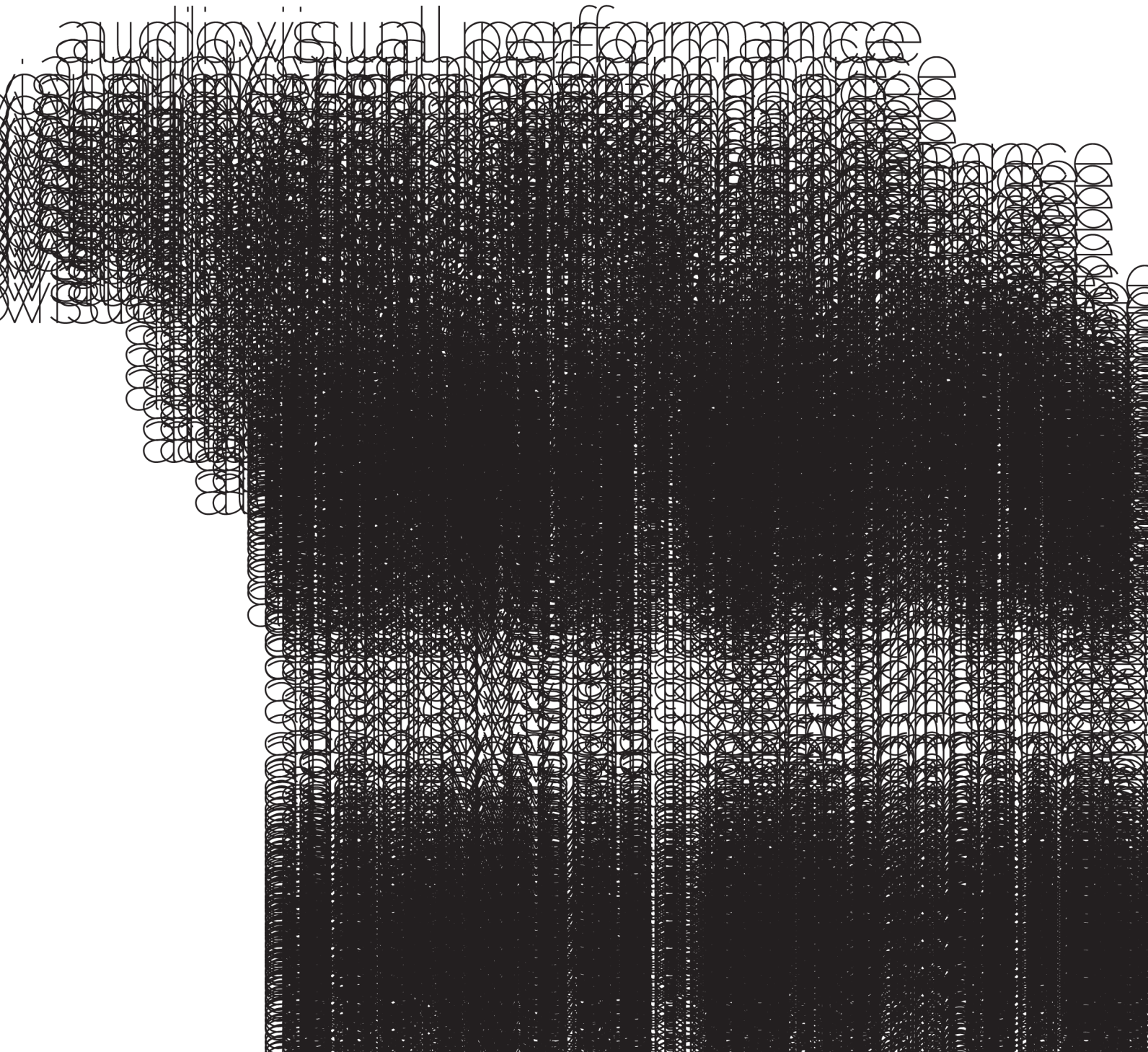
HYPNOTOAD

GIJS Gieskes

During six hours within an open space, the
construction of situations proposes the destruction
of software as architecture (of abstractions),
environment, and language (a conversation) which
describes and constructs the systematic world. The
unknown and programmed event bears witness to the
expansion of re-constructed code as a new framework
of discussion within the creation and organisation of
moments.
A situation is constructed starting from this
description, a large room with people, a few tables
and chairs, drinks, audio equipment, esoteric
technologies; the symbolic destruction of any
framework as
new codes work towards the collective initiation and
fragile construction of a truly unforeseen site of
execution.
Participants: Shu Lea Cheang, Martin Howse, Anthony
Iles

SOLVEPLENE

Oyvind Mellbye

Sølveplene is a quadrophonic listening apparatus that
consist of 4 cassette players that play tapeloops
which is controlled from a custom made mixer.
I see the construction of Sølveplene as an apparently
anachronistic activity. In terms of technological
selection the project appears as a rupture in a
linear view of technological development. This is
expressed through the use of analog circuits and far
from lossless media where Sølveplene continues
investigation of technological projects that
initially has been discarded.

ANGULAR MOMENTUM

Signe Lidén, Michal Kindernay

Lidén and Kindernay makes metal sing and moments of
momentum seeable. The installation is built up by
resonated metal objects embodied by strips of
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insects revive contemplative wired environment.
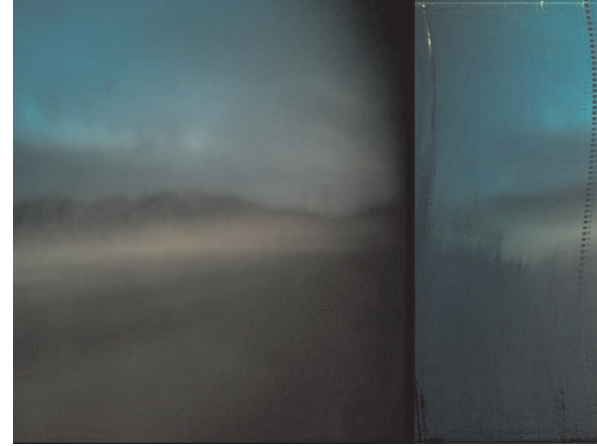
UNRUND

Korinna Lindinger

Self-moving porcelain objects, ø 14-16cm - 2009

Porcelain robots roll through the space. The
mechanical swinging movements of the motor inside the
robots and the irregular porcelain spheres produce
patterns of movements and sound. Shape, sound and
movement form an entity mediated by the ceramic
material. The thusly designed random movements make
the objects seem as if they had a life of their own.

www.maschen.at/unrund

FRUIT+EMOTION=NOISE

martinka bobrikova, oscar de carmen, victor mazon

Is an audio-visual performance based in the
audiovisual installation "E", where we create an
open hardware by the use of the basic 3rd generation
hardware, capable of process into sound the energy
contained in fruits and vegetables, discarded by
supermarkets, through an electrochemical reaction.

- Protest against current patterns of production and
consumption, providing new critical devices.

- Evaluate the environmental impact generated in the
field of waste management.

- Finds a second use for the fruits and vegetables
which are discarded by supermarkets because of their
color or shape and is not attractive for sale to
customers.

- Visualize the sound of the energy given out by
fruits and vegetables discarded by the supermarkets.

Shows the electrochemical reaction, which is
generated by inserting two different metallic
objects, copper and zinc, in each of the fruit that
is in the installation. These fruits, connected in
series, produce a small amount of electricity that is
transformed through various integrated circuits to
sound frequency, which are displayed on TVs located
in the room.

-in relation to the energy system of the performance.
These states in constantly change and through its
various stages in the electrical potential, create s
a symphony of sound that is analyzed in real time to
display and enhance what our senses by their limited
range does not allow us to discover.

By synthesis of analog and digital video, hardware
(video synthesizer) and free software (PureData)
previously designed and built and for live
audiovisual installation Fruite+emotion=noise,
artists create an audiovisual composition based on
the law of conservation of energy, the first law of
thermodynamics, which states that energy can neither
be created nor destroyed, only can be transformed.

PUSH AND SHOVE

Ben Dembroski, Ben Woodeson

Ben Dembroski and Ben Woodeson no longer live in the same country; we therefore propose two geographically separate, but digitally connected, installations. The installations will be vulnerable, precarious, aggressive and reactive. Each installation will initially be developed by both Bens; physically by one, virtually by the other as they will be developed in two different locations; Glasgow and London. However, the exhibited configuration for each segment of the work will be realised and installed by one Ben at each location. An online record of of the exchanges and inevitable arguments arising from this exchange will be made publicly available online on this site along with the source code and API used for the communication between the installations.

Like software development, the work will be experimental and ongoing; no one variation, section or configuration will ever be deemed "finished" or "ultimate".

Ben Dembroski's practise is primarily interested in networks of things and FLOSS development as a model for artistic practice. Ben Woodeson's is in "active" art works that challenge the exhibiting institution and spectators, usually via confrontational and/or deliberately dangerous sculptures such as the ongoing Health and Safety Violation series. Although they have enjoyed a co-operative relationship as individual practitioners, this would be the first time the two would collaborate on a project from conception to execution.

Most sculptures are made to exist, these are made to both stop existing and to stop their evil twin existing. Like a throw back to the cold war and the days of Mutually Assured Destruction, the two works are both agressive and vulnerable; their intention is to destroy or disable their counterpart. Conversely, they have no concept of defence or retaliation, yet each carries within it the seeds for it's won destruction; they search for vulnerabilities in their counterpart with no concept of their own precarious situation. In some ways, this can be seen as playful nod to the irreverence of dada, Man Ray's "Object to be Destroyed" and Jean Tinguely's "Homage to New York".

Each iteration of the work will be built based around the physical concerns of sculpture such as mass, gravity, balance and friction. The sculptures will be loose accretions of wood, glass, plastic and metal in balanced equilibrium. Electro-mechanical devices will push, pull, rotate and vibrate, the intensity of their activity affected by random chance and the aggression of their counterpart; beyond a certain point, the sculpture's equilibrium may break down and the work physically collapse.

It is therefore unlikely that either segment will survive the exhibition unscathed.

SPACTIVE

Emanuel Andel, Christian Gűtzer

! Spactive" ist die Abkürzung für active Space. Dies soll keine in sich arbeitende Maschine, sondern ein räumlich begreifbares Erlebniss sein, das den Betrachter in sein Schaffen miteinbezieht. Die einfachste Form eines sich selbst beeinflussenden Systems ist eine Feedbackschleife. Unser Ziel ist es also, eine räumliche Feedbackschleife zu erzeugen, die auf das Verhalten des Betrachters und umgekehrt Einfluss hat. Unser Plan sieht 12 50x50cm grosse Aluminiumplatten vor, an denen Lichtsensoren montiert sind. Jeder einzelne dieser Elemente kann seine Tiefenposition im Raum abhängig vom Signal des Lichtsensors ändern. Trifft viel Licht auf einen Sensor so fährt das Element zurück – fällt kein Licht auf den Sensor kommen Elemente näher. Durch die verändernden Helligkeitswerte des Feedbacksignals beginnen die Elemente sich im Raum zu bewegen.
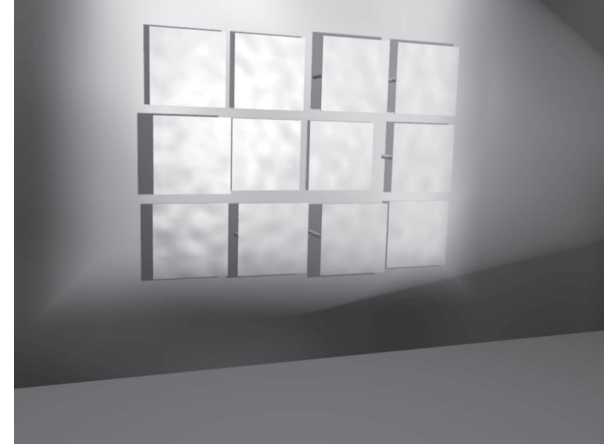
2X

jorge Luis Crowe

2x (Potencia de dos) is an audivisual reactive
installation, a sort of basic DJ/VJ machine built
with scrap (scanner, PC speakers, LCD panel from an
old laptop). 2x explores, in a simple way, the
relations betwenn numbers, image and sound. It uses,
in its core, a low cost integrated circuit designed
for mathematical operations, diverted from its
original purpose to generate rhythm with a
syncronized visual response.
While a speaker delivers a beat at a certain time,
each of the other speakers will raise this number to
the next power (21,22,23,24,25,etc.) enriching the
rhythmic sequence. Simultaneously, a proyected image
(generated by an LCD panel) will show geometric
patterns that change according to the sound. The name
of the installation «Potencia de dos» ("Power of
two») not only refers to the audiovisual
representation of the arithmetic operations but also
to the physical interface: the «instrument» is
executed laying no one but two hands ofver the
control surface.
The amount of skin (or the amount of fingers) in
contact with the interface will determine the speed
of the rythmic sequence. This simplicity allows
viewers/players to control the technic of audiovisual
generation in a few seconds.

FROM ERROR TO TIME - OR: FROM TIME TO TIME AN ERROR

Richard Schwarz

Because of my studies (humanities and arts) the two
aspects of time and programming came together. Time
was the main theme of my master thesis and I was
asking – shortly spoken: How do we get our
understanding of time? One of the problem about time
– as some authors claim – is the difficulty to
picture time. One example for an early attempt to
grab time and get information about ourselves was the
usage of long exposure – people got lamps on head,
hands and legs and then their movements could be
analysed. That was one of the materials upon which
Henry Ford designed his time-saving factories. So I
recognized how important work is for our
understanding of time and that this was developed
over the last few centuries – and because it seems
developed the question rises: Has there been another
sense of time in other times? Is there a way to get
time into a picture that gives us a hint, how we
travel through time?
Once I made up my mind, how the glitches in mpeg are
created – which led to a short excursion on glitch-
art and that's the reason for the title. Somehow it
seemed to me that a distorted mpeg-frame is
containing more than one "time (presence)" – it
contains the tracks of more frames / more "times" in
it. Before I was going deeper into the mpeg-codec I
came across processing and thought of the possibility
to program a time lapse within one single picture. In
the documentation you can see my first steps (to file
under "error") but the main intention was the same,
as it is in the following renderings. As material I
used sky-catcher images (open source at sky-
catcher.nl); just 288 for the tests. From each
picture I took a few pixels and placed it in the
time-lapse-picture at the same xy-coordinates as in
the original. At the end I got a picture – somehow by
pixel-picking – that contains pixels from pictures
that cover a period of roughly two weeks. Time goes
by, but every moment leaves information.

And based on this idea I would like to suggest an
installation that does jet not exist: A camera placed
at a gallery or a place of the festival takes a
picture in a fixed interval (the interval is based on
the duration of exhibition and the resolution of the
created time-lapse-picture). From every picture one
pixel is used and it replaces the pixel of the
initial picture at the same pixel-position. The
initial picture is a picture of the empty place
without the installation. With the beginning of the
exhibition a white box will be placed, on which the
current picture will be screened. Slowly will the
visitors, the light (I am interessted in the nordic
winter.) and the installation itself leave their
pixels in the time-lapse-picture. After the
exhibition the final picture should go online and
through a time-slider visitors and interested-ones
can have a look which pixel was token at a special
point of time. Hopefully it gives another notion, of
how we travel through time and leave our tracks
behind.

Link to samples and to a sketch of the installation
http://www.student.uni-
ak.ac.at/islandrabe/errortime.html

DESTATIK

Malte Steiner

! Dass es so weitergeht, ist die Katastrophe (That
things go on as they are is the catastrophe)."
Inspired by the sentence by Walter Benjamin, this
installation facilitates the possibility to interact
with a virtual wall of blocks. The installation is
ment to be projected outside, like on a real wall or
a shopwindow from inside. Bypassers got detected by a
camera and their motions are translated into the
virtual world, triggering the collapse of the wall.
The elements, cubes, have a physical correct
behaviour so the moment of catastrophe is never the
same. The surface of the building reacts. Via a
grafically simulated catastrophe new forms evolve,
from dissolution to progress. Are these new forms
architecture themselves? Or are they arbitrary? The
realisation is done with projection, camera sensor
and software developed by the artist especially for
that use. Already in 1999 Jean Baudrillard described
the relation of the architect with his software in
his essay: "Architecture: Truth or Radicality". Also
in this installation, the person acts as the trigger
of a process of generativity.

The software is based on open source libraries such
as OpenSceneGraph and OpenCV and running on a Linux
computer. The realisation and first exhibition
happend at ESC Graz, Austria, during the Steirischer
Herbst Festival 2009.
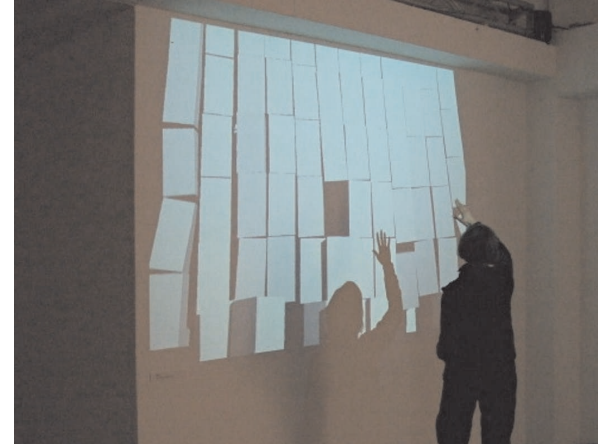
PALESTINE.FRAG

Luca Carrubba

Palestine.Frag is an exhibition of augmented
photography. The object of the photos is the city of
Nihilin, Palestine, its people and its daily
practice. Through a self-made device, the user
generates a real-time audio landscape that
accompanies him during the exhibition. The soundscape
is constructed dynamically from individual audio
tracks associated with each photo through a filter of
granular synthesis are deconstructed to create a
unique interactive sound track.

AUDIO PALIMPSEST

Anis Haron

Anis Haron's Audio Palimpsest (2010) is an
interactive sound-based installation that explores
applications of indeterminacy and randomness in an
interactive platform. The piece is based on a hacked
cassette recorder, where the device functionalities
are reconfigured to work in a different context.
Audio Palimpsest is an auditory art system that
allows multi-point interaction by synthesizing data
inputs collectively and emphasizing the thought of
open-endedness in its execution -- opening up content
generation to sources beyond the traditional
expectations.

To watch video documentation of audio palimpsest,
please visit : http://www.vimeo.com/13817251

www.anisharon.com

workshops

PSYCHEDELIC D.I.Y. TOILET ROLL GOGGLESS

Ryan Jordan

Your very own hallucinogenic, drug free goggles!

Aside from that, this workshop introduces the
participant to D.i.Y hardware hacking and
stroboscopic light. The workshop will focus on
building simple hardware synths from 555 timer
circuits and CMOS4093 chips. These electronic noise
machines can also control lights and the workshop
will focus specifically on stroboscopic light.

The participants will then build there own
psychedelic/stroboscopic goggles, which also can be
hooked directly into a sound system to create your
own personal hallucinogenic flickering noise machine.

This workshop is ideal for beginners in hardware
hacking and for those interested in stroboscopic
light and sound/noise.

ARDUINO SYNTHESIZERS

Gijs Gieskes

I would like to give a workshop in arduino synthesizers.
participants can build arduino synths from kit form, and (if
there is time) learn how to make there own scripts for them.

the following devices can be build:

- http://gieskes.nl/instruments/?file=hard-soft-synth-3

- http://gieskes.nl/instruments/?file=hard-soft-synth-2

- http://gieskes.nl/instruments/?file=wavetable-radar

- and maybe more..

used software:

- arduino

- tiny vga

- fritzing

CHEAP, FAT + OPEN: AN OPEN SOURCE PLATFORM FOR MUSICAL EXPLORATION, COMPOSITION AND PERFORMANCE

Jacob Sikker Remin

CHEAP, FAT and OPEN is an open source platform for musical exploration, composition and performance.

The platform is CHEAP, and OPEN – welcoming you to experiment.

It is a combination of the old and new: the raw 8bit / chip tune approach combined with wireless connectivity, state of the art open source hardware, and expandability – gives us that FAT sound.

It is portable, allowing you to make music on the go.

The platform is a performance instrument, giving a full 11! 2 octave keyboard control in compact packaging, through a classic stylophone interface. It is also a sequencer, allowing you to program rhythms and melodies, and play them back in sync with other platforms and instruments.

This is NOT a finished product. It works as is, but inside the platform rests an atmega328 processor, which can be programmed in the Arduino environment. This means that the platform can be modified, expanded, and tweaked to meet your exact needs.

CHEAP, FAT and OPEN is designed for geeky musicians, the chip tune community, the makers, the circuit benders, the interaction designers and the musical programmers, and anyone else who wishes to experiment with sequenced / networked / low-level musical exploration.

For piksel10 i suggest a talk on my experiences with the project, and the potential of open source hardware development. I would like to combine this with a demo of the platform, and a workshop & jam session with interested local musicians and musicians visiting piksel10. I am flexible in regards to the form of this workshop -- but earlier i have had great experiences with having an open hack lab, basically a corner where we build CFO synths, inviting people to drop in and jam with us (musically and programming / electronics wise) -- at the end performing together with those most interested.

project development blog:
http://tthheessiiss.wordpress.com/
sound samples: http://cheapfatandopen.bandcamp.com/

FUNCTIONAL LIVE CODING WORKSHOP

Alex McLean, Dave Griffiths

Duration: 3+ hours

Platform: Latest puredyne

Level: Aimed at those without programming experience,
or programmers with some experience with functional
programming language. Expert programmers without
functional programming experience might find it heavy
going, and are encouraged to think about Russian
dolls for a while before signing up.

The history and practice of live coding will be
briefly discussed. Two live coding environments will
then be introduced – SchemeBricks, a scheme live
coding environment with colour block syntax rather
than parentheses, and Tidal, a pattern language
embedded in the Haskell programming language. The
group will go through a simple hands-on example of
both SchemeBricks and Tidal together, and then decide
which they want to concentrate on. The group will
then split into two, each playing with some ready-
made examples, or building new scripts from scratch
if they wish. Of course switching between groups is
fine, as time allows
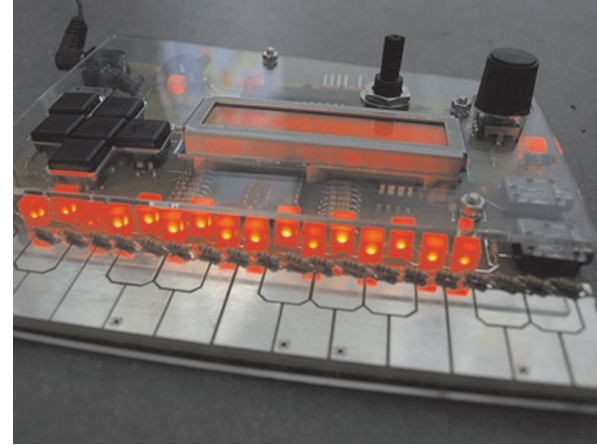
BUILD THE CHEAPEST SOUND GENERATOR BASED ON AM RADIO/// HACK YOUR RADIO IN 30 MINUTES

Julien Ottavi

Based on some long run projects around radio
transmission (from analog to digital) I intend to
continue the process of using the medium in its
different possibilities.
we will hack some 2! cheap radio (on the am
frequency) to make a new crazy light / touch / radio
feedback sound generator.

components :
-a cheap radio

-some wires

-screw drivers

-iron

-solder iron

-battery

-30min to 1 hour ++ (depend your skills and how you
want to expand the hack).

All the participants of the workshop would be able to
perform (as another step) with their radio hacked
sound generator in a collective radio noise grand
concert.

Electromagnetic Antena Workshop and Guerilla Noise Intervention in Bergen
Jenny Pickett, Julien Ottavi

The aim of this workshop is to build many mini electromagnetic antenna for the purpose of amplifying the inaudible electronic center of Bergen.

Man has always been living in a natural electromagnetic environment: the earth magnetic field. But for over 40 years, we also have had to live with a multitude of machines that generated their own electromagnetic waves (EM). An EM wave is the combination of two «disturbances», one electric, the second: magnetic. These two disturbances, vibrating simultaneously, but also perpendicularly, travel at the speed of light. An EM wave can thus be perceived as a moving electric disturbance of matter. It is possible to create a magnetic field at any time, by respecting the basic laws of electricity: by building your own generators, amplifiers and loud-speakers; and by adapting the electromagnetic phenomenon: with copper induction coils, magnets, and surfaces that capture charge or vibrations. The combination of a magnetic field and an electric field, which may vary in time and expand in space, has the consequence of the waves being kept alive within an EM field. In order to generate an EM field, you must simultaneously produce:
an electric field, out of electric charges
a magnetic field, by displacing these electric charges

With this workshop and participants we intend to produce EM buoys as sculptual EM amplifying objects to be chained to various sonically interesting areas in the city center - we would also like to place one or few of these objects in the gallery space. The buoys acts as a markers in the city, via which walkers or passers by may navigate/derive into an alternate veiw of Bergen

MOUSE AND KEYBOARD HACK: THE WAY FOR A SIMPLE AND UNIVERSAL INTERFACE
Wolfgang Spahn

Mouse and keyboard hack – the way for a simple and universal interface Mouse and keyboards are among the best working interfaces for a computer. They work wireless or with USB, they are supported by most software and every OS. And the best is each of them has its own interrupt. Above all they are cheap and reliable. That's why they are the perfect base for an artist's universal interface. You simply must hack them! In the workshop I'll show you how mice and keyboards function. Furthermore I'll show you how you can hack them and how you can connect those keyboards/ mice with switches and sensors. Additional I'll show some tricks and circuit to turn of the "tilt-function" of a keyboard. The workshop will enable you to use hacked keyboards and mice for creating your own interactive installation. It is although possible to develop a universal Arduino Mouse Shield, which allows the communication between software and an Arduino pretending to be a computer mouse. Arduino Mouse Shield:

http://dernulleffekt.wolfgang-spahn.de/mouse.html

SPECTRAL ANALYSIS AND PROCESSING IN PURE DATA

Alexandre Torres Porres

Alexandre Porres has written an extensive Puredata tutorial in portuguese. with about 200 patches to cover all about Pd Programming. This does not cover an audio or computer music tutorial though.

The author has taught a course on computer music with examples in Pd, which is published freely online as a book. He is is now working on a computer music tutorial all as Puredata patches, based on that book – this is also in portuguese too. Both the Pd tutorial and computer music tutorial in Pd are to be translated to english soon. The workshop proposed here will be taught with this material in english.

Alexandre Porres is a very active Pd teacher in Brazil, having taught many Pd workshops. He was also the main organizer of the International Puredata Convention in São Paulo, Brazil, in 2009. during that event, he also taught an workshop on Spectral Analysis and processing in Pure Data, and published the first version of his book for Computer Music with a paper presentation, discussing the scenario of computer music in Brazil, and what were the needs the book was trying to fulfill.

The book is designed for beginners, it covers the basics of digital audio, synthesis, and is a nice introduction to spectral analysis in an accessible way. It covers well how FFT works and processing such as Spectral Shiffting, Convolution, Cross Synthesis, Vocoder, and Phase Vocoder. These are the main topics that will be covered in the workshop.

A couple of Phase Vocoder Abstractions (abstractios are ready made patches to be included as objects in Pd) is also distributed by the author freely. They are end user oriented tools, and the most important feature is that they allow processing in real time, on the fly. You can start recording and immediately do Phase Vocoding processing on the incoming audio signal. Usually Phase Vocoders operate on pre recorded audio, or you have to wait to first fill in a buffer.

The objective of this workshop is to cover the basics of Puredata and introduce to Spectral Analysis and Processing. Participants will be provided with a good didactic material, and will learn how to use the Phase Vocoder Abstractions provided by the author, as well as other examples from the other topics.

The author is also submitting a performance where he uses mainly the Phase Vocoder Abstractions (ID 494). So, in a sense, the two submissions are related.

3 days of workshop is suggested, from sessions that can take 2 or 3 hours. If more time is available, the author would gladly be available for that, if suggested by the organizers.
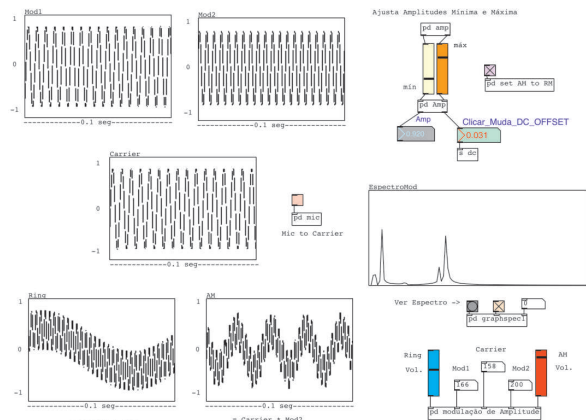
Important links:

– The Pd Tutorial
Pure Data Tutorial in Portuguese – by Alexandre Porres

– The Computer Music Book, which is the basis for the Computer Music tutorial in Pd Patches:
Computer Music Book in Portuguese (Porres, 2009)

– Paper from the Puredata Convention 2009 talking about the above book
Teaching Pd & Using it to teach

– Exerpts from the new Computer Music Tutorial based on the Book (In Portuguese)
Introdução & Wave Forms
Complex Math, FFT, Resynthesis

– The Phase Vocoder Abstractions:
[PVoc.pd] & [LPVoc.pd]

Most of these links are available in the autor's website (in portuguese) at: http://sites.google.com/site/porres/pd