

PHILIPPE DRUEZ

ARTIST & RESEARCHER

2025.1

BIO GRAPHY
RE SEARCH
X HBT ION
ART WORKS
P R F R M N C

Based in Ghent, Philippe Druez has developed an expanding practice in multidisciplinary and cross-disciplinary often experimental art. In his projects he explores society, communication, the psyche and the individual within the social fabric. Through exhaustive research the projects have a scientific and historic undercurrent adding layers and depth to the often poetic works.

Druez grew up with one foot in the film and video world and the other in a world of electronics, mathematics and information systems. This made him one of the first multimedia developers who understood image language, IT-hardware and logical structures. He challenged storytelling in museums by designing cutting edge technological projects and producing innovative interactive documentaries and installations involving novel media devices for major museums and heritage sites in Flanders and abroad. The commissioned works evolved from technological masterpieces to art systems. In 2012 he decides to focus ardently on his art practice.

As an artist he creates open systems that emphasise organism over mechanism and use dynamic processes of interaction among elements. The participant's role is an inextricable part of the aesthetic experience. The projects are multi-sensorial, interactive, multilayered, philosophical and challenging. Sound is a recurring field of interest but we know the artist as engineer, maker, developer, hacker, designer, architect, composer, director and researcher, mastering, exploring and using all disciplines to create works that use all media to lift objects, ideas and concepts out of the conventional to reveal, question and rethink everything.

Druez studied Philosophy at the University of Ghent (UGent), has Academic Bachelors degrees in Computer Science and Mixed Media Art and a Master in Visual Arts at Luca School of Arts, dept. of the KU Leuven university. He is doctoral researcher at the IPEM Musicology dept. of UGent and KASK School of Arts & Conservatory researching on the subject of 3D sound art. He was Artistic Director at Logos Foundation until the end of 2022 and now works full-time as independent artist and researcher.

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MAS – MUSEUM AAN DE STROOM

Multimedia installations, films and photography
(creative director, multimedia design, CEO at The 8ighth Day)
Permanent exhibition on floors 4, 5, 6, 7 and 8
Museum MAS, Antwerpen

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NEWS FROM THE WEST

Photography
(+ teacher, organiser, scenographer, curator)
International workshop and group exhibition in Flanders Fields
Peace Village, Mesen



UNDERCURRENTS

Photography, installation, films
First solo exhibition
//PAKHUIS_141, Vismijn Oostende
(pop-up in an old fish cooling warehouse)



FOTOFESTIVAL BRUGGE

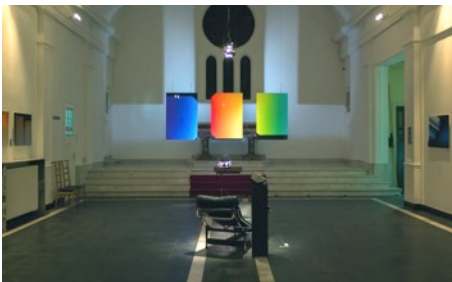
Photography
Official selection
Cultuurhal, AC 't Brugse Vrije, Brugge



PRINT AHOY 2

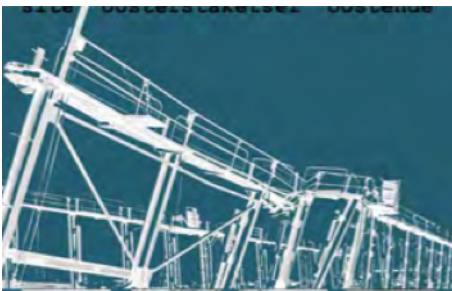
Graphic work (screen print)
Group
(Kamer 108)
Boat, Dok Noord , Gent

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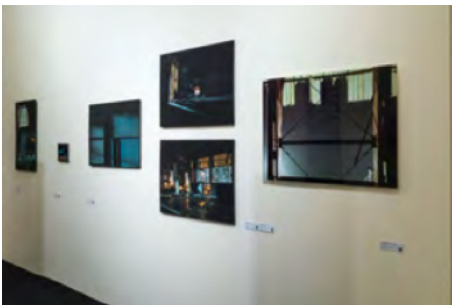
THIS IS [NOT] A PHOTOGRAPH

Photography, installation
Solo
Chapel of Awesomeness, Brugge



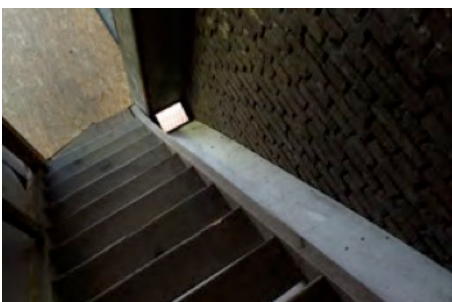
Z3

Installation, live performance at sea
Group
Academie voor Beeldende Kunsten, Gent
Oosteroever, Oostende



OOSTENDS PAVILJOEN

Photography, film
Group
Curated by Johan Westenburg
Venetiaanse Gaanderijen, Oostende



KARFOUR

Photography, installation
Group
Curated by Ben Benaouisse
Jan Colle Gallery, Gent



THE ARTIST IN THE CITY

Lecture - Pecha Kucha Night
VUB Crosstalks
Vrijstaat O (KAAP), Oostende



ACADEMY

Installation, live performance in the field
Long wave worldwide MORSE radio broadcast
(3.565MHz, 10.065MHz)
Group: Academie voor Beeldende Kunsten, Gent
Zwalm, Oost-Vlaanderen



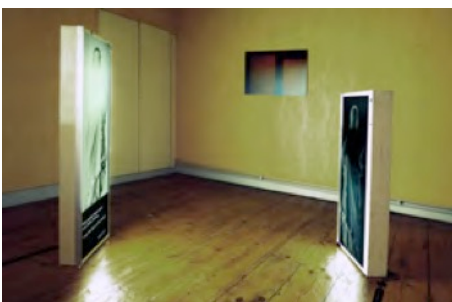
SALUT AU LANGAGE

Lecture (2h)
(related to The iSemaphore Project)
Academie voor Beeldende Kunsten, Gent



L2ME - LISTEN TO ME

Lecture & presentation of the project
I-Brain festival
Zebrastraat, Gent



MXM

Photography, Mixed media
Group
(participating artist and curator)
Brouwsels op Straat – Pastorie, Eke

**TTTT**

Sound performance

Poem on C60 cassette tape, player, speaker

Group

S.M.A.K, Museum voor Actuele Kunst, Gent

**ABKG**

Installation

Mixed media

Group

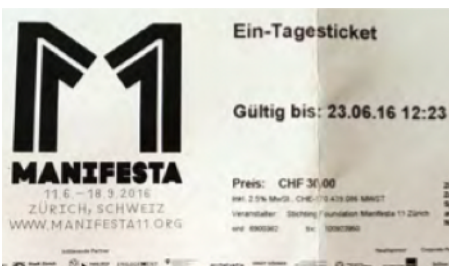
Academie voor Beeldende Kunsten, Gent

**THE PROCESSION**

Musical performance

Solo (try-out / POC of The macePod)

DOK, Gent

**WHAT YOU PEOPLE DO FOR MONEY**

Letter and guerrilla performance.

Manifesta 11, Zürich, Switzerland.

I performed two art acts confronting the organisation with the theme of the 11th Manifesta. The letter is in itself a third event confirming the motif.



L2ME - BRAINSOUND

Online presence of the project:
L2ME.org and BRAINSOUND.org
(project in progress)



INSTANCES OF

Photography, Installation
Solo
Galerie Studio, Oostende



FINAALST

Installation - mixed- & multimedia
Group
Master exhibition
CC Netwerk and SULBB, Aalst

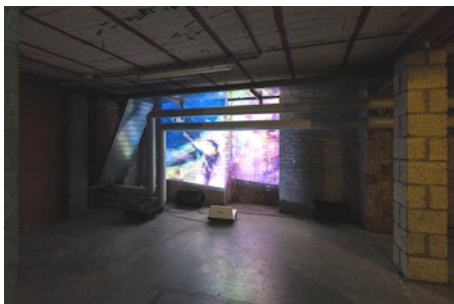


LISTEN TO ME

SOUNDS LIKE SILENCE, LOOKS LIKE TINNITUS

Curator and artist
Installation, sound-art, interaction, performance
International and local group of artists and work from:

- Einstürzende Neubauten (DE)
- Pierre Huyghe (FR)
- Robert Rauschenberg (US) Adam Basanta (CA)
- Heide Bertram (DE)
- Peter Beyls (BE)
- Joris Blanckaert (BE)
- John Cage (JC Trust, US)
- Ruth Devriendt (BE)
- Corry Vandermassen (BE)
- Yves Velter (BE)
- Myself with several works.

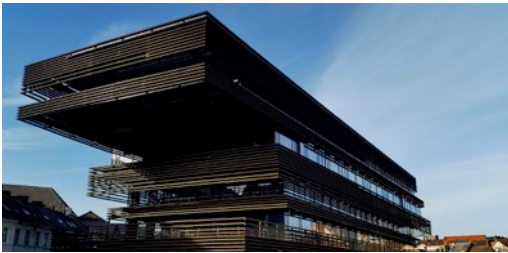


Cochlea Site, Zebrstraat, Gent.



EAR TO THE GROUND #3

Installation - sound-art
International group. Part of GAME, House of Ear
Advanced Master Ensemble
Curator: David Helbich
Bijloke Muziekcentrum, Gent.



SYMPOSIUM AUDIO RESEARCH AND PRACTICE

AES Belgian section of the Audio Engineering Society
IPEM, the Institute for Psychoacoustics and Electronic Music
Art Science Interaction Lab (ASIL)
De Krook, Gent



HARBINGER – SUBTLE COLLISIONS

In the context of the EPS-HEP particle physics conference to be held in Ghent in the summer, KASK's 2018-19 Curatorial Studies designed a series of events drawing closer lines between art and science in partnership with art@CMS, a program developed within one of the large experiments at the CERN Large Hadron Collider in Geneva.

Ghent University Botanical Garden

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LOGOS @ S.M.A.K. – DOUBLE EXHIBITION

Curator – Sound-art composition
Music robots, Sound-art, Mixed media, Composition

Appointed as new Artistic Director for Logos Foundation, the world renowned unique professional research and production center for experimental musics, musical robotics and audio art, Druetz curated their first exhibition at the S.M.A.K., museum of contemporary art in Ghent.

He chose 14 muBots from the collection of 80 to have a representative ensemble but also with the acoustics of



the hall in mind. For the one month presence of the robots he designed and coded a composition called <<Chevrons in C++>> for 10 robots.

The title refers to the < > brackets used in all muBot names, e.g.: <Whisper>, <Propellers>, Tubo> and Aeio> to name some. The algorithm was written in C++ for Arduino and runs on the NittyGritty sound-art-tool he designed months earlier for such purposes. NittyGritty played and controlled the

muBots over MIDI during opening hours of the exhibition. Besides the muBots, Druetz wanted to show the designer and builder's ghost in the machine by projecting wall-height photos of notes, diagrams, texts and sketches from Godfried-Willem Raes' notebooks. The images were matched to the overall design strategy. The second part of the exhibition showed a selection of sound-boxes and "sound-painting" (mixed media) of Moniek Darge, partner and compagnon de route of Godfried-Willem.

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WATOU ART FESTIVAL 23 (FLANDERS)

Two interactive installations. 1.7.2023 — 3.9.2023

Watou market place and De Lovie Castle chapel, Poperinge

Les Cœurs Qui Soupirent

The five "lung creatures" with an undefined shape and with organic-looking skin of various animals, birds, fish, moss and artificial scales, gently expand and contract at their own rhythm. The natural sound of the breaths invites the visitor to slow down and involuntarily turn inward and listen to their own breathing. The setting in the chapel opens up the prospect of the emergence of a new religion and that of cults dedicated to the worship of artificial intelligence and android creatures.



Oendergroend — The Parliament of Frogs & Túbe Koarte

The installation Oendergroend (local dialect for metro or underground), impishly refers to the world of thought of **Bruno Latour**. After all, the subtitle of the AmfiTheater is the Parliament of Frogs, a hint to Latour's Parliament of Things in which the non-human also gets a voice. Effectively, a curious croaking of frogs can be heard in the market square that falls silent as we approach. The frogs appear to be trapped in a flooded underground subway shaft in which we can occasionally observe a frog through the grid, hidden between aquatic plants and lilies. Although there is a link to Martin Kippenberger's Metro-Net from 1993, the starting point is completely different.



► Read more about the installations on the *Art Projects* page...



BELGIAN ELECTROACOUSTIC FESTIVAL

Tinnenpot Theatre, Ghent. 25.9.2023

Boredom — 3D VR composition 9'11"

The Ambisonics VR work was created as a counter-reaction to our ever growing oversupply of algorithmic marketing products and entertainment oriented society. Everything must be more, well, this composition is less. And it's not contemporary classical ambient minimalism. The composition is called Boredom, an essential state of being, time to contemplate and make room in one's head. At the start of my artistic career I was mainly into photography.

One of the last ideas of this period was to depict boredom at offices. It got shelved with the end of this trajectory, until I discovered the photo series of John Pilson who lives and works in New York. The cover photo, is called Unfinished Origami (1998-2000) taken at an office floor of the NY Twin Towers, not long before they vanished. Originally it is a pure modular generative work (in stereo) that goes on forever. For BOEM 23, I re-cut the whole scene to 9 minutes and 11 seconds for 16-channel Ambisonics and punctured it with a 9/11 4- channel reconstruction of recordings of the second plane entering the South Tower, elevating boredom to a heavenly state.

► Find out more on [//philippedruez.be](http://philippedruez.be) and [//soundcloud.com](https://soundcloud.com).



AUTUMN WAVES — BEFEM/FEBEME

Project(ion) Room, Brussels, 5-8 10 2023

Choral Flow

An interactive sound installation with eight active speakers. It explores the affect of choral singing through interaction and architectural acoustics. The work is created as a reflection on the physical isolation and digital interconnectedness.

Individual choral voices directed and recorded by Heide Bertram, Neural network architecture, algorithm, coded in Python by Philippe Druez. The algorithmic neural network as well as the scenarios are a work in progress.



KLANKENBOS

Permanent installation, Pelt 20.9.2023

THE SOUNDCLLOUD / LA PLUIE JOYEUSE

SoUndclOud / la pluie joyeuse is the result of a collaboration between Musica Impulsentrum and Meakusma festival Eupen, with the financial support of the Flemish government and the German-speaking Community, with the aim of promoting cultural cooperation and exchange between both communities.

► Read more about the installations on the *Art Projects* page...

Performance (see also: installations)

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ETHEREAL THREADS (PILOT)

The wasteland of radio waves is the raw material in this mysterious and ephemeral musical scene. The electromagnetic *objets trouvés* (as such: military radar signals, diplomatic communication, clandestine transmitters, number stations, ionosphere heaters, morse code, beacons, foreign music stations and satellites) are the basic components for this experimental performance. Large antennae, a soprano voice, cello and interactive visuals form the stage in which various radios are operated to create overlapping rhythms and melodies. The work starts from media theory with as central philosophers and cultural critics Marshall McLuhan (*The Medium is the Massage*) and Walter Benjamin.

Verbeke Foundation (winter exhibition).

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ETHEREAL THREADS – WASTELANDS

Overlapping rhythms and melodies are created by tuning amateur radios and manipulating radio antennas on stage, searching for garbage sounds originating from VLF natural radio, skip-propagation, military over-the-horizon radar signals, diplomatic communication, foreign clandestine transmitters, numbers stations, unlicensed and pirate radio, ionosphere heaters, digital signals, morse code, beacons, foreign music stations and satellites.

Live singing and poetic interventions with samples from Marshall McLuhan and Walter Benjamin travel around the globe, relayed through (amateur HAM) radio stations, and return to the stage, coloured with atmospheric noises. Cello and prepared piano improvisations, hands-on tuning and modular synth manipulations bring unexpected moments, reflected by the interactive visuals on the stage. Jocelyn Bell Burnell, Pauline Oliveros, Bebe Barron and Daphne Oram.



The collective seizes a gap between art praxes by creating art-music-performance-installations through research, experiment and improvisation, merging media and communication as form and content. Historical and contemporary phenomena are considered in the works, where the intersections between nature, technology and society lead to layered and pronounced experiences.

With:

Giusy Caruso, prepared piano

Jasmijn Lootens, cello and electronics

Heide Bertram, soprano.

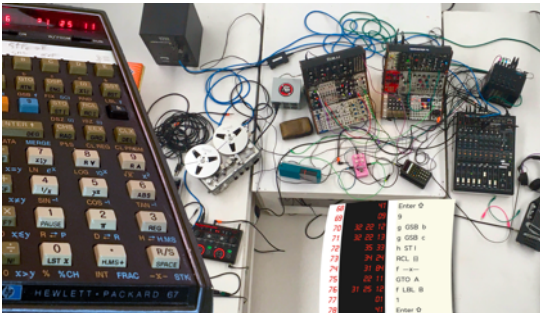
Short wave radio operators in Germany and Belgium

16.10.2020

Miry Concert hall

Read more: <http://wastelands.be>

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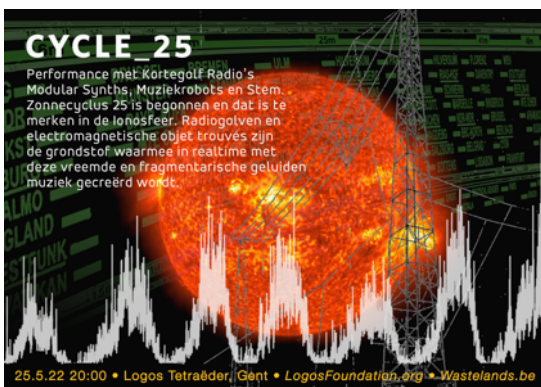
IMPROVISATION WITH HP67

Improvisation with the Hewlett Packard HP-67 Programmable Calculator (which was used on NASA's **Apollo Moon Missions**). The 112 step code is written to perform a musical piece. An electromagnetic interface is built to pick up the processor's spill radiation while computing the program steps.

With: Heide Bertram (acoustic instruments and voice)

Exhibition Ruth Devriendt. TinnenPot, Gent 07.21.

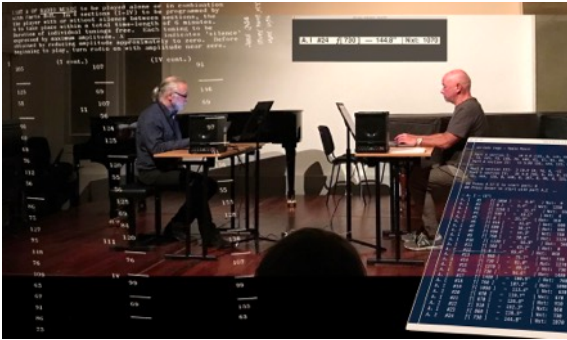
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CYCLE_25

The solar magnetic cycle is a nearly periodic eleven-year change in the Sun's activity measured in terms of variations in the number of observed sunspots on the solar surface. The observation goes back to the early 17th century and is the longest observed time series of any natural phenomena. The performance and/or permanent installation celebrates year one of a new cycle, #25 as we count. Solar activity can aid or hamper HF propagation beyond line-of-sight range. and aids in creating the musical composition for radios and music robots.

25.5, Logos Foundation.



RADIO MUSIC BY JOHN CAGE – 21ST. CENTURY INTERPRETATIONS – SESSION #1

An Interactive & Immersive Singing Installation – with Dr. Luk Vaes. Orpheus Institute.

Radio Music, like Imaginary Landscape No. 4, is based completely on radios as sound sources. The concert is performed by Luk Vaes and Philippe Druetz, operating digital broadband receivers capturing AM MW radio stations from

the East Coast of America (near New York). The score is a series of columns with numbers representing the tuning frequencies of the radios. The players may hold each note for any duration, and there are no dynamic markings or instructions except for a few lines that indicate a silence. This piece was composed in 1956, five years after Imaginary Landscape. It was adapted by Philippe Druetz and performed in 2 x 6 minutes (parts A, B, D, E). Software written in Python (Druetz) was used to assist in (the challenging) timing. Five more sessions will follow.



BOFUS – THE BUREAU OF UNCLASSIFIED SOUND: THE CON | FUSION OF TIME

The Bureau of Unclassified Sounds (or simply BofUS) explores what it says: unheard analog and electronic created and field recorded sounds, composed and improvised as sound-logic, synthetic enchanting weirdness, transforming resonant drones to poly-a-rhythmic experimental musical performances. The concerts are performed in *Ambisonics 3D* where suitable (Min. 10 speakers available).

More to read on the BofUS page:

<https://www.wastelands.be/BofUS/index.html>

Venues:

- 02.6.2024: *Galerie Ben Benaouisse, Gent*
- 21.7.2024: *Kasteeldomein De Campagne, Gent*

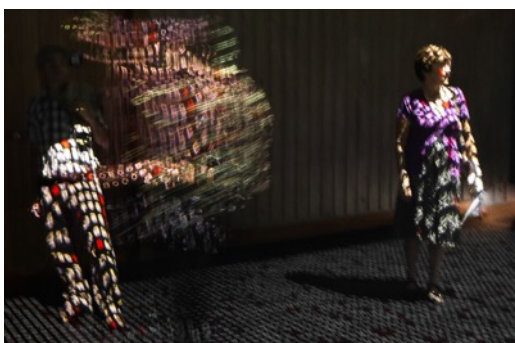
INSTALLATIONS (non exhaustive list)



ORBIS MEDIA

Multimedia installation. Film, music, cylinder with eighteen 24" displays in a 10x10m black box. Loop of 4 minutes. Part of permanent exhibition at the Museum MAS, Antwerpen. 2011.

The cylinder made of 18 video screens is throning above the visitors. It shows manifestations of power in a montage of TV archive, iconic photographs and artworks. The visual information shows the power of economy, military, religion, finance, people and art. The soundtrack emphasises the images and creates an intimidating atmosphere.



CITY BY NUMBERS

Multimedia installation. Real-time electronic data, immersive projection in a 10x10m black box room. Part of permanent exhibition at the Museum MAS, Antwerpen. 2011.

This immersive installation fills the room with numbers. The numbers are updated in real time and are derived from statistical information about the city: the number of containers shipped, of habitants, of power consumption etc... The colouring of the digits represent recognisable skyline images of the city. When the visitor is walking through the projected numbers he/she becomes part of the statistics.



THE POLYPHONIC WAVE/WIND QUARTET — O

Installation, live performance at sea. Plastic containers as buoys, tubing, flutes, funnels, cables, metal chain and fluke anchor. 2014

The installation with buoy-like objects are producing sound like wind instruments. The homemade organ pipes and whistles produce the 8 base notes in the octatonic tone system. They stand for eight wind regions where ships have been sailing to the sea for centuries. Where are those ships now? The floating installation plays a song that blows through the port, an oath to the glorious past of the Ostend harbour.

► <https://vimeo.com/99613275>



THE POLYPHONIC WAVE/WIND QUARTET — I

Installation. Plastic containers as buoys, tubing, flutes, funnels, cables, Arduino, electronics, audio equipment, air current duct tubes and fans, beamer. 2014

The “I” in the title stands for “Inside version”. The installation can produce the same sounds by means of fans blowing wind in the tubes instead of water pressure from the waves. The micro-processor driving the fans runs an algorithm written by the artist to simulate the movement of the sea waves.



THE ISEMAPHORE PROJECT - SALUT AU LANGAGE

Installation. Aluminium truss parts, gears, chains, sprockets, electronics, tele-lens and camera, tripod, Arduino and litteBits hardware, software (Open CV, Python, C++), wood panels, ISEM code book, 5 newspaper editions, 100 lottery bills.

This mixed & multi media art installation questions the effects on human society and cognition due to the evolution of the written culture and now, the image culture. It exists in the construction of a communication network that spans 220 years of history, starting at Napoleon’s sémaphores. The artist wrote the code and a proprietary developed code book. The physical operation of the installation, results in optical signals, decoded and transmitted in morse and Tweets over the Internet. The messages can be heard worldwide on any long wave radio receiver.

▶ <https://vimeo.com/130428156> (project trailer)

▶ <https://vimeo.com/120786126> (lecture slides and BBC clip)



L'IMAGE DE MON PÈRE

Sculpture. Roll steel welded frame, speakers, RSF electronics, MDF board, steel cables. 2017

The vague image the artist has from his childhood of his biological father is represented by what happened on a rare and uncanny encounter. The representation is through a sound frame. This frame is the psychological embodiment and produces a sound image, a distant and nebulous reminiscence in (time and) space. This is the only image the artist has. The architectural approach hints to André Peere being an architect.

The recording of the drawing of the image was done with 5 cardioid type small diaphragm condenser microphones, registering the sound of the pen (drawing on) scratching the surface of the paper.



ARTIKA

Interactive installation. Glass dome, Peltier element, cooling fans, aluminium tubing, radiator, heating filament wire, felt, Arduino and littleBits electronics, software code, wireless Internet link. North Pole melt water (in ice form). 2016

The installation is linked via Internet to Summit Station, a research station operated by the American-based Polar Services on the apex of the Greenland Ice Sheet. The temperature measurement at the station is used to regulate the pico-climate under a glass dome by controlling the temperature of the filament banner and the cooling element. The banner text Artika reminds of a depleted or abandoned theme park where ice bears are left to their fate.

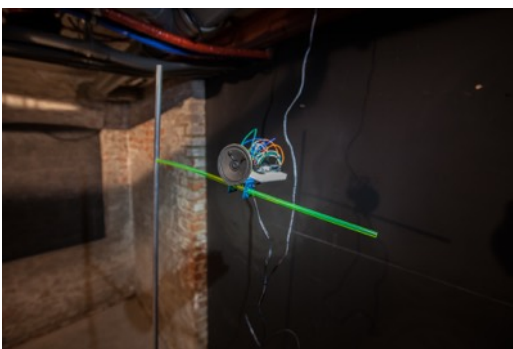


AUDREY & MARKUS

Installation. 80 B&W negative slides, Kodak Carousel slide projector, Tripods, Electronics, speakers, cables, PU-board. 2017

The computer generated speech is at times hard to follow. Audrey and Markus talk about the weather in English with a heavy French and German accent. The singularity is coming near and AI will compete all human thinking and actions. The slide projector alludes to technology in a certain time frame but also stands for the authority, standardising nature, in this case weather by sentences and symbols but it is also a metaphor for the sun.

► <https://soundcloud.com/Audrey&Markus>



TWEETING BIRDS

Arduino, speakers, coloured fluorescent Plexi glass, C++ code. 2019.

Tweeting Birds is about communication, more specifically, on how artificial birds might develop functionality to talk to one another as well as develop sensitivity to listen to one another. This process is assumed to start from scratch, without prejudice. Tweeting Birds is a collaborative project, currently being prototyped by the author and artist Dr. Peter Beyls. One day, we hope to interface natural and digital birds into an extended functional hybrid biotope.



TETRICE

Installation. Pico beamer, modular electronics, iPad. 2014

Melting hailstones descend on a glass plate, moving like Tetris blocks. This poetic work is accompanied by subtle sounds generated by an electronic circuit.

The artists often uses sound generated by programmable systems, using sensors, random and human interaction to control the evolution.

Part of these systems are for instance modular synthesisers like Moog 32, Mutable Instruments, MakeNoise and ARC artificial neural network.



BACK TO ZERO / FLUXØ THE EXHIBITION AS ARTWORK

Sound art installation.

Eight channel analog sound track 4'33". 8 KRK Rokit RP8 G3 speakers, Tascam 38-8 1/2" tape deck, production and processing with Ableton Live10 / Max8. 2019

A planar to cylindrical transformation as auralisation study case was performed by using a 16 microphone recording of the linear arranged space during the L2ME exhibition and then transformed into an Ambisonics virtual acoustics space. Back to Zero could be listened to during hearing sessions the last day of the exhibition. The title refers to the sixties ZERO art group's definition of "a zone of silence and of pure possibilities for a new beginning". Hence the circle with sound from an exhibition that started with silence.



KINDERGARTEN

Ultra directional parametric speakers, Arduino, servos, electronics, C++ code, aluminium mechanical parts. 40 x 25 x 20cm. 2019.

Hearing from a distance, children's voices at a playground is (if you're not doing your homework as a kid) mostly experienced as soothing, joyful or even overwhelming. In the case you hear voices as a tinnitus case, it's rather disconcerting and even horrifying. The Kindergarten installation sends children's voices through

the space, scattering from all walls and corners. Two pan-tilt servo systems are pointing ultra-directional parametric speakers in all directions. Children's voices can be heard fragmentary, creating the confusing effect of sound coming from walls and existing only in one's head. The movement of the "sound lasers" is controlled by an al-

gorithm, simulating natural semi-random movement. The work is part of the artistic doctoral research of the artist and explores the possibilities of holophony.



C(H)ORDS ON WHITE (RE.) / SOUND MARKER

Installation & Performance. 2019.

Glass semi-opaque plate, black felt marker, contact microphones, support beams, slide projector, slide, sound transducers, RSF microDAP MP3 player, stereo sound track 30mns.



C(h)ords on White (Re.), shows a remade White Paintings from Rauschenberg's series (re-fabricated, re-cast, re-modelled, re-forged, re-created, re-interpreted), as a white film slide, projected on an opaque glass panel. The light of it is obfuscated by the cords, (i.e. the black lines of felt marker applied on the glass in a performance – ibid.), creating the desire on the part of the beholder to look through the glass, to the elusive untouchable white image of panels.

The panel was traced with a felt marker during the opening performance sessions of the Listen to Me exhibition. The sound of the marker on the glass was recorded with two contact microphones. During the course of the exhibition the sound was re-played through sound transducers and could be heard when listening at close range from the glass plate.



CAMERA SONORA

Installation. Wavefield microphone on a high pole, Custom audio delay and storage equipment. WiFi transmission. 16 Speaker Wavefield reproduction system (interior).

A live and exact 24 hour delayed holographic soundscape is reproduced inside a chapel. The sound can include intended performances but is like a retinal afterimage of the acoustic ecologic space at this location. Sonora raises many questions: What about privacy? Like facial recognition, is speech recognition a threat or a blessing? To whom does the sound landscape belong to? The 24 hour overlap with the real sound of the moment and the scaling of the sound in 3D create a multiverses experience for the beholder. Ultimately, the sound recordings are used in a granular compression reducing time and space (as binaural) recording.



LISA JOUE

Robotics, electronics, aluminum mechanical parts, brass bowl, Arduino, C++ code. 55x55x25cm. 2016

According to Tibetan oral tradition, the existence of singing bowls dates back to the time of the historical Buddha Shakyamuni. Singing bowls produce sounds which invoke a deep state of relaxation which naturally assists one in entering into meditation, the ultimate goal of being enlighten. In the installation the mathematical circle is translated to movement over an X and Y axis, driving a stick to energise the bowl. The confrontation of the machine operated singing bowl evokes a mixed feeling to the listener. The unintelligible or dissonant sound of the machine that creates a perfect harmonic sine movement and lets the bowl resonate, clashes with the harmonic vibration of the bowl.



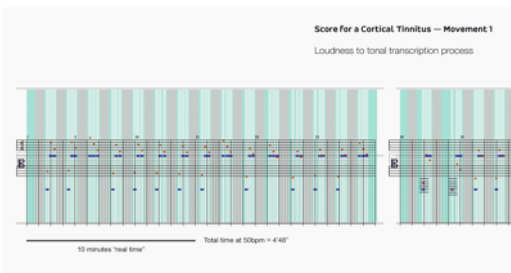
SCORE OF A CORTICAL TINNITUS

Score transcription, Music produced on Ableton Live 10 with Moog Mother-32, Mutable Instruments Elements + Clouds and MakeNoise 0-Coast modular synthesisers. Stereo, 4'40" and 5'20". 2019.

The biology versus technology parallel is a recurring element in Druetz's work. Where Huyghe's work *Partition du Silence*, results in a score reflecting the sounds during the recording of Cage's silence piece, it also produced notes as a result of the noise and digital artefacts of the medium (CD and player) itself.

The report *Intercranial Mapping of a Cortical Tinnitus System using Residual Inhibition*, by William Sedley et al. that appeared in 2015 in *CellPress*, a research publishing platform, contained a graph with fMRI scan measurements of the evoked, induced and steady-state auditory responses of a subject with typical bilateral tonal tinnitus, comparable to that of Druetz. The graph has been translated in analogy of Huyghe's work, to produce a score, translated in two movements (one for each day — see graph).

The minimal music arising as an aesthetic is marked by a non-narrative and non-representational conceptual work, approaching the activity of listening by focusing on the internal processes of the music, which lacks all other goals.





BEARING VOICES

2021-22. Interactive Sound-Art Installation

8 speakers, microcontrollers, sensors, wireless neural network.

Bearing voices produces a singing choir, directed by the beholder/participants. Movement and actions are picked up by sensitive and accurate light radar sensors and interpreted by the neural network. The data is interpreted by algorithms and different scenarios are used to control the evolution of the musical pieces. The choir voices were directed, recorded and edited during the Covid lockdowns by Heide Bertram.



LES CŒURS QUI SOUPIRENT

Inside the organo-mechanical creatures is a thorax system that, like lungs, blows air in and out of the artificial lungs. A pneumatic system, controlled by a microcontroller, creates a natural breathing movement. A human-inspired larynx creates the accentuated breath sound. Sensors register the presence of the bystanders, which influence the breathing cycles through a biorhythmic algorithm that controls the neural network that connects the sighing creatures. This varies between calm and rather restless rhythms.

2023. Five creatures, apx. 110 x 60 x 50cm each. Electronics, sensors, microcontroller, industrial pneumatics and compressor, mechanical parts, valves and tubing (hoses), PeliCase, plastics, wood, textiles, moss, feathers, air.

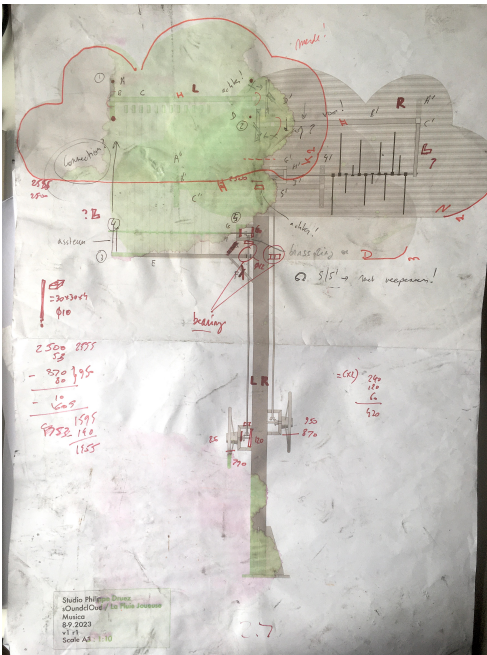


THE PARLIAMENT OF FROGS

(Contd. from the Exhibition page) Bruno Latour criticises the division between nature and society. In this he follows the scientist and environmental activist James Lovelock from whom he borrows the term Gaïa for a world as one system that is in a sense self-regulating. People, animals and things therefore co-exist for Latour – one cannot be thought without the other and hybrid forms also arise among themselves, of which AI systems that think along or create are

part. The synthetic or fake biological objects and the frog song (created with modular synthesizers) in Druetz's croaking quasi-parliament plays with an identity between real and fake.

2023. 2.50 x 2.50 x 1m. Electronics, sensors, microcontrollers, speakers, samples, simple pneumatics, tubing (hoses), PeliCase, plastics, metal, wood, artificial plants, ceramics, 1500 liters of water. Total weight: 2.2 Tons.



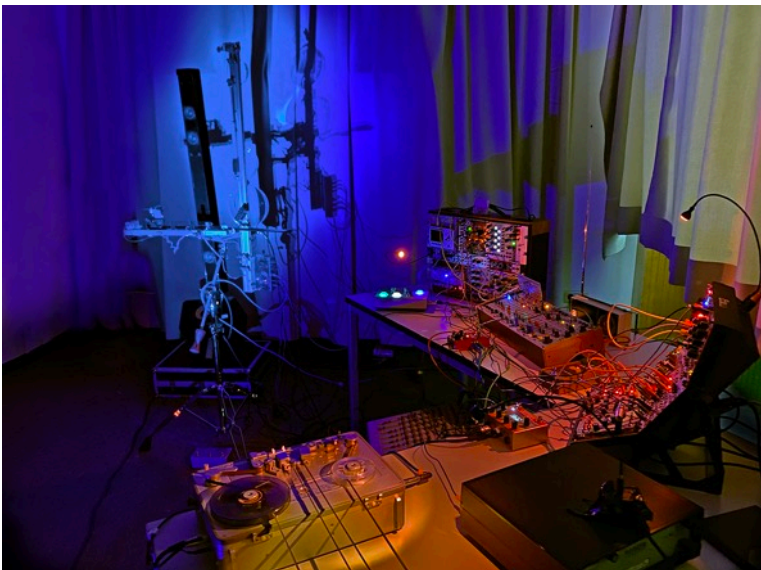
THE SOUND CLOUD / LA PLUIE JOYEUSE

2023

The original idea comes from Frédéric Le Junter, a French artist who creates installations/instruments and performances with recycled items. After studying the prototype, we came to the conclusion that the core aspect "rain sound" could not be produced as we wished if we were to work with this model. A brainstorm brought us to the "sound cloud" installation. We kept the original spirit in mind and the beautiful title "la pluie joyeuse".

Three plates, each representing a cloud, hang from the 3.5m high pole. The plates of corrugated plastic and aluminum each have their own sound character. The sound of rain becomes audible when two wheels are turned. An interplay of cogs, gears, a camshaft and axles causes hammers with cork, steel wire and nylon cable-ties to hit the plates. A thunderstorms can be summoned by subtly pulling on the 'thunder cable' that causes one of the plates to vibrate.

The installation was constructed at the Studio Philippe Druetz atelier who, in collaboration with Heide Bertram (DE), did all the cutting, welding, painting and fine-tuning. It weighs about 150kg and is made of 70% recycled materials.



THE CON/FUSION OF TIME

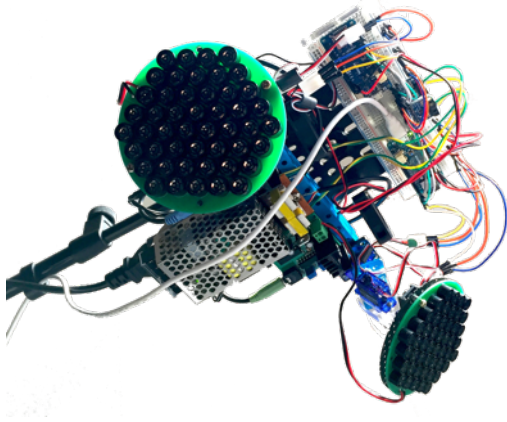
2024

Time seems to follow a universal, ticktock rhythm. But it doesn't. The Bureau of Unclassified Sounds explores the multifaceted nature of time perception. Circadian, Euclidean and ultradian rhythms are literally stretched and granularly condensed to produce a relativistic time improvisation. Experience a spatial time dilation process of time chopping (the metronome), performed by Heide Bertram and Philippe Druetz who concretise and synthesise parallel time universes.

Human voice, Nagra tape recorder, Tascam cassette portaStudio, Boss looper and CocoQuantus time manipulating devices, analog Moog Mother32 + SubHarmonicon, Buchla Easel and Ciat-Lonbarde Sidrax synthesisers Starring Jillo, a self-built hybrid string unstrument (see: Interactive installations).

Venue: University Münster - Musikhochschule

PROJECT CONCEPTS, PROTOTYPES, WORK IN PROGRESS



THE RADISON PROJECT

First shown at the Symposium on Audio Research and Practice in Belgium organised by the AES (Audio Engineering Society) in De Krook in may 2019, this spin-off **un**strument finds its origin in the Kindergarten installation. The sound robot, equipped with hyper directional parametric speaker units is controllable by CV and MIDI. The direction of the sound can be in direct relation with live streamed or recorded sound and direction information. It's part of the unstrument designs where The macePod (ibid.) belongs to.

As demo a setup with a Beatstep Pro sequencer producing MIDI over 2 channels and a combination of a Makenoise 0-Coast and Mutable Instruments modular synths prove to be very impressive.

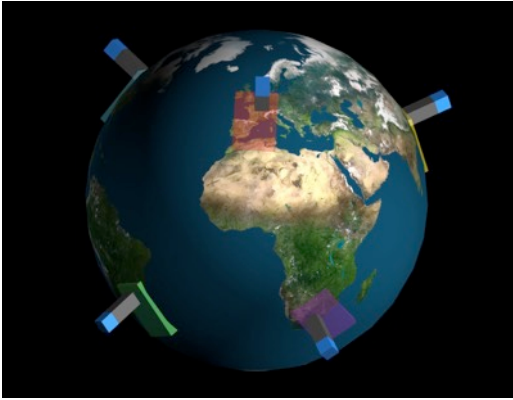
The unit has been used in a collaboration with artist Joris Blanckaert (KASK) for a project with CERN, the European Organisation for Nuclear Research who holds a symposium in July at ICC Ghent.



FLAT EARTH FOUNTAIN

Installation maquette, scale 1:35. PUR-board, iPad, video. 2016.

Flat Earth Fountain, a window through the Earth, connects people –almost literally– through the earth. The installation's fountain style architecture invites people to gather around it and look onto the enclosed surface. Just like a fountain where the sky reflects on its water surface, the beholder will see a sky. Tough, not the sky above, but the one you would see if you could look through the earth. At least two fountains are needed with a 5 meter diameter video screen.



THE PENTALITH

Interactive installation. Concept. 2016.

The Pentalith is a distributed artwork¹ consisting of five robotic mobile modules. Every active module is equipped with four cameras filming the surrounding space in four directions (N/S/E/W). The images are streamed in realtime to the other four active modules, showing the view of the other locations on four adjacent square displays, thus creating a new “real-virtual pentaspace”. The installation can be placed outside the museum or gallery boundaries: architectural space, political space, conflict zone, religious spaces, science environment, technology, nature, etc... .



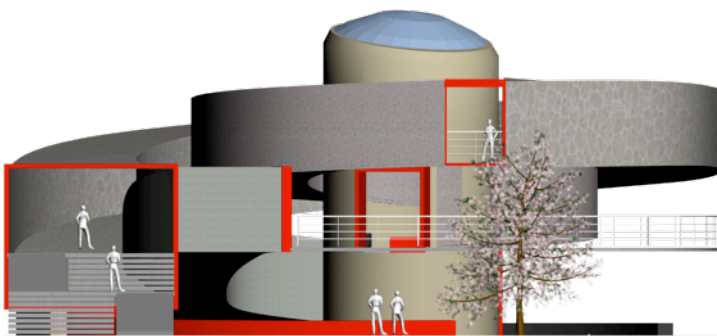
LISTEN TO ME

Curator, artist. 2015 - 2018

*In consultation with tinnitus sufferers aged between 12 and 92 years, the sound their brain makes is emulated with special equipment and software. Visitors of the exhibition can listen to these faithfully recreated sounds, accompanied with the portraits of these individuals. The visitor will —for the first time— hear what tinnitus-people hear everyday. Philippe Druetz has tinnitus for about 8 years now, and that makes his work autobiographical. The sounds are also made available to a group of invited international artists. They use the sounds directly or indirectly in their work: sound systems, visual arts, mixed media, sculptures, interactive art, music, 3d visualisation... Participating artists: John Cage (US) , Eleanor Crook (UK), Soichiro Mihara (JP), Adam Basanta (CA), Ricky Van Broekhoven (NL), Yves Velter (BE), Chantal Pollier (BE), myself. — **Updated text, see Exhibitions***

▶ http://l2me.org/index_EN.html

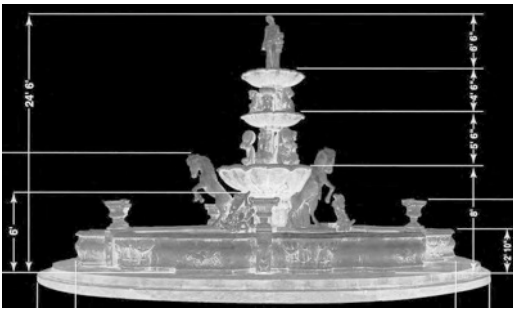
▶ <https://vimeo.com/218015629> (related architectural concept)



THE COCHLEA PAVILION

3D Model, prints, material study. 2017.

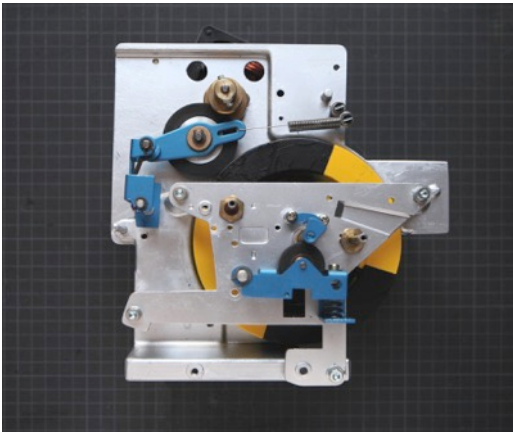
Taking further the idea of a cochlea shaped exhibition space (ibid. Listen to Me), the pavilion design offers three floors where artworks can be displayed. It includes a totally silent room and a dedicated John Cage room.



BLACK FOUNTAIN

Concept for (semi-) permanent installation. 2015
 Materials: recycled truck tyres, tubing, pumps, liquid.

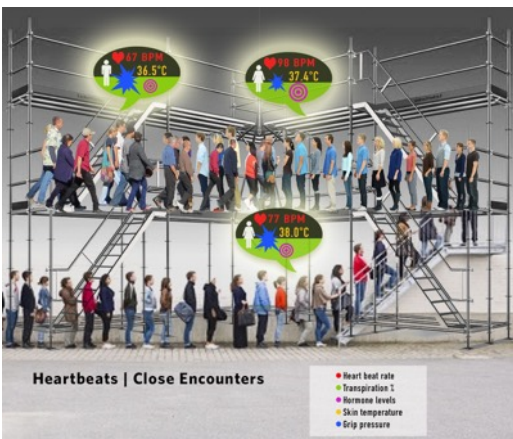
As Donald Trump wanted to build a giant Roman fountain at his son's Turnberry Hotel "to deliver a world class experience for guests arriving at the Carrick resort", I want to build a black fountain, spewing a black oil-like liquid out of its mouths, greeting everybody at this site.



INFINITIS

Installation (size apx. 40sqm). 1/2" audio tape, 8 tape play heads, suspension, speaker horns, electronics, motor and capstan system. 2016-17 (image shows capstan drive)

An audio tape is suspended in a room in the shape of a lemniscate (∞ symbol), standing for the infinite loop and ringing of tinnitus. The tape contains recorded white noise that is picked up by eight tape heads along the loop. It is then filtered to different frequencies and amplified, in analogy to the way sound is extracted from the cochlea (inner ear) and send to our brains. The work is made for the Listen to Me project.



HEARTBEATS | CLOSE ENCOUNTERS

Installation. Concept. 2012

A two stories high scaffolding construction forces people to enter the narrow aisles in two directions. Each "visitor" receives a tube-like sensing device that they carry in their hands measuring parameters like heartbeat, sweat rate, secreted hormones and temperature. As they walk up and down from entry to exit they are forced to cross others coming from the opposite direction. Stress results in changing levels, measured by the sensing unit. One side of the scaffolding is a huge projection screen. Visitors are tracked as they walk along the aisles and have their personal info-bubble projected next to them. The colour, shape and other parameters change according to what the device measures, reflecting their reaction to other people.



iBRDS

Arduino, speakers, C++ code.

WiP: 2019 -....

A machine learning algorithm helps to develop successful interaction between iBrds, totally based on perception and interpretation of sound. Analysis of real bird chats serve as base for this ongoing project. *Ibid. supra: Tweeting Birds.*

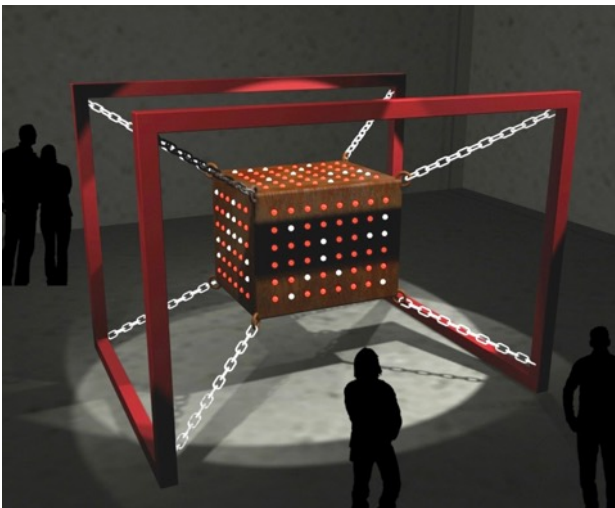


THE MACEPOD

Unstrument. Performances.

Laser cut plastics, tubing, speaker, electronics, camera, Arduino, sensors, batteries, WiFi, software code. 2014-16

The first event, named Flux#0, consist of 8 performers, each carrying a macePod (sometimes called timeSpirit). These are interactive ceremonial staffs, producing sound due to interaction of the performance and driving the performance to the destruction of sound. It goes back to the "ommegang", the religious and ceremonial processions in Flanders. The procession attributes are extracted and are driving the operators, hence the use of UNstrument. At least two sound carriers (macePod operators) are required since this is a peer or group experience due to the nature of the macePod's operating modi. Ten possible events have been written as a script. These define a concept, starting position and sound database. All performance movements are projected in 2D in real time.



BOOM TIME (ANY TIME NOW)

Steel beams and encasing, 100kg TNT, LED lights, electronics, seismic registration device.

5x5x5m. *Concept of installation.*

Inside the double walled steel box sits a 100kg TNT bomb, connected to an electronic circuit generating random pulses to all 264 lamps mounted on the outside of the box. If all lamps illuminate at the same time, the TNT is ignited and the inner box explodes destroying the inside of the installation and giving a shock in the museum.

The number of possible permutations is 69.432. So there is one chance on 69.432 every second that the explosion will occur. The installation makes aware in what critical times we live: ecology, (nuclear?) terrorist attacks, world war and extreme diseases are threatening humankind and life on our planet.

The 264 lamps stand for the countries in the world, including territories which are not independent countries. An atom clock and a seismograph, part of the installation, hold still at the moment of the explosion.



IN SEARCH FOR A

24 full-range high fidelity speakers and amplifiers, 24 channel audio player, wood board, blank canvas (not shown), 90" loop. 2018.

Global interactive website and community.

In Search for A is a project about a world in search of harmony. What better to choose sound to represent this evolution. To be more specific it highlights the historic evolution of the A. That is, the note A4, nowadays representing a sound oscillation of 440 cycles per second. The work consists of a sound art installation and a public platform in the form of a global website.

The work loops the tuning and detuning of 24 violins. Since all instruments are played with their distinct speaker, the close-ness/distance experience of canvas is recreated in sound. As part of the acquisition of the violin tuning, a dedicated recording box will be sent to 24 (important) violinists around the world to record their 90" performances.

The website allows violinists, musicians in general and singers to tune and detune their instrument/voice and upload the clip on the platform. Visitors can fill a virtual room of any number of selected tuning performances and thus create a personal tuning orchestra.



INCUBATION FIELD EMITTER

(working title) Bus stop furniture, back-lit automated scroll ad boards, op-art graphics. 2018

The bus stops are installed all over the city by advertising companies offering the furniture to create space for their adverts. The scroll boards move every 10 seconds revealing one of three ads, catching the eye by the passerby or people waiting for the bus or tram. I use the scroll boards to produce animated op-art graphics. The kinetic opaque-transparent binary permutations, in the style of Victor Vasarely's creations. The visual shocking is in contrast with the resting space of the bus stops, acting as incubators, where people wait while brainwashed with graphic codes. Sometimes they go dark and all there is to observe is the sound of the scroll board motors, serving as message transporters and enabling a re-observing of the public space.



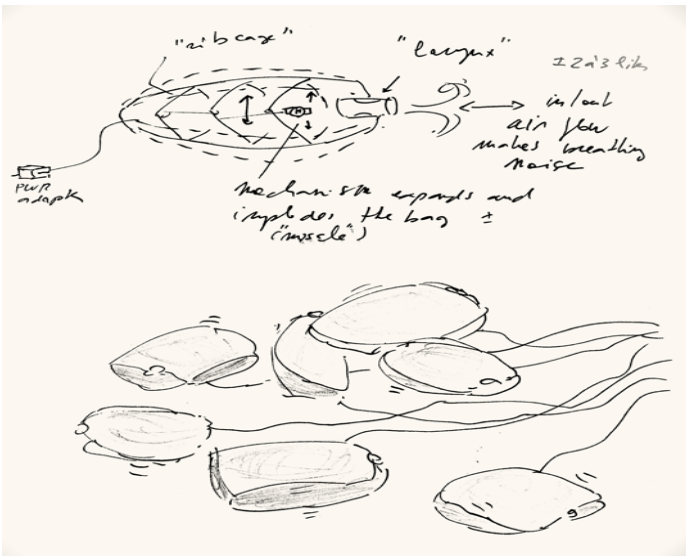
THE RUB OF THE GREEN

Lawn grass mats, commercial lawn mower robots, golf poles, international flags (triangle). 2019

Up to 20 (depending on the size of the space) lawn mower robots browse over the grass plain. Their movement is random, avoiding collision with each other and the beholders on the plain. The installation has a “day and night” cycle. When the ambient (or room) light dims, the robot lights shine over the lawn.

The golf style flags stocks mounted on the consumer robots makes the “grazing” political. Since the grass will never be watered it will turn dry and rusty in time, referring to the climate crisis, not taking care of by the international authorities.

The title is a term used in golf –a preferred sports by some presidents–, used when the ball is deflected or stopped by a third party or object, (e.g. if a ball is going out of bounds and is deflected in bounds by hitting a spectator or a tree).



LE CŒUR QUI SOUPIRE N'A PAS CE QU'IL DÉSIRE

(Longing Lungs – working title)

Sound-art installation. 3.2022

Mixed media: cloth, metal, mechanics, electronics

Based on scientific research on anxiety and a way of developing safe, effective and affordable non-pharmacological treating methods, inspired me for the concept of Le Cœur Qui Soupire.

The seven pillow-like sculptures are softly expanding and contracting at their own rhythm (between 5 and 7 secs) and mimic a group of relaxed people (or animals, or androids). The mostly asynchronous movements act as a group sounding.

The inhale/exhale cycles produce a kind of human breathing sound and the installation invites the beholder to slow down by looking and/or listening to the peaceful actions.

Inside the “pillows/lungs”, a bellows mechanism is activated by a silent electromagnet and damper, driven by a micro-controller. As a result, the air moves in or out a cylinder at the side with a human larynx inspired device acting as a voice box, producing an accentuated breathing sound. The movement can be linked to environmental parameters: noise, heat, light and movement sensors influence the rhythms.

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Research



ZOOC - THE AUTOPOIESIC CYBER SOCIETY

Pico-quadcopters, sensors, docking station, glass cube (5x5x5m), artificial neural network. 2015.

Concept of installation. Research phase.

Twenty zoo-copters form a closed community and try to survive. The zoo-copters are modified quadcopters equipped with sensors linked to a neural network. The concept of classic logic and electronic circuits is replaced by a more biological circuit designed by the artist. The zoo-copters are "aware" of sensations and feelings like pain, speed, hunger... Their empathic quality should make it possible for the society to survive. Cooperation with a university makes it a sci-art project involving neural science, social science, psychology and applied mechatronics.



THE NEURON ENSEMBLE

iNeuron app (soft- and/or hardware)

The origin of this project finds its roots in my search for a new way to create sounds and generate music in a (live) performance. I was looking for an answer into the void between music and sound art.

The use of Artificial Neural Networks (ANNs) looks like the way to go since a lot of projects have been using AI and ANN to create music, based on a learning process. Instead, what I will do here is investigate the possibilities of the ANN in its own existence. That is, not the mere result it produces but the activity itself to create music. The way the smell of a rose triggers whole regions of neurons in our brain, visible as flashes on the monitor of a real time fMRI scanner, is the way this neuron music should sound like.

Therefore I created the iNeuron concept. iNeurons are dedicated simple hardware units or apps that can be configured in a wireless network, called a Synaptic Cloud. This network can be of any type and any size. The Synaptic Cloud is built with iNeurons and could function globally as an InterBrain. The iNeurons in the ANN form what could be defined as the InterBrain when a global neural network of considerable size should be created. The connection with its Umwelt will be a totally new experience for us to understand our world. The iNeuron project is in itself a bigger project and the project delineated in this paper which is an applied experiment. Neurons use all the sensors available in a Smartphone to create a conscious network.

The Neuron Ensemble project uses a moderate size ANN with a mere dozen neurons and musicians, singers and synthesizers, trained to react on the result of the iNeuron units. Experimental and classical musical expertise is necessary to translate the ANN neuron activity into an comprehensible experience, triggering the public's neurons in a unprecedented way. The Neuron Ensemble is an Exploration between Brain Waves and Sound Waves.



SOUNDPIXEL + WAVE FIELD WALLPAPER

SoundPixel is a flexible system, designed to produce holographic sound in a diversity of spaces, be it interiors or exteriors, using multiple virtual acoustic sources (the SoundPixels).

The goals are: Real time dynamic correction of the acoustic model significantly enhancing performance issues related to movement of the public within the 3D space; Bring accurate 3D sound in any space at a resolution that fits the need of the artist; Spatial Verisimilitude / Auralization: Capable of remodelling the room's acoustic properties (VR acoustics); Portable, nonintrusive system, suitable for any space; Install and forget technology, controlled by the software and comprehensible for artists, musicians and composers; Distributed signal processing to increase performance; Wireless (BT & WiFi) and battery operated for hassle-free operation.

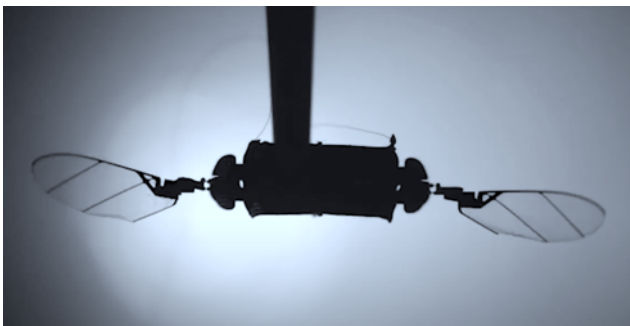
Related to this is the Wave Field Wallpaper, an invisible high density matrix of electro-static speakers in a thin foil. The matrix is connected to a WFS or Ambisonics processor to create a real homogenous holographic sound field.



THE IRSOB THESIS

/DISCLOSED INFORMATION/

Research on methodology, technology and artistic use of object oriented sound.



eBEEZ

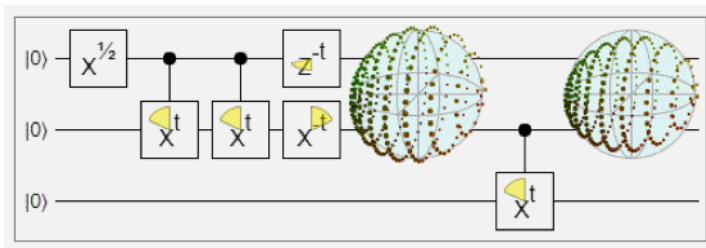
eBeez (working title) is a performance and “robot swarm” installation based on David Tudor's 1984 work *Dialects*. It is also a tribute to Jackie Matisse who passed away in May '21 and designed the original metal flowers for the piece.

Bees (among many other insects and animals) are an essential part of the biosphere, an under severe threat of survival of which has been endangered since the Anthropocene. This is the theme for this new work that questions man in his biosphere. Tudor's work is now done with live brain waves (not recordings of alpha waves) using

commercial brain wave tracker. The sound of the bees is produced by a swarm of 50 nanobots (aka. robobees) instead of recordings of bees.

The robots, each measuring 20mm, almost the size of a real bee (Ref: IEEE Journal 2019 — Robobees. Department of Electrical Engineering and Computer Science / MIT / Harvard University / City University of Hong Kong), consist of piezo-controlled actuators or micromotors with cellophane wings to generate “voice” formants as an essential part of the piece. A call will be launched to find an artist to design the (interactive / moving) flowers.

The whole is configured as a neural network, which responds even more to the organic-synthetic dialectic. This should ensure that the formants are “taught” and produced. eBeez can function as an on-stage performance or as an installation in a museum.



QCM

QUANTUM COMPUTER MUSIC

I use music as a theme and drive as a way to explore the quantum physical world. Early simulations are coded in Python. At €100/minute (IBM) online quantum computing research has a bit stalled. Access to a real 4 qubit quantum computer would be the thing to make advancements...

2024 — 2025

Doctoral Research — Art-Science Projects (in progress)



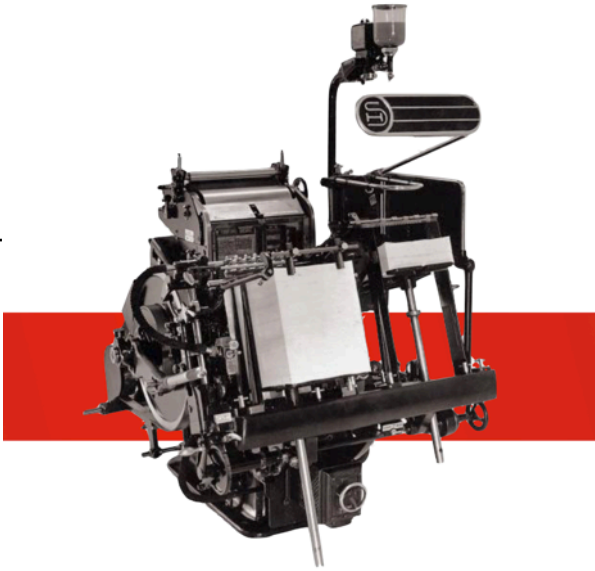
LE CAUCHEMARE DE GYÖRGY (LIGETI'S POÈME SYMPHONIQUE)

The 100 metronomes are simulated in the 3D space of the **Art and Science Interaction Lab** of **IPEM** (Institute for Psychoacoustics and Electronic Music of Ghent university (BE). one can walk between a 10 x 10 matrix of metronomes, ticking following Ligeti's piece of 1962.

THE HEIDELBERG PRESS SOUND PROJECT

This is a case study for the IrSOb 3D sound object model, part of my PhD research. I will use the technique to recreate a mixed reality sound experience using UWB position aware headphones.

In cooperation with Industriemuseum Gent.



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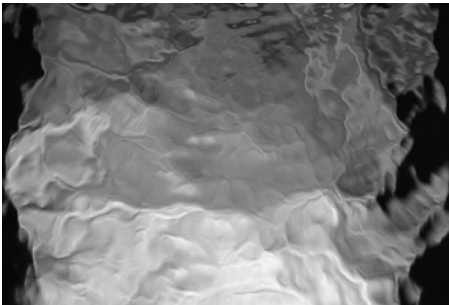
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PHOTO SERIES (limited non exhaustive list)



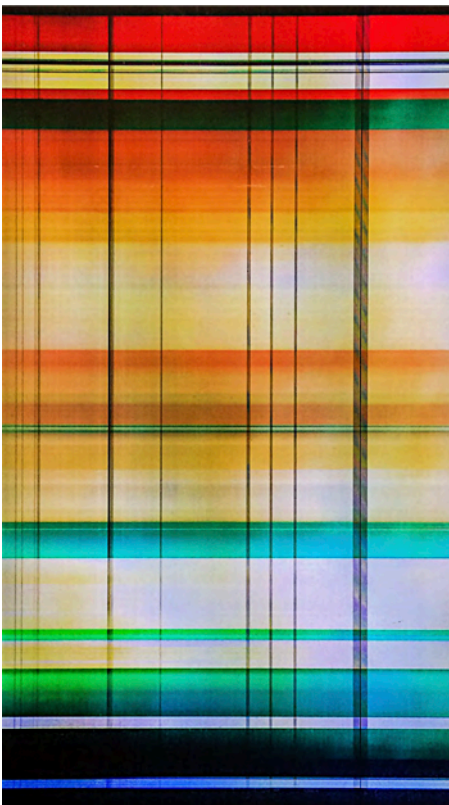
THIS IS [NOT] A PHOTOGRAPH

The relation of the images and the beholder is to be understood of a twofold relation of subject and subject. There is always an Identification with and understanding of the other's situation, in this case between the beholder and the photograph. The series shows twelve abstracts, with titles referring to and reflecting on Sigmund Freud's seminal works.



EMPYREAL PATTERNS

STUDIO EXPERIMENTS WITH WIND, LIGHT AND WATER. REFLECTION, DREAMING, GAZING. THAT IS WHAT THESE IMAGES EVOKE.



CLEARED CHANNELS

COMMUNICATION IS A RECURRING THEME IN THE ARTIST'S WORK. THIS SERIES SHOWS IMAGES FROM FAULTY VIDEO SCREENS IN SUBWAY STATIONS, EMPTY ADVERTISING PANELS AND COMMUNICATION INFRASTRUCTURE. HOW IS COMMUNICATION CHANGING OUR WORLD...

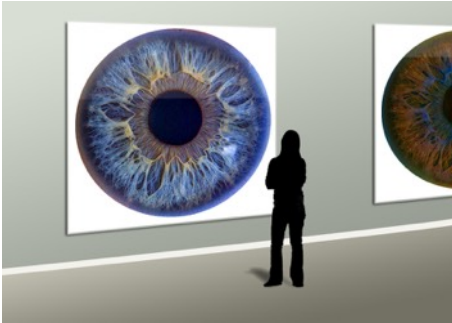
Diasec.



GRAFIK STRAßE

Street screen prints. Photo's of painted street surfaces around the world.

2014 - 2017

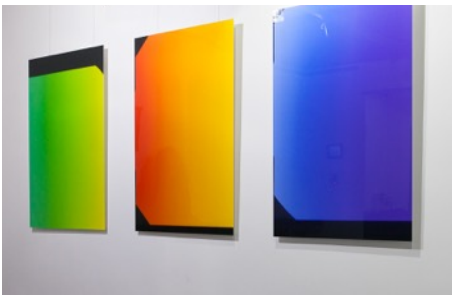


MEETING THE I

Diasec™ prints, **Interactive video.**

Concept (2014)

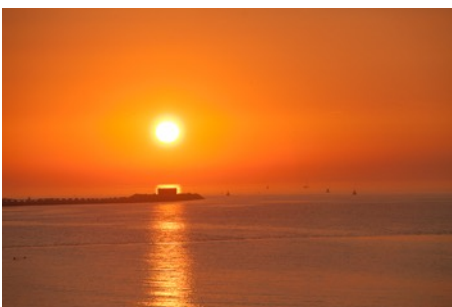
These 3 by 3 meter very high resolution colour photos of human eyes, show the iris and pupil in unprecedented detail. The eyes communicate information by a still unknown way. We look for this when meeting people first sight. How are you reacting when looking closely into those eyes? An interactive video installation will show an eye with a pupil reacting on the pupil of the visitor.



COMEBACK DER SCHÖNHEIT

Light and colour at the basis of all art but how does it relates to beauty. The light shining trough a prism is directly captured in the camera, without lens. A perfect and abstract rendering of nature, formatted in a classic triptych referring to —often— divine depiction.

Diasec.



THWARTED SUNSET

The anthropocene is a recurring theme in the artist's work. This installation shows a sunset in 80 slides. The cliché image of the most photographed subject is scarred by human intervention, in this case a new harbour wall traumatising the romantic experience.

Installation: Kodak Carousel, 80 slides, Mother-32 synth, speakers.

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