

sound as a technological medium

- **curating new media**
- **curating and cultural management in art and new media**
- **Ars Electronica, ZKM, ISEA, V2, ICC...**
- **institutions and universities**
- **practices, exhibitions, courses, seminars, conferences, workshops**
- **colleges, universities and museums**
- **MAH Media Art Histories or Leonardo Society**
- **media labs, sound labs, bio labs**
- **hackerspaces**
- **digitals arts departments**
- **festivals**
- **Complex systems, disruptive economies, new media curating, emerging circuits**

- **new media art: net.art, software-based art, video art, stream art, database art, code art, sonic art, interactive art, intermedia art....**
- **radio art, eat (experiments in art and technology), new media development techniques', interactive installations, sensors or software-based art**
- **art, science and technology**
- **physics, neuroscience, cybernetics, technologies of recording and reproduction, software-based art, media and new media communication techniques, streams, live broadcasting, radio, iphone**
- **computation, engineering, cybernetics, neuroscience or physics; synaesthesia and multisensory aspects, taxonomies of sound**

- theory of systems
- Deleuze / Guattari: disturbed, chaotic, interruptions
- Physics: **indeterminate Schrodinger wave function, system collapse, non-linear processes, immeasurable, non-linear, stochastic and non-simple processes, quantum state, non-deterministic, randomness, probabilistic theory, uncertainty principle, pattern interference**
- Science as a paradigm, **universal processes of knowledge or weltanschauung, philosophical analysis of Technology, discourse on techniques**
- Media studies, culture techniques, media ontology, ecologic media, media archaeology, **self-reflective media, self-exhibiting media, nature of techniques, techne**
- Metabody, non-verbal communications, Simondon transduction, mind/brain

sonic landscape :::

variable space :::

acoustic phenomenon, acoustic dimension, acoustic space, sound and space, multivariable spaces, space within the space, non-Euclidean space

digital signal processors DSP (pure data)

audible eco-systems, Agostino di Scipio

- Of course, one can not separate the sound of the room, the reflections of the space given, from the sound produced by the equipment itself in the room: space and technical infrastructure are “structurally coupled”, to use a term from cybernetics and other systemic sciences, ecology included. In that sense, sound becomes and “interface” between us and the space: sound is energy (mechanical, acoustic, electro-acoustics), but it also bears an “informational” signature of spaces and bodies from which they emanate.
- Emotional aspects and sound shapes emerge from this self-organizing dynamics over time. That’s a peculiar notion in all the Audible Ecosystems I’ve realised in recent years.
- <http://agostinodiscipio.xoom.it/adiscipi/index.htm>

sonic landscape ::

amplifying landscape ::

Any time a machine is used to process classified information electrically, the various switches, contacts, relays, and other components in that machine may emit radio frequency or acoustic energy.

... This problem of compromising radiation we have given the covername TEMPEST.

[TEMPEST: A Signal Problem. NSA 1972]

<http://www.1010.co.uk/vlf.html>

sonic landscape ::

satellites' technologies ::

Laboral Orbiting Satellites

Museum, institution, collaborative lab.

All was an exercise in the imperceptible realm of the waves of radio-electric frequencies to spot and listen to both geosynchronous and low elevation orbits. To locate and observe, like the ornithologist, guided by sound and spectral analysis technologies of the Victorian age, and given as a result soundscape captured with a VLF (very low frequency) receiver to allow the listening of satellites.

<http://www.laboralcentrodearte.org/en/education/orbitando-satelites-1>

sonic landscape ::

streaming networks::

Locus Sonus

a Pure Data tool for **microphones** and **soundscapes**
that collaboratively creates a **network of**
connected profiles worldwide established. **Locus**
Sonus is a **live open microphone network online**

<http://locusonus.org/>

- **noise responsive systems** ::
- **sound as (eco)system** ::

- classical science / physics / Heisenberg vs Bio-science / holistic physicist / chemical hacking
- Indeterminacy / uncertainty / self-organising systems / dynamical process / high sensitiveness to initial conditions / time /
- behaviour electron / interference pattern /
- System as a closed defined object vs. ecosystem as an open non-defined objet of analysis

- **noise responsive systems**
- **cyber-sound**
- **Cybernetics / computing / Norbert Wiener / Complex systems / dynamic / randomness**
- **Cybernetics** is a confluence of biology and electronics and in some part of its studies uses noise to analyse complex systems.
- **Cybernetics cyber-biology technoscience cyberfeminism**
- **Emergence of CPS Cyber-Physical Systems: study of physical conditions (temperature, light, EM, time) in processes of communication through computers. For example, generative software, interactive installations and neural signals feedbacks**

- **noise responsive systems**
- **neuro-noise**
- **Brain waves / brain functions**
- **memory, inner landscapes, states of the soul, transcendent and immanent inner visions, “spacing out” phenomena, Neuroscience, psychology, psychiatry, neurology, physiology, technology for arts, music, TV, film, radio, Kinect art**
- **electroencephalographic (EGG) data capturing alpha waves operated through open source software**
- **neural signals receivers, bio-potential signals, detection of neural spike signals, bio-amplifier, neural spike detectors, capture of electrical signals, brain alteration techniques**
- **electroencephalo-music, feedback loop circuit, neuro-noise and neuro-feedback**
- **Roy Ascott, moist media and mediated mind; Jonathan Kemp, experimental communication system ; Ryan Jordan, Hylozoistic neural computation; Mick Grierson, real-time interaction activity research on cognition and perception. Wendy Hasenkamp, MRI scanners. Peter Weibel.**

- **noise responsive systems**
- **biomusic**
- **Orcus research 1960**
- **Development biopotentials**
- Skin detectors, sensory stimulation systems, skin sensors, Psycho-galvanic skin reflex, skin resistance sensors, **electrochemical sensors or electrodes, biopotential sensors**
- involuntary muscular contraction, capturing motion, biological feedback stimulation, voluntary and involuntary movements or emotions, muscle stimulation, sensory deprivation, sensory bombardment, to detect the human body's **nervous system**
- Marco Donnarumma, Xth sense (XS)
- [Paula Pin http://biosensing.tumblr.com/sensors](http://biosensing.tumblr.com/sensors)

- **noise responsive systems**
- **intermedia interactive immersive environments**
- **Interactive art / interaction / human to human / human – computer /**
- **Physical / haptic / non-verbal**
- **Interactive responses (sound / light / movement)**
- **Immersive (related to the environment)**
- **Intermedia**
- **Sound responses to light / sound responses to movement**
- **complex acousmatic environments, responsive sound installations, virtual acoustic space, Noise responsive environments, motion tracking experiments, noise responsive systems and interactive installation**
- **David Rokeby, Dark Matter <https://vimeo.com/19311180>**
- **<http://www.kurthentschlager.com/portfolio/zee/zee.html>**

- **software-based art ::**
- **Influences information theory by Abraham Moles; communication theories by Claude Shannon.**
- **indeterminacy, unpredictability and unstable, unexpected, stochastic and randomness, complex dynamic systems, variable, randomness relative assumed standards, processes encoding and decoding**
- **Generative art, granular synthesis, live coding**

- **software-based art ::**
- **live coding ::**

- **Real time, time-based art, programming**
- **Languages Haskell, Supercollider, Chuck, Fluxus, Perl, Python, Ruby, Pure Data**
- **FLOSS Free / Libre /Open Source Software, culture hacking, free sharing licenses, collaboration, participation**
- **Ron Kuivila, STEIM, 1985**
- **Its linguistically performative **statements** transform the capacity of language from **saying to doing****
- **Inke Arns, Geoff Cox, Richard Stallman, Lawrence Lessing, Thomas Dreher**
- **Software-based audio, new medium, art institution, exhibiting, changing hardware and software, hosting and servers, museums databases and collections, technical art history**
- **<http://yaxu.org/>**

- **epilogue: women artists in the boundaries of sound**.....
- **Feminism, art, science and technology, biotechnology, life science**
- **Ada Lovelace, conceptual feminism 70's, new media: video, sound, internet, Valie Export, Charlotte Moorman, Laurie Anderson, Lygia Clark, Yoko Ono**
- **Gender art net, feminism and internet, queer or pornoterrorism, trans-gender, women in engineering, biological-ethical discourse,**
- <https://secure.studioxx.org/en>