

LAB[au]
Rue de Laeken 104 Lakensestraat
Brussel 1000 Bruxelles
België _ Belgique

lab-au@lab-au.com
<http://www.lab-au.com>

MediaRuimte _ the digital design platform by LAB[au]
<http://www.mediaruimte.be>

Content:



- Page: 0 _ about LAB[au]
- Page: 1 _ about LAB[au]'s digital platform MediaRuimte methodology _ MetaDeSIGN
- Page: 2 - 14 _ list of recent projects
- Page: 15 _ list of selected exhibitions, performances ...
- Page: 16 _ list of relevant links

About LAB[au]

LAB[au] - **l**aboratory for **a**rchitecture and **u**rbanism
Manuel Abendroth, Jérôme Decock, Alexandre Plennevaux , Els Vermang

LAB[au] developed a transdisciplinary and collaborative approach based on different artistic, scientific and theoretic methods, examining the transformation of architecture and spatio-temporal structures in accordance to the technological progress within a practice entitled 'MetaDeSIGN'. Metadesign [meta = information about information] displays the theme of space-constructs relative to information processes - architecture as a code. It concerns the transposition of inFORMational processes in n-dimensional form.

Founded in 1997 and situated in Brussels, LAB[au] mainly creates interactive installations and audiovisual performances, and develop for this their own software and interfaces. Constituted of 3 members (Manuel Abendroth, Jerome Decock, Alexandre Plennevaux and Els Vermang) with a background in architecture, art and music, they likewise run since 2003 a digital design gallery in the centre of Brussels.

LAB[au] exposed at New Museum (New York, 2003), Nabi Art Center (Seoul, 2003), Bauhaus (Dessau,+), Ars Elektronica (Linz, 2001), Sonar (Barcelona, 2004), Centre Georges Pompidou (Paris, +), ICA (London, 2002), ... among many others.

Official website: <http://www.lab-au.com>
Complete biography: <http://www.lab-au.com/bio2>



MediaRuimte '01t XYZ' is the gallery and office of LAB[au]. It distinguishes itself as a platform for digital design, with a program focusing on the digital medium and its multiple forms of expression, as such: MR+ (MediaRuimte abbreviation to MR., say 'Mister') .xpo, .ini, .wav, .txt, .www, .tmp and .exe.. MediaRuimte hosts a series of activities going from exhibitions ('MR.xpo'), artist-presentations ('MR.ini'), audiovisual performances ('MR.wav'), conferences ('MR.txt'), online studies ('MR.www'), artist-residences ('MR.tmp') to workshops ('MR.exe'). The intention of LAB[au] exists in the creation of a experimental platform BY artists FOR artists where experiences and exchanges are shared with a public. Alternative formats such as breakfast-presentations and media-lounges are handled, and each invited artist is encouraged to explore the modalities of its work through live-experiment and site-specific development. MediaRuimte is thus as much a platform for presentation as creation, where LAB[au]'s artistic and technological know-how is acting as support through a transdisciplinary and collaborative approach.

<http://www.mediaruimte.be>

MetaDesign _ methodology

A technology is not an independent or alien object, it complements integrally our sensorial and cognitive system; as a medium, it conditions not only communication modes but also the way we perceive and conceive our environment.

The technological developments of the last decades are at the base of the shift from industrial to post-industrial information society, where computation and communication technologies extend our very 'senses'. The notions of body, matter, space and time are increasingly defined by the unit of information; its structures, processes and systems introducing new parameters of space and time - presence, such as immersion (real/virtual) and interaction (real-time/entropy) as well as new parameters of materiality (nano-technologies and smart memory materials) or biological (gene technologies) ones in its definition. Technology based on the transmission, computation and storing of information thus influences organization models (modes of production, work and knowledge) and affects the communication process (code, symbol) and the social relations as well as their spatialisation / representation.

Architecture and Urbanism are structural and functional disciplines involved in the spatial and temporal organization / representation of social, economic, political...structures through which they also constitute a semantic system of signs and codes. The shift from architecture to MetaDeSign is the result of the comparison between communication modes, its structures (indexing + linking) and processes (computation + communication) and spatial constructs (architecture and urbanism) enhanced by technologies _ and thus is based on its organizational principles binding high level of abstraction (codes) within specific modalities of perception and cognition in the construct of meaning – semantic level. In this manner the investigation in MetaDeSign is the investigation in design, its methods and processes grounded on the inherent logics of computation and communication technologies in the visualisation and formalisation of inFORMation processes in textual, graphical, spatial representations. In summary, MetaDesign is about the setting of codes / language drawn from concepts of communication and information sciences - cognitive science with that of process methods, design and spatial constructs – architecture in the general cultural paradigm and in the production and conception of signforms. It outlines the spatial and semantic mutation provoked by technologies on the perception and conception of our environment. 'MetaDeSign' thus can be understood as a technology determinism that constitutes the main vector/thought in the concern of networked, information-based societies.

Writings _ theory

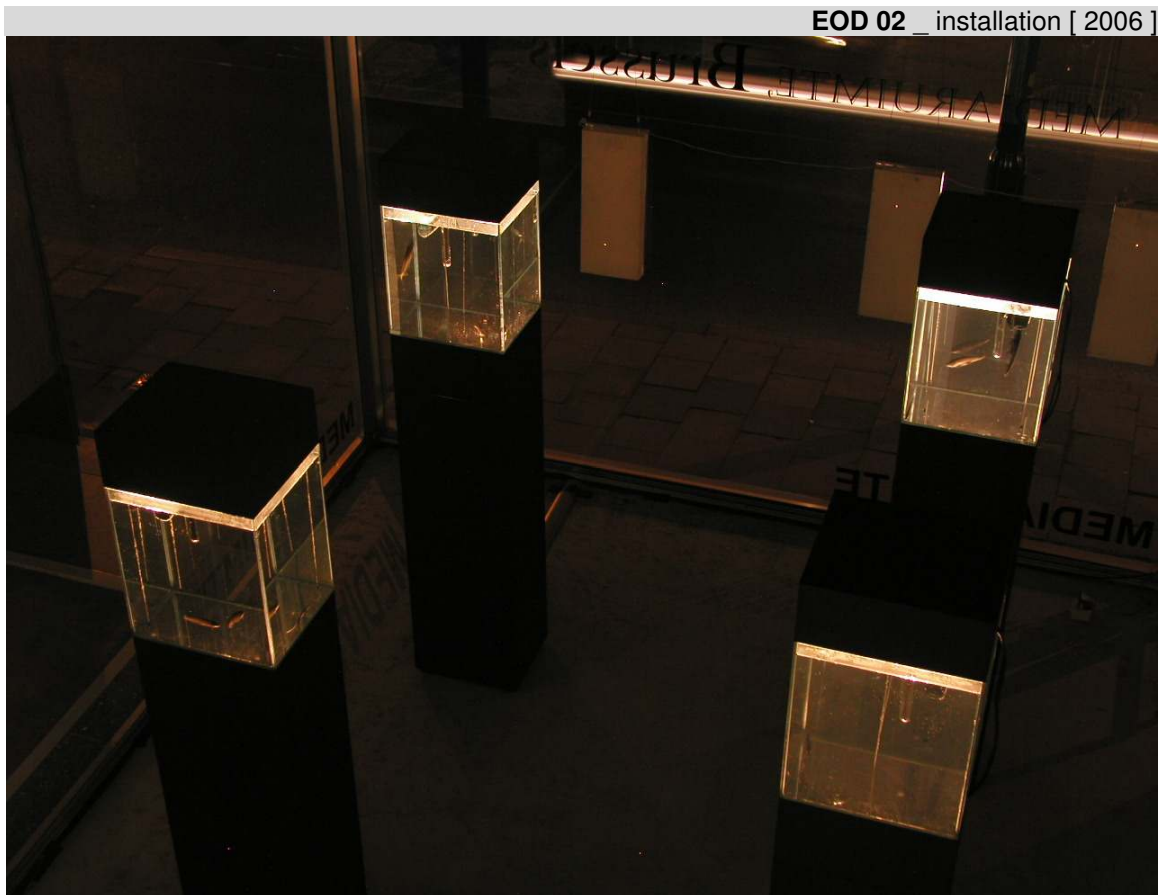
l'ARCA n° 187, Dec. 2003 'E.motion space _ the cinematic construct of e.space'

<http://www.lab-au.com/files/doc/arca3-eng.htm>

n° 180, Mai 2003 'Sonic space _ the shape of sounds' <http://www.lab-au.com/files/doc/arca2-eng.htm>

n° 177, Feb. 2003 'MetaDeSign _ the setting of a discipline' <http://www.lab-au.com/files/doc/arca1-eng.htm>

- EOD 02
- pixflow
- 12m4s, interactive installation
- man in espace
- liquid space, book
- liquid space, collaborative design workshops
- point, line, surface computed in seconds
- exploring the room
- space navigable music, software platform
- particle synthesis, music performance
- voice space, sound installation
- i-skin, interactive installation



EOD 02 is a collaboration in between Fred De Wilde and LAB[au]. The project is a new media installation founded on special species of fish that perceive, electro-sense, their environment and communicate with each other by emitting electric signals, either in pulses or waves. The project explores the normal communication mechanisms of electrical fish, including JAR (the means by which a fish avoids attempts by other fish to jam its frequency) and thus investigates communication and non-communication between individual fish as well as between fish and people.

The installation is based on four aquariums of taintless mirror, each presenting a specific composition of fish producing different electric signals. In each aquarium antennas allows to capture the fish signals which are directly related to four speakers transforming these signals into sound, what we hear is the fishes electric signals_ their communications. Further under each aquarium a light bulb is placed pulsing according to the intensity, rhythm, of the emitted signals of the blind fishes. In this manner the electrical impulses of the fishes drive sound and light., an entire audiovisual space.



The installation '12m4s' is an interactive audiovisual installation representing human flows by generating out of visitors' main parameters (position, orientation and speed) a visual (3d particles) and sonic (granular synthesis) dynamic scape in real-time. To achieve this result, the installation uses two different tracking techniques: firstly, image recognition is used to create spatial sounds (diffused through 8 speakers disposed along the 12m installation) and secondly, ultra-sound sensors are used to create visual echograms of the space (projected as background image along the 12m screen). These different tracked data influence a graphical vector-field projected on the entire surface of the screen (foreground), where each of its vectors reacts to a visitor's movements while taking his/her orientation. Furthermore, graphical and sonic objects emerge at the point (location) where movement is recognized. Once created, these sonic and graphical elements start to move through the vector field, while trying to find their path.

For example: a visitor is passing by the installation, s/he is followed by a visual and sonic trace, but as soon as s/he changes direction or produces any other movements, s/he creates turbulences. According to this principle, the visitor can even more actively paint with his/her movements a sonic and visual space on the 12m surface, as it opens up to collective interaction.

The result, this 'particle synthesis' is projected on a 'Mylar' screen fusing projection and reflection while building a common space in between the digital and the body space.

Technology:

Installation is based on a software developed by LAb[au] using basic and C++. Motion tracking is achieved by infrared cameras and infrared illuminators as by ultra-sound sensors. The projection screen is developed by LAb[au] using a 'Mylar' and 'Clear Crystal' screen.

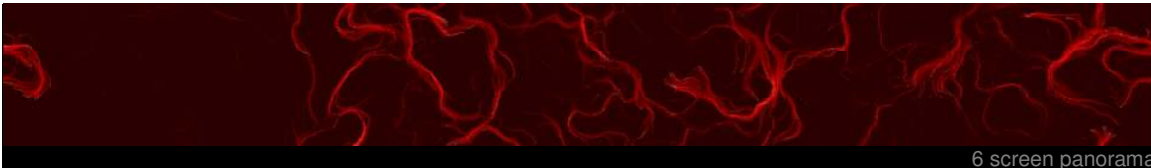
Credits:

LAB[au]: Conception + design

Marc Wathieu + LAb[au]: Sound design



PixFlow is a generative work based on a vector field to translate moving particles/pixels into flows. This vector field is based on a mutual influence in between vectors and particles resulting in an unsuspected highly evolving behavior. Running on 11 networked computers, displayed on 11 plasma screens as a seamless 11 meters flat space, it is visible since August 2006 as a permanent artwork in Brussels's Grand Casino restaurant.

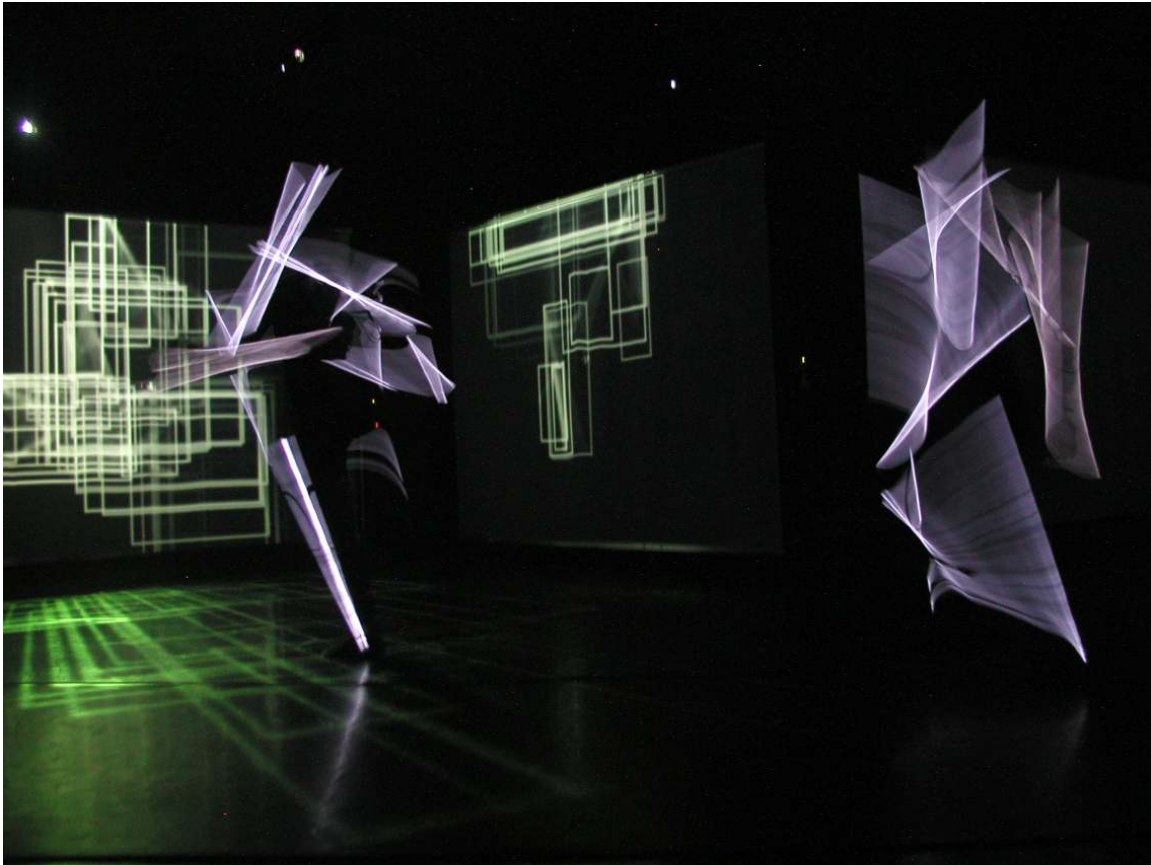


Project Data:

total length of the installation: 11m
total amount of computers: 11
total screen space: 11264 x 800 pixels
Total amount of particles: 11000
Total amount of vectors: 33792 (64x48=3072 per computer)
Speed of particles: 4 pixels / frame = 120s to cross from left to right border in a straight line

Man in e-space, dance performance [2005]

As the title already suggests, the performance refers to the experimental cinema and dance of the twenties, examining the notion of bodyspace in relation to machines and the resulting aesthetics. From Etienne Jules Marey's cinematic experiences to Oskar Fischinger's audiovisual works or to the choreographic work of Oskar Schlemmer, all proposed a analytic and artistic view on the body by building an abstract and symbolic representation. 'Man in e.Space' pursues these researches while confronting them to digital media, in between choreography, cinematography and scenography _ in between dance, music and architecture.



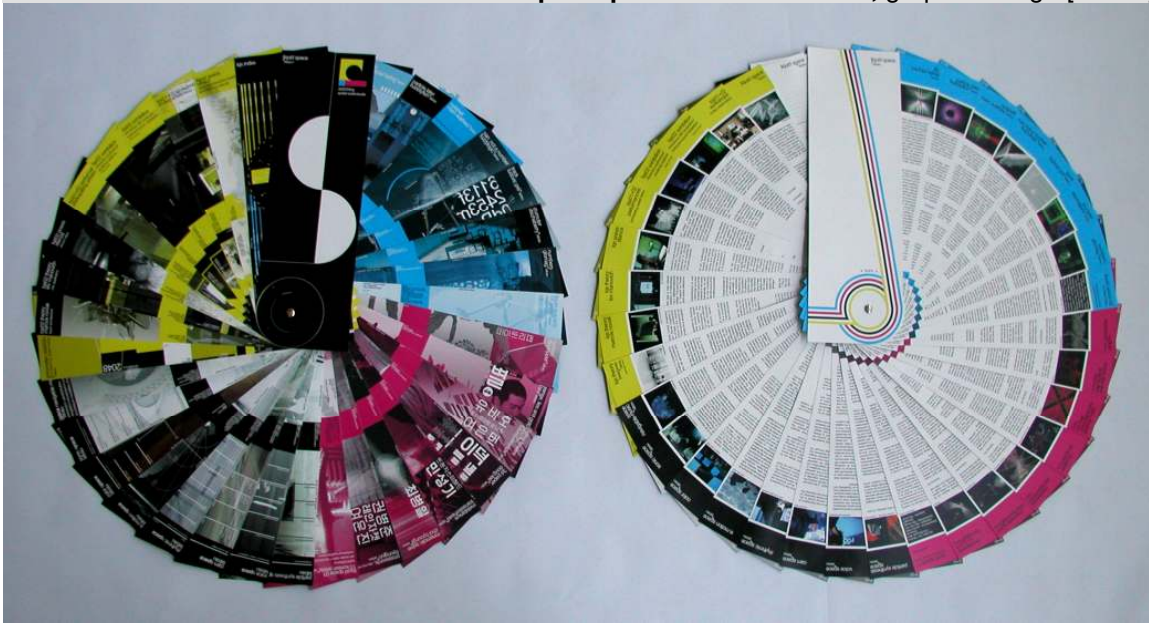
The performance 'Man in e.Space' is based on the complete reduction of space and body: on one hand, four centered transparent projection screens, disposed in folded windscreen setting, are encapsulating a minimal construct of space, on the other hand the visibility of the two dancers are reduced to glowing lines, emitted by their light costumes, outlining their body articulations by the means of long light sticks. Furthermore the traditional scenic frontal setting is abandoned in profit of a fluid space of intervention, where both dancers as public co-operate in the definition of the performative environment.

Inside this common space four cameras are filming the dancers' movements, the moving lines. These captured images, 24 frames per second, are placed inside a 3d electronic space, processed and projected on the four screens in real-time. Each camera is related to one projection screen and to one computer rendering one of the four views of the common digital space. In this manner each of these viewpoints constitutes a position inside the digital space, differing by a distance of 24 meters. Here, navigating through the digital space with a speed of 24 meters per second means to cross one screen after the other within a time-lapse of 4 seconds. This specific time-based scenography and its cinematic construct of fps (= frames per second) is reinforced by real time processed sound based on the parameter of 'bpm' (= beats per minute). In this manner the entire sonic structure is related to the dancers' movements and the frequency of captured / recorded images. In this construct the dancers create an audiovisual space out of their movements, a space where the logic of the physical and the electronic space overlaps and where time is space and space is time.

Whereas in the beginning of the performance the dancers stand alone as light-sculptures inside the space, the gradual shift from the above mentioned space-time based logics leads to choreography between them and their electronic representation. A step further, the introduction of motion tracking techniques enhance the interplay in between them and their spatial motion until the point where the cameras are turned towards the screens leading to an endless closed feedback loop. Suddenly the machines stand alone reproducing over and over the dancers last inputs (trace).

Credits:

LAB[au]: conception + e.space
res publica : choreography
Marc Wathieu : sound



In the context of the 'liquid space 01+ 02' cycles dealing with the collaborative design of spatial audiovisuals, LAb[au] conceived a hypertextual catalogue transcribing these interactive 360° multiscreen and quadrasonic real-time constructs into a 2D concept. The book-dvd is a visual, theoretic and sonic collection of spatial audiovisuals created by LAb[au] in collaboration with over 50 different artists from all over the world.

Imagineering on the level of colours, degrees, keywords and time indexes an unfoldable modular 360° card book which contains in its centre a dvd. The publication gives the overview of the likely named series of workshops, installations, lectures, performances and exhibitions using as starting point LAb[au]'s sPACE, navigable music - platform. Whereas the modular structure of the book will allow in the future including further developments, further cycles such as the ongoing liquid space 03 about designing feedback loop systems, in form of upgrade-packages.

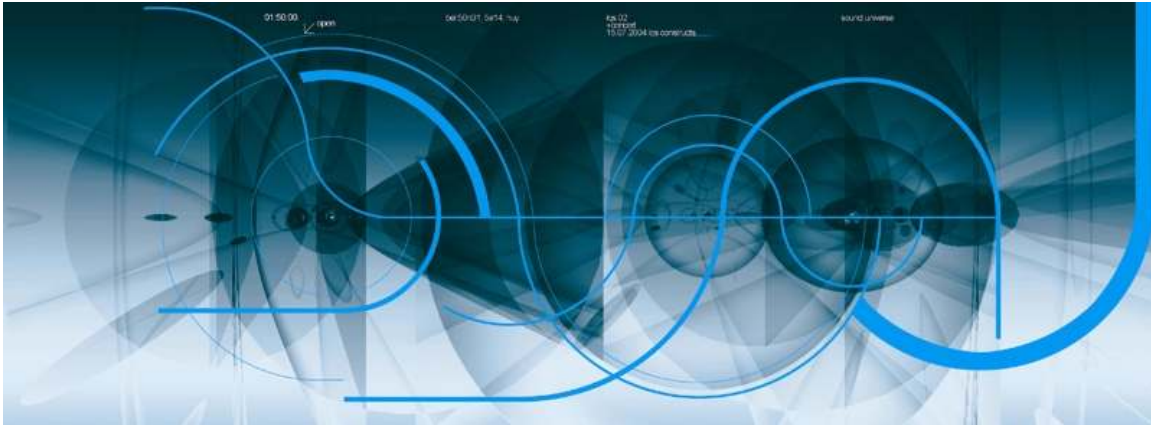
1 dvd + 36 CMYK pages = 360° [C=90°, M=90°, Y=90°, K=90°] = 36min. of video
a book as architecture = a book as parameter design = a book designed out of data
a hypertext book allowing through its 360° index and modular structure multiple reading modalities and sorting, according to the parameters of: time, space, information, keywords: project concepts, project logos, keywords: technology, project thumbnails, keywords: methods.

All info: <http://www.lab-au.com/lqs-book>

Credits:
LAB[au]: conception + interface & graphic design
Gert Van Berkelaer: video

Liquid Space _ collaborative design sessions [2003 - ...]

Liquid space 01 _ 2003 Art Center Nabi, Seoul South Korea _ **de SIGNforms**
Liquid space 02 _ 2004 MediaRuimte, Brussels Belgium _ **de SIGNing by numbers**
Liquid space 03 _ 2005 Brakke Grond, Amsterdam The Netherlands _ **de SIGNing feedback loop systems**
Liquid Space 04 _ 2006 TENT., Rotterdam The Netherlands _ **co/ordinate space**
Liquid Space 05 _ 2007 Club|Transmediale, Berlin Germany



Liquid space is a series of collaborative design sessions concerning spatial audiovisuals.

Each design cycle stands under a specific theme, theoretic approach, to frame the work on the interactive, immersive and performative qualities of digital design, whereas its results lead to installations, exhibitions and performances.

For the collaborative design sessions, the 'sPACE Navigable Music'-platform, a 3D engine developed by LAb[au], is proposed to the invited artists as starting point for development and exchange. The engine is based on the principle of integrating different media in a structural, programmed manner, inside and through electronic space through navigation. In this sense, the design platform proposes rather space- than time-based logics of visual and sonic media _ it is composing and editing inside 3d space to create visual and sonic architectures. An environment where the performer navigates his created 3D space to compose music in real time, displayed in a 360° projection space and through quadraphonic sound.



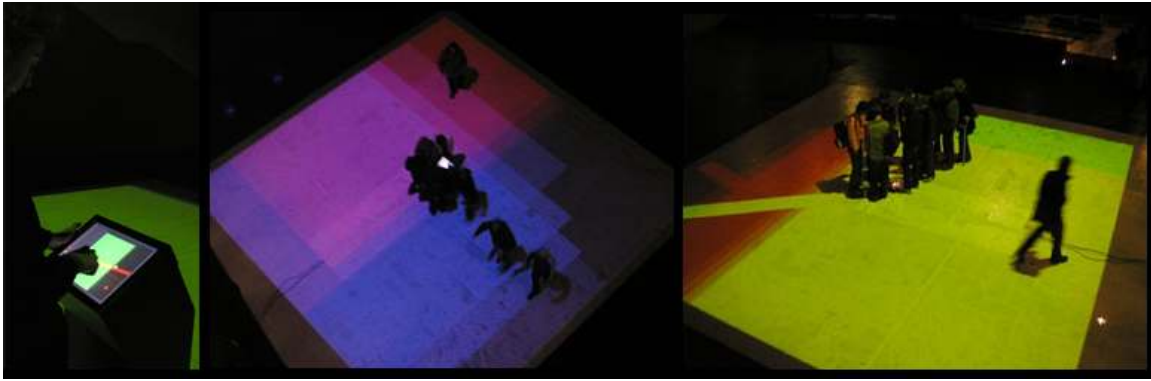
The topic of the collaborative design sessions is designing spatial audiovisuals, or in short: how to produce an artwork where music and visuals merge, through to the concept of 'space'. Here movie making techniques, music composition and architectural structural practices merge.

Interdependency of sounds and visuals opens a new range of experiments, considering the digital nature of the work which permits both real-time and interactive manipulation, inscribing itself in a new artistic register of designing processes and systems, rather than 'closed' results. Liquid Space thus stands for the setting of interactive sonic and visual processes as a transdisciplinary approach, but also as an explorative work in merging codes and signs of different media. In this sense, the collaborative design sessions focus on the production of interactive 3D real time spatial and visual music projects, which take in account different 'performative' settings, such as live concerts, user interaction, interfacing and exhibition installation.

Point, line, surface computed in seconds, interactive urban installation [2005]

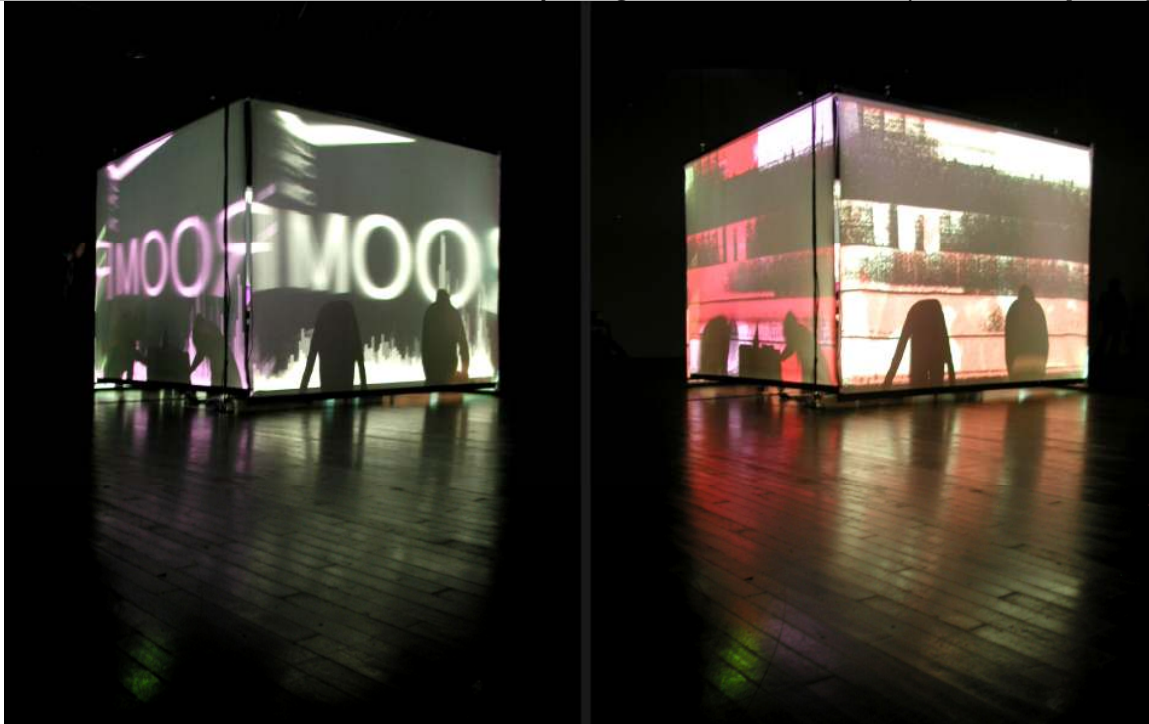


The installation 'Point, Line, Surface computed in Seconds' is based on simple user interactions, drawing with fingers on a touch screen to built a complete sound and image environment. The two major differences to paper drawing are that first, an object like a dot or a line are also sounds, second that drawing is a process including time parameters which are used to produce motion. On this principles a sonic and visual composition is gradually build out of the drawing movements of the user, resulting not only in visual objects moving on the screen and the ground projection, but also to sounds moving in space due to the quadraphonic sound setting. The installation is an instrument which like any instrument has its own codes and modalities while linking geometric shapes to sonic "topologies" and colors structuring the entire space. In this manner the user immersed in the installation creates more than an animated visual soundscape but architecture, due to its spatial distribution of sound and light.

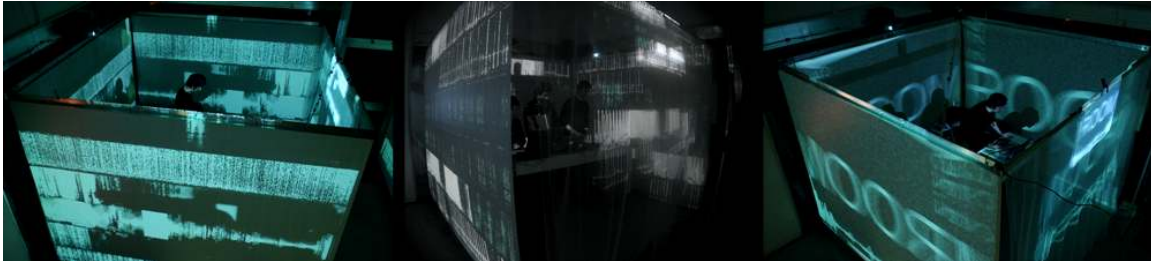


Each created soundscape by the user can be recorded and called back at any moment. The recording takes in account the parameter of time [third axis=z] in the creation of a 3d display of the composition. Each of these times based towers are placed on a common grid according to two parameters: 1: the % of density and the % of motion. These two parameters qualify in different manners the audience-interaction while confronting it to time/space related parameters of the sonic construct. The common grid slowly creates a geometric pattern of space-time indexed objects_ the sound towers. The installation directly refers to Mondriaans works like the 'Boogie Woogie' based on the interrelation in between the rhythmic structure of a jazz piece, the dynamic composition of visual elements on canvas and the urban grid of New York. The installation prolongs the synaesthetic works of Mondriaan to an interactive and digital vocabulary inside the urban and electronic space.

Exploring the room, audiovisual performance [2005]



Exploring the room (2005) is a performance where music, best defined by the practice of soundscaping, and real time generated computer graphics stand on the same level. Establishing a constant dialog through its particular stage-design, sound and visuals are building the room, a 3.00 x 3.00 x 2.25 meters "cube" made out of projection screens and quadraphonic speaker setting, giving the minimal footprint able to host 3 musicians during 1.00 hour. This total abstract place, this autonomous and un-contextualized object, cuts all direct visual links in between the audience and the performers, focusing all attention onto sound and "presence".



The room constitutes a 4 faces object each one being different from the other yet linked in a 360° electronic space/sound representation, it invites the audience to walk and look around it and hear and see it from different positions, explore is thus an action as much related to the performers as to the audience. The room presents itself to the audience as both a container and a transducer for the human beings occupying it and of for the activity they have inside it, mainly manipulating machines to produce sound. The room acts as an interface in between performers and the audience. as such it replaces the usual stage/audience relation by a mediated representation. As a result the room is self-contained and is very much based on the principle of feedback. Performers and the audience are projecting shadows on the screen-walls; the system is capturing this image and reintroduces it as an overlaid projected image, closing the loop.

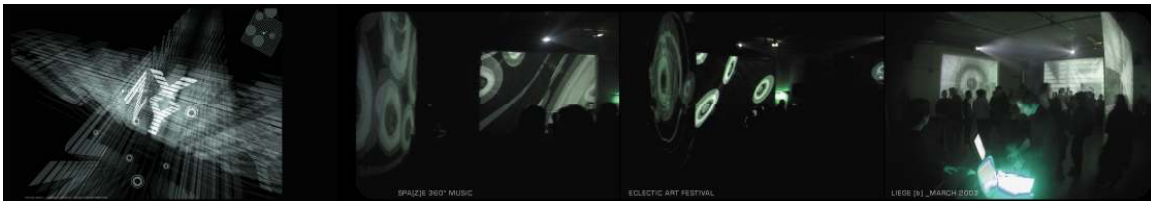
All acting then is a matter of balance in between black and white, light and shadow, sound and silence, one and zero. Feedback reveals by its very nature the system, it relates "inside" to "outside", it provides meaning to the system in itself. As abstract as it can very often be, here the system exposes its limits and becomes an entity which anyone can perceive. Using "presence" and sound-waves as its inputs, providing a "visible" link in between its elements, translating his number realm onto a three dimensional object/space, the system stands of its own but remains mute until human beings explore it.

sPACE navigable music, spatiovisual music software / performance [2001 - ...]

project – modalities || sPACE, Navigable Music || || spa[z]e music || || spa[z]e 360° ||

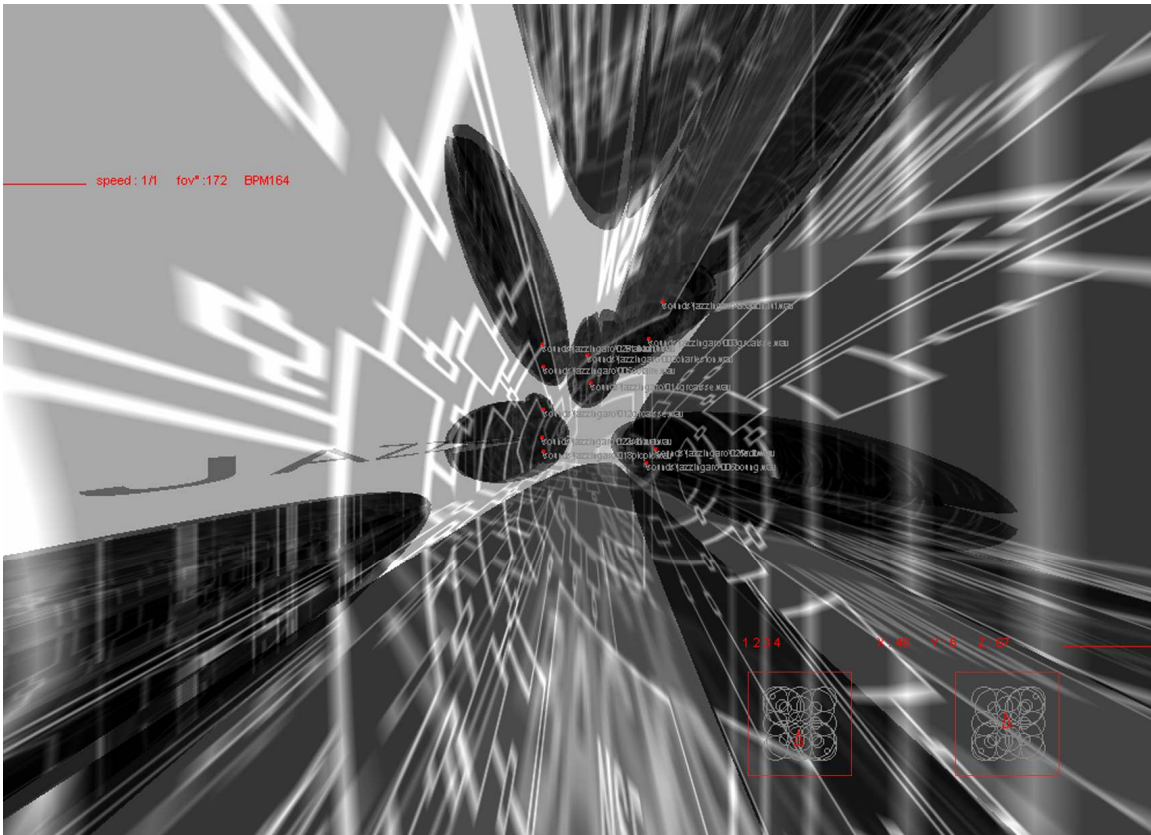
sPACE, Navigable Music has started in 2002 as a work in progress with the aim to link research and development according to electronic space. Since the start of the project different forms of production and development has led to multiple modalities between technological and artistic research such as:

- a network of collaborations with experimental electronic musicians exploring the field of music and architecture, and the development of specific performative spaces (music and contemporary dance) and cybrid spaces
- a network of collaborations with architects, video artists, visual artists, media artists, graphic designers, ... in the field of MetaDeSign, exploring new signforms in hypermedia
- thematic collaborative design sessions (on invitation of educational, artistic... institutions)



'sPACE, Navigable Music' investigates the impact of IC technologies and particularly, 3D Real Time technologies in the construct of space. According to the objectives of LAb|au|, the project constitutes as much a space for theoretical research as a space of experimentation on the forms of spatial, visual and sonic interactions in networked environments.

The project explores the setting of hypermedia environments and cybrid spaces combining architecture, music and cinema through user interactions – navigation within the digital matrix. In sPACE, Navigable Music, the architecture of the electronic space is generated in real time according to the position and movements of the user (> mix color, > mix image, > mix sound). Operating on the assignment of spatial (x,y,z) and temporal (t-movements) parameters to visual and sonic ones, each interaction by the user, navigation, transforms the rendered space.



The 'Navigable Music' thus constitutes a space, in which the user experiments electronic space by dropping sounds into space, mixing music throughout navigation, record its movements to produce an animation, a kinetic music clip, a sharable sonic space, where the multi-user space extends the project to collective interactions.

'Spa[z]e music' is based on various collaborations between LAB[au] and different contemporary electronic music musicians, which compose specific sonic spaces, navigable music. The collaborations focus on the exploration of musical patterns in and through e.space, and relates them to image-sequencing and spatial constructs in order to create an immersive audiovisual environment. Composing music through navigation in e.space and spatialization through the quadraphonic sound system constitutes a performative sonic space, which the musicians create live through their navigation. It thus relates and synchronizes space to music through cinematic techniques, dealing not only with new ways to compose, share, perform and diffuse music through electronic space but also questions the construct of music and space itself.

'Spa[z]e music' performances include a series of experimental interfaces exploring different settings in the interaction with 3d real-time music, such as voice recognition (allowing through voice instructions to generate spatial objects (architecture) to control navigation and to interact with 3D sound-objects), body movement tracking systems (navigation through body movements) and different hardware controllers, even more merging the experience of e.space to the one of the body space.

The exploration of 'Spa[z]e music' has its origins in the experimental electronic music of the fifties, where musicians like Varèse, Stockhausen, Xenakis... have explored audio visualization and spatialization systems in order not only to relate the logics of space to the ones of music and imaging, but also to link it to computation technologies, synthesized and programmed music. The 'Spa[z]e music' compositions thus relate the logics of inFORMAtion processes, computation, communication (networking) and editing (recording) to the ones of space and music, building up an immersive space; a navigation through the digital matrix.

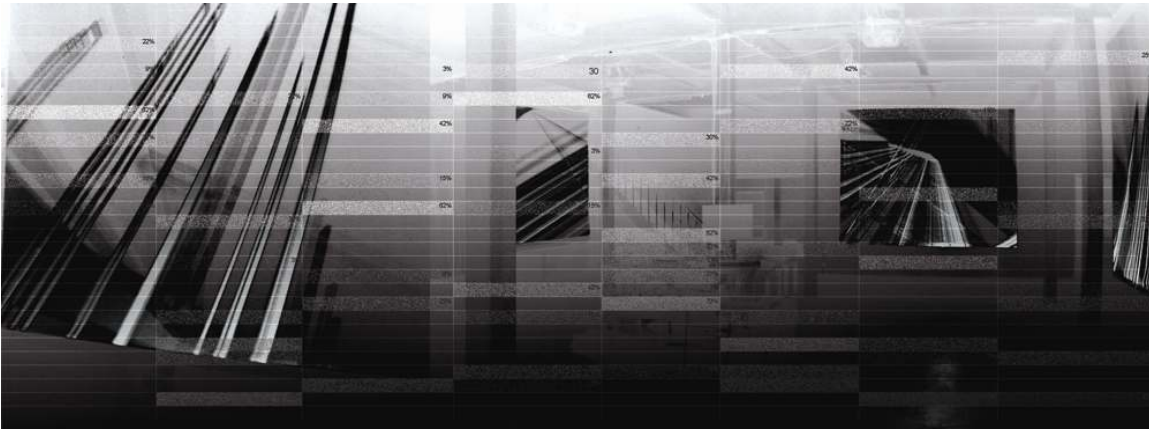


The 'Spa[z]e 360°' project proposes an installation based on a complete immersion of the users and the public in the 'Spa[z]e music'. This is produced on the one hand through the spatial (quadraphonic) diffusion of the sound navigation and on the other hand the visual, 360° panoramic projection of the e.space. 'Spa[z]e 360°' is based on a software, developed by LAB[au] in order to make through network rendering a 360° projection in real time possible. Synchronization within navigation and mainly the one of sound is critical in networked devices as each computer process its own 3D computations. The project thus is based not only on networked 3d rendering but also on complex time programming. As any number of computers can be used, the 360° projection can be made out of 3,4,6,8 or even 32 screens/computers. Slave computers can also provide sound extending the project to hexa, octa, dodecaphonic sound.



Particle Synthesis, music performance [2004]

Particle Synthesis explores the combination of 3D particles technologies with the sound processing ones of granular synthesis. Here each particle in space constitutes a micro sound, a grain, which on its own wouldn't be visible neither audible, but where its sum, being the synthesis of hundreds of these grains, leads to the creation of a sound, thus constituting a kind of sonic organisms, ruled by the parameters attributed to each sonic particle, such as speed, lifetime,....



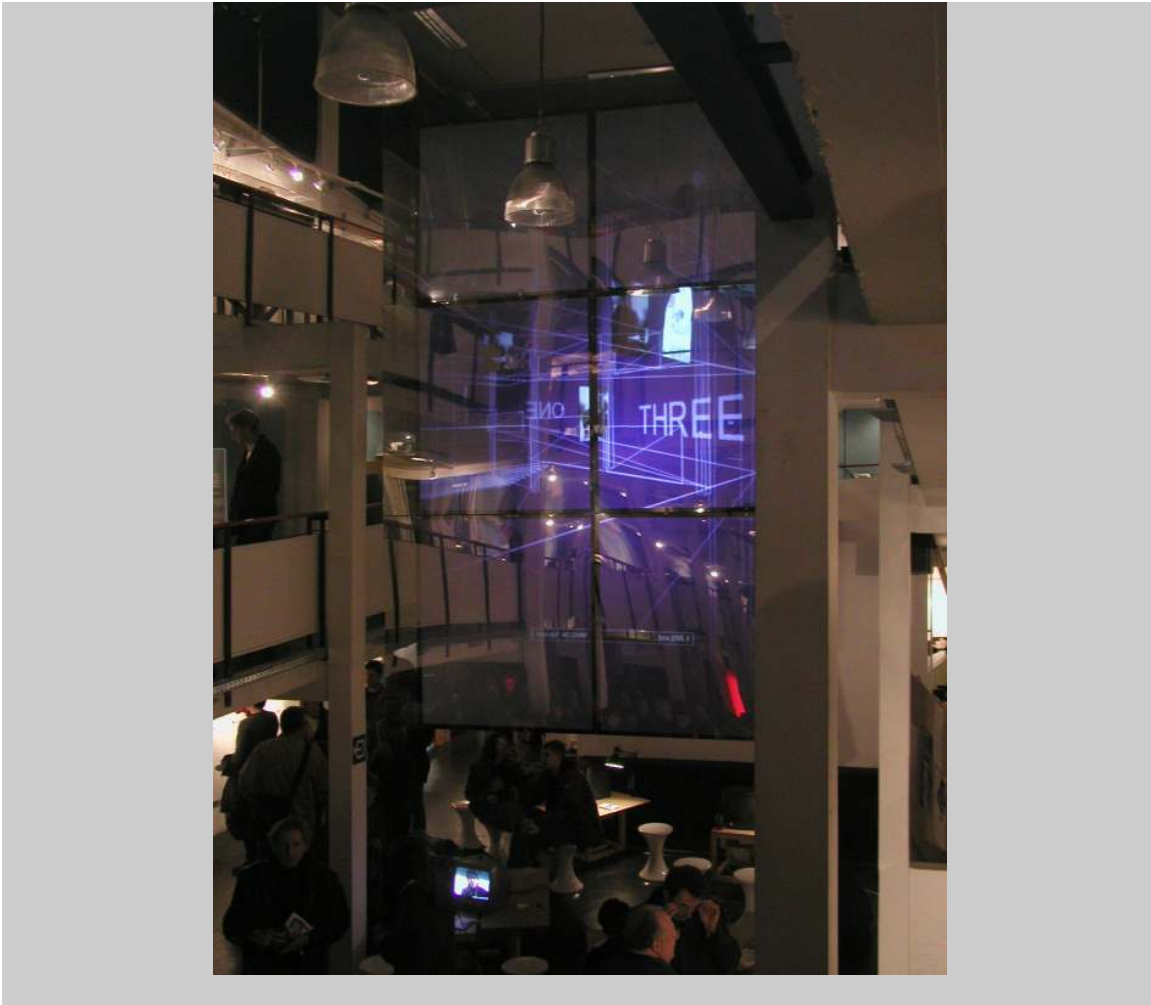
In this manner the produced sound-scape of ' particles synthesis ' is the result of the interaction of all the different particles, a synthesis of the behaviours, parameters which are attributed to the spatial and sonic particles / grains. Composing spatial sound-scapes is in this case building up and playing with the parameters of an organism which defines the visual, spatial and sonic scape. The use of 3d technologies combined with sound processing ones fuse, in order to describe more than a visual sound-scape, but further displaying the parameters of sound and space itself, as the assignments, rules, of its construction.



Sound elements can be translated visually into 2D pixels, and moving sounds into voxels (3D pixels). These grains would form a visual and sonic pattern, transformed by energy (loudness) to form "waves", which affect neighboring patterns and create a back and forth, fluid movement. One of the possibilities in sound synthesis is to work with micro-sound. Micro-sound is interesting because they are closely related to digital technologies, digital sound has a sample rate or a number of sound elements per second as granular synthesis is using. Furthermore Microsound is closely related to the history of spatial sound, Xenakis introduced in his piece "PH concret" intended to be played on 400 speakers integrated in the Philips pavilion of 1958 World Fair in Brussels. This type of synthesis has its background in "musique concrete" as much as in mathematical constructs which again makes it so close to computer technology.

Voice Spa[z]e, interactive sound installation [2004]

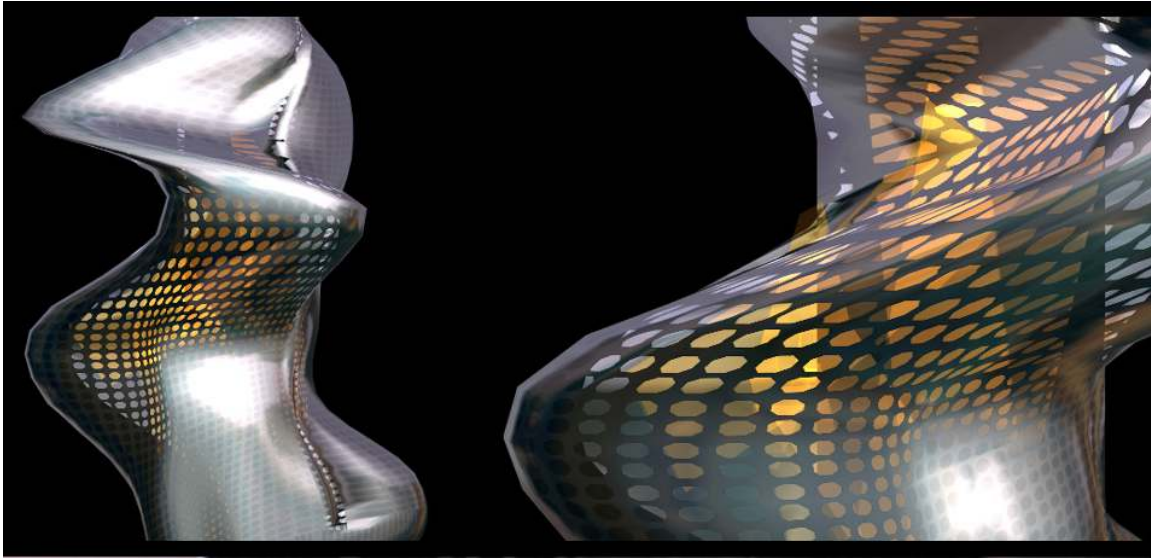
Voice Spa[z]e is an installation by LAB[au] based on the development to combine 3D real time technologies with the one surround sound as on voice recognition systems. It allows through voice instructions not only to navigate the 3D spaces in real time, but also to create entirely its sonic and spatial structure. In this manner each time the user pronounces a word he/she places an object and/or a sound inside the 3D space. In this manner through his/her voice he/she transforms the empty black space into an entire navigable sonic, visual and spatial construct, rendered in surround sound. The voice spa[z]e 03 file combines this principal with another recent development: the use of real time web.cam images used as 3d object mappings. Here the trace of the navigation in form of image boxes establishes a 3d image strip displaying in a temporal and spatial logic the captured images. In the 'voice file' this principle of a 3d image trace is used to create a moebius strip where the looping of the navigation-path leads to a successive building of a space, the sonic moebius, through voice instructions and the visual one through the web cam images. This principle of looping the navigation path leads to the overlaying of sounds and images in time, densifying loop by loop the space, while building up the moebius as a spatial and temporal _ sonic and visual trace.



As the webcam is filming the projection screen itself, this feedback principle even more leads to a looping principle, establishing infinity by a space inside a space, inside a space... effect. This moebius effect combines space with time, a process which stops when the system itself fails, of the impossibility to treat all the information, the crashing of the computer. In this manner the voice space combines advanced 3d navigation and real time image technologies to play on the parameters of IC technologies _ displaying its parameters in spatial, sonic and visual manner.

i-skin, electronic bodyness, interactive installation [2000]

i-skin, electronic bodyness, was conceived and realized by LAB[au] in collaboration with the fashion designer CRSTOF in the scope of Avignon 2000 exhibition ' La beauté '. By proposing an experience binding physical to digital through the vector of an "avatar", the i-skin project is a construct on the migration of the human body into the electronic space of communication and computation technologies as a hybrid extension of body, clothing and architecture. The programming of these three skins into one single display includes complex identification and representation codes based on mental and cognitive rather than physical processes. The programming of behaviors and instructions into form - **InFormation** – is based on visual communication and identification code – the image.



Extending the experimentation of a real world enhanced by the digital one, the installation scenography proposes the visitor to penetrate a space where the image turns into architecture merging the electronic space with the concrete one, mixed reality. The visitor is dropped into a highly reflective space, a Plexiglas pleat, a continuous surface banded in space producing a multi-layered architecture. The pleat constitutes the projection screen, with folds to be crossed, creating a game of multiple forms of presence between shadow, reflection and projection combining the physical experience of body space with the mental, digital one.



Enhanced to information displays, the hyper-surfaces describe the passage from the bi-dimensional sheet, the surface, to the n-dimensional space of information - its perception and interaction. So these hypersurfaces can be defined as the programming of information and behaviors in space according to the relation of perception and conception of space and information displays. Through the themes of the body, clothing and architecture, the entirety of the i-skin project plays with the possibilities that new communication and information technologies offer in the mutation of these concepts and their respective value.

Exhibitions

[2006] // Liquid Space exhibition + Iqs 04 workshop at TENT., Rotterdam, The Netherlands
 [2006] // 12m4s + EOD02 at Pierre Berge & Associates., Brussels, Belgium
 [2005] // LAB[au] invited for the Artefact festival, **STUK Leuven**.
 [2003] // **'Info.scapes – information society'** : interactive 3d interface for the European community presenting the politics of the EU commission in the field of IC technologies presented at the **ITU WorldTelecom 2003, Geneva [Switzerland]**
 [2003] // launch of LAB[au]'s gallery **MediaRuimte** _ October 2003, **Brussels [B]** → <http://www.mediaruimte.be/> for complete list of concerts + interactive installations, lectures, exhibitions,...
 [2002] //: LAB[au] + Fabric | ch invited with the ' electroscape 001' : *Art Gallery* **Siggraph** _ 22.07 - 26.07.02 **San Antonio [USA]**
 [2002] //: LAB[au] invited with the sPACE, navigable music multi-user installation for: ten day's of ' electronic sPACE ' _ 17.05. - 26.05.02: **le blanc ' le beau local d'art contemporain, Brussels [B]**
 [2002] //: LAB[au] invited with the sPACE, navigable music multi-user installation for: 'cinémas du Futur' exhibition Via Festival at le **Pass Mons [B]** _ 15.03 - 14.05.2002
 [2001] //: LAB[au] presenting the 80m x 2.5m printed edition of ' fictional sPACE ' at: the **Cannes film festival** Sony Pavilion (F) _ 09.05 - 20.05.01 the stairs, la Croisette **Cannes [F]** with: in collaboration with IRD France and the Mitic festival
 [2000] // : LAB[au] invited with the interactive project ' i-skin, 01+02 ', for: the ' i-skin ' exhibition _ 10.10.00 - 29.10.00 at: **Louvre, Musée de la mode, Paris [F]**
 [2000] // : LAB[au] + CRSTOF invited with the ' i-Skin, electronic bodyness ' project for:the ' La Beauté, Transfo, Décors à corps' exhibition _ 27.05.00 - 01.10.00 at: **Avignon for the 2000 celebration [F]**
 [1998] // : LAB[au] invited with the urban project 'liquid axis ' for: the ' TransArchi 02 +03 ' exhibition at: ... **Aedes east, gallery** _ 03.08 - 22.08.98, **Berlin [GER]** ... **UQAM** _ 27.08 - 18.10.98, **Montreal [CA]** ... **NAI**, Netherland architecture institutes _ 17.11. - 12.12.98 **Rotterdam [NL]**

Performances / Festivals :

[2006] // LAB[au] performance: Man in e.Space presented at Elektra, Montreal, Canada
 [2005] // Artist residence at **Carre de Jalles** a Saint Medard, Bordeaux
 [2005] // LAB[au] performance: Man in e.Space presented at **Centre George Pomipou**
 [2004] // LAB[au] invited for a lecture about METAdeSIGN at **Sonar-** festival, 17.06 - 20.06.2004 **Barcelona [Spain]**
 [2003] // LAB[au] invited to present on the Bauhaus-stage the **EN3+4JeuX** interactive dance performance, in the context of the **Urban Lab**, 11 – 12.10.2003 **Bauhaus Dessau [GER]**
 [2003] // **Liquid Space** - performance and workshop with ten Korean artists in the context of RESFEST November 2003 in **Seoul [S-Korea]**
 [2003] //: FREE 360° SPA[Z]E MUSIC PARTY BY LAB[au] **SPA[Z]E 360° SPHERE** quadraphonic sound and 360° projection in a 17m diameter sphere of pulsing light and beats located in the urban jungle of BXL. The 10th SPHERE at 31.05.03, **Atomium Brussels [B]**
 [2003] //: LAB[au] invited with the 360° spa[z]e music performance + the polygone den[c]jity project for the 'Superficial: The Surfaces of Architecture in a Digital Age ' exhibition by: the **new museum of contemporary art** _ 23.01.2003 Broadway **New York [USA]**
 [2003] //:LAB[au] invited with: _ sPACE, navigable music multi-user installation for: the **ART+ COMMUNICATION festival** _ 08.05-11.05.2003 at: the center for New Media Culture RIXC in **Riga [Latvia]**
 [2002] //: LAB[au] + Res Publica invited with the interactive dance performance ' EN 3+4 JEU x 4 ' + the sPACE, navigable music by LAB[au] for the: Villettes Emergences festival _ 25.09.2002 at: **Maison de la Vilette Paris / Parc de la Vilette** _ **Paris [F]**
 [2002] //: LAB[au] invited with the online project sPACE, navigable music for: **file 2002** symposium / festival _ 09.08 - 22.08.2002 _ organised by: file **Sao Paulo [BR]**
 [2002] //: LAB[au] invited with the sPACE, navigable music for the ' motionable spaces ' exhibition <> **UIA 2002** _ 22.05 - 27.05.2002 at: Chromosome gallery for contemporary art **Berlin [GER]**

 [2002] // : LAB[au] invited for an open lecture about for ' electronic space / electronic music ' for the cybersonica symposium, international festival for sound and music _ 07.06.2002 at: the **ICA Institute of Contemporary Art , London**
 [2002] //: LAB[au]+[ERZATZ] invited with: the spa[z]e music performance and the sPACE,navigable music project for:the 2nd international festival of new audio-visual languages OFFF 2001 21.032002 at: **OFFF 2001 , Barcelona, Spain - [E]**
 [2001] //: LAB[au] invited with the ' space, navigable music ' for:**the 5th biennial on media and architecture** 07.11 - 11.11.2001 at:Schlossberg Graz _ organised by: Artimage, **Graz [AUT]**
 [2001] // : LAB[au] invited for the round-table by E.Sadin ' **textualités & nouvelles technologies'** for: Saison de la France au Quebec at: **Musée d'art contemporain Montréal [CA]**
 [2000] // :LAB[au] invited with the 3d browser project ' i-tube ' and the urban project ' light_scapes ' for: the village de l'innovation - **Imagina 2000** _ 28.01 - 04.02.2000 Monaco - organised by: **INA, institue national audio-visuel**

[2005] // LAB[au]'s **MetaLAB** website received ~ 20000 visits a month

MediaRuimte _ digital architecture platform by LAB[au]

<http://www.mediaruimte.be>

Complete writings + interview index

<http://www.lab-au.com/files>

Concept _ Korean Architectural Review _ most of LAB[au]'s projects are illustrated

Concept 1 _ netart // net architecture by LAB[au]

Concept 2 _ urban and exhibition scenography projects by LAB[au]

Concept 3 _ architecture and dance scenography projects by LAB[au]

Concept interview:

<http://www.lab-au.com/files/doc/concept-1.htm>

<http://www.lab-au.com/files/doc/concept-2.htm>

<http://www.lab-au.com/files/doc/concept-3.htm>

<http://www.lab-au.com/files/doc/concept-interview.htm>

Indesem _ a driving perception

INDESEM 2003 fast forward, a driving perception _ publication

<http://www.lab-au.com/files/doc/Indesem-publication.htm>

InfoScapes _ InfoSociety

Eu exhibition pavillon _ 3d navigable database interface

TransCultures interview:

<http://www.lab-au.com/files/doc/interview-infoscapes-eng.htm>

project site _ not completed yet

<http://www.lab-au.com/eu>