ULTRAMONO

TANJA VUJINOVIĆ

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ULTRAMONO: GENERATIVE DIGITAL TECHNIQUES, DATA VISUALISATION, DATA SONIFICATION, MODERN ELECTRONICS AND BLACK FURRY CREATURES

Petja Grafenauer

At some point in time, towards the end of childhood, comes a moment when you best friend tells you that only small children play with soft cuddly toys. Of course, you are in a hurry to grow up, so you throw away everything that is remotely childish and start pretending you are an adult. And for one, adults are not interested in teddy bears. Suddenly, your favourite teddy bear, who used to comfort you, make you smile, help you fall asleep and ate breakfast with you, the teddy who was always there for you and shared your happiest and saddest moments, becomes a part of the past. He sits all alone on the shelf at the back of the wardrobe, for the magic is no longer there. The battle with reality has started.

However, the child within did not wither away when we stuffed the teddy or toy rabbit behind the piles of magazines that teach us how to be seductive, attractive, successful and in contact with the newest trends. We merely hid him from ourselves and others. Luckily, similar to other children, our inner child has more positive than negative qualities. He helps us daydream, appreciate fellow human beings and keeps us playful. As Huizinga said: » Summing up the formal characteristics of play we might call it a free activity standing quite consciously outside 'ordinary' life as being 'not serious,' but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner.«[1]

As adults we sometimes simulate play and toys for adults (real cars, expensive clothes, sporting events, artworks, etc.) start appearing in our thoughts. Sometimes we are also drawn in by a toy that reminds us of the toys we used to play with when we were children; however, in order for this to happen we have to forget our desperate desire to be all grown-up. Every now and then it is perfectly OK for us to want to play with our old cuddly teddy (which can be found lurking in the back of the wardrobe), or with a new one that is adjusted to our 'adult' aesthetics.

The industry is aware of this fact and it just loves offering the qualified contemporary consumer something new that would replace the old. Today toys for adults are a common sight. They are so common we can easily hide the desires of our inner child. However, it is nicer and certainly more useful to allow the child (even though it is extremely hard to acknowledge that we still have a child within) to learn through fun and games and not hide his playfulness behind adult cynicism.

We can find a negative and positive side in every activity connected to play in adulthood - for example, the exploitation of market capitalism and the sincere human desire for pleasure that it exploits. It is hard to distinguish between the former and the latter, and we will not attempt to do this in this text. However, play is resolved of at least a part of the negative connotations, for play is older than culture: »for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing.«[2]

In order to play we need toys, and in the last twenty years these have entered the world of contemporary art in big style. They follow the general trend of returning to play in adulthood. As they represent an important part of the *Ultramono* platform, which is used by Tanja Vujinović in the production of her works, their story will serve as an entry point into her projects. As digital technologies have a strong presence in her opus, toys are most commonly pushed aside and considered to be merely a means to reach the goal, and the projects are analysed within the frame of new media technological art. However, as regards their visual appearance and significance toys are central to, but by no means the only possible way of understanding her projects. It seems that this is why her projects provide the user with an easier understanding of technological issues such as the transformation from data to picture and sound and back again. On the other hand they also operate on the sensory level, a level that is much easier to access through toys and play, both of which lead the user to complex insights.

However, it was by no means easy for toys to wiggle their way into the world of contemporary art. We can follow the connection between toys and art since prehistoric times, throughout Antiquity and the Middle Ages, until 1575, when Trubar wrote down the word 'Iegrazha' for the very first time in the Slovenian language and described it as »an object that should belong to a child and is used for playing.«[3] In Modernism the liberated artist encountered toys his inner child desired: Jean Tinguely, Niki the Saint Phalle, Pablo Picasso, Marcel Duchamp, Surrealism, Bauhaus... Contemporary art has lead us through Fluxus and the first performances to the objectivised world of toys, realised in a variety of ways in the different art practices of various artists such as Maria Fernanda Cardoso, Kim Dingle, Tom Friedman, Mike Kelley, Jeff Koons, Charles Longo, Tim Rollins, Annette Messager, Takashi Murakami, Isa Genzken, Yoshimoto Nara and many others.

Tanja Vujinović operates in a field in which we can clearly see the intertwining of dark and electronic aesthetics through the research of transforming sound into images and other possibilities offered by the programming of various interfaces. All of this is intertwined with the intention to create the art of noise. Within her opus - which is tightly linked to contemporary technologies that the artist finds appealing - one should not contemplate her progress but the progress of her artistic opus, the development of the individual project, technology and its inclusion into the work of art, concept and aesthetics and the intertwining of all these factors.

Tanja Vujinović's projects emerge within the *Ultramono* platform. The artist creates projects that she calls *Discreet events in noisy domains*, at which she uses generative digital techniques, data visualisations, data sonification and modern electronics to merge the noise obtained from data and the culture of play: » Sometimes materialised as random locations of info-dust or anthropomorphized data-emitters, these studies, as they are also sometimes called, create temporary fields of noise and play. These works range from audio-visual installations and reactive environments to installations in public spaces, allowing visitors and passers-by to participate in the pulsing and reverberations of often anthropomorphized objects.«[4]

Extagram 1 and *Extagram 2* (2007) were the first attempts in materialising the research of the data captured by digital generative techniques. This took place in the shape of soft toys, participatory installations with inbuilt electronics. The toys were

attractive, contemporary stylised objects made from a material that lures you to touch them and they created or transformed previously existing sound and video signals whenever a visitor in Ljubljana or London moved or touched them. One of the toys in the first version included a video system that gathered data from its environment and passed it on as a video recording to a screen on a different exhibited object. *Extagram 2* was also materialised as a soft sculpture - with a built in video screen, upon which audio-visual fragments were recycled.

The project lead into the next, vaster and bolder installation *Supermono*, which expanded through numerous phases between 2008 and 2010. Locally this installation was shown at a solo exhibition in the Kapelica Gallery, while internationally it was presented at group exhibitions and festivals in Vienna, Belfast, Edinburgh and Augsburg. The few objects lead to the development of an entire tactile environment, created from generated 'toys' with simple anthropomorphic and zoomorphic forms. Through the interaction with the user (or each other) they gathered, generated and mediated kinetic, sound and visual impulses. The sculptures - 'toys' operated in three different ways. During their interaction with the user the first group communicated amongst each other, using sound and video images generated in real time, the second group of smaller objects started to behave as an instrument whenever the viewer touched them, and strengthened and modulated the captured sounds of the touch, thus creating a minimalist soundscape. These sounds were sent into the space by a third group of objects with active microphones that created mono signals. In the same way as the supermarket substituted the market, the artist's project became a 'super' venue for mono sound elements and other sensory impulses.

We should also mention the 2009 project *Blipstat* that was shown at the *Sonica* festival. In this project the toys were excluded and substituted by underwater darkness. The project was conceived in cooperation with the Piran Marine Biology Station. Once again it used computer software to gather and transform visual and sound signals into their new versions in real time. It obtained visual and other meteorological and oceanographic data from Piran and combined this data with the sound of water that was scooped from the aquarium (with a robotic fish) in the gallery. This data - coincidental and rhythmical, permanent and changeable - was processed into a new visual and sound image based on numerous complex elements.

The almost entrepreneurial strategy of project growth, which was of course emerging in the impossible production conditions found in the Slovenian art field, lead to the gigantic 'toy' object in the 2009 project *Oscilorama*, which *Ultramono* produced in cooperation with Kibla in Maribor, where the project was also presented. This part of *Ultramono's* extended 'toy' group was composed of a giant black balloon that hovered over the passersby and could be found in the gallery and various public spaces.

As in real life the 'toys' found in Tanja Vujinović's projects were becoming increasingly sophisticated and responsive to the presence of the users. Of course, each user reacts to electronic pets in his own way. Their reactions were relatively unpredictable and did not serve predetermined communication logic. Their sounds consisted of noise of various loudness and pleasure levels, their images were 'mixed' and transformed data fragments from the everyday, while their touch - *Oscilorama* mainly built upon the sound and visual landscape - was mechanical and simple. *Oscilorama* consisted of a large floating

toy in front of the gallery - a balloon with a camera - that sent signals from the street into the gallery, where special software (especially written for this occasion) transformed them into algorithms that created a real time sound and visual projection. This environment was complemented by textile and plastic objects that served as tactile components of the project and showed the user random transformed data. This time the processed data was changed into images that were reminiscent of a collision between the crumbling Mondrian and Murakami's brush, while the sounds pleasantly accompanied the visual data landscape. The visitor in the gallery was greeted by a giant soft *Supermono*, who welcomed him into the safe sanctuary of rest where the visitor could follow the countless small recordings in a pleasant environment. The recordings gently flickered around the circular screen, which showed the previously mentioned digitalised and pleasant Mondrian, the Boogie-Woogie that was created by random passersby who strolled across the town square in front of the gallery.

In 2011 the Kapelica Gallery, which announced its interest in works in progress years ago (while leading the sixth *U3*), hosted a new step in the development of the project, which was now known as *Superohm, Study 15*. In this project black soft toys reappeared once again, only this time they were gathered on a platform, onto which the viewer could merely peek, in the same way as a child can merely peek onto the kitchen table. The platform was full of somersaulting, moving, crawling and 'communicating' soft toys. In this project the visitor was merely a trigger, for the soft toys acted as the data source, which was processed into sound and video with the aid of the artist's new software. They moved on their own accord and with minimum human power, when, for instance, the visitor would separate them from a relentless hold, in which the batteries of one robotic soft animal was battling with the other's to immovability, while their robotic lights were flashing and the microphones and camera were capturing their images and sounds. Friction appeared amongst the signals that were sent by the soft toys- and it was these frictions that represented the base for the sound and video landscape, which was created on the projection, beyond the electronic field.

As is the case in all art creativity, studies appear during these larger 'super' projects. However, they are often developed to the level of independent projects and presented to the public. They are lead by the same interest in the relation between the electronic 'toy' and the real time and real data processed audio visual landscape. Only certain studies are made available to the public and the first one amongst them is *Extagram*, which is a compilation of audio-visual works and a series of digital prints of frozen screens of the project carrying the same title. The eighth study is called *Amjumix* (after the games *Amju*) and operates as a computer game with generated mistakes that block the user's way to the next level. The study is accompanied by 'toys', which this time imitate the heroes from *Amju* in their form, and have optical sensors inserted into them, which create a soundscape, depending on the strength and direction of light within the space.

The studies *D.E.I.N.D.*, *Oscillon* and *Oscop* are computer audio visual generative installations that gather data from various sources and return them in various combinations into the visual and audible, while *Pulpa* is a compilation of five works that emerged while processing digital signals that influence each other and create a flow of abstract

images.

How can one summarise the projects created by Tanja Vujinović? They are recognisable as a part of an opus with its chaotic dark noise aesthetics. Their interactivity is of key importance for the existence of the project itself - the interfaces generate the image and sound from data that is predominantly created by the viewer's presence –, and at the same time the sensory and conceptual part of the artwork provides the playful atmosphere found within the gallery. The high technology, which is in art usually perceived to be found in projects for 'geeks', where you have to enter the consecrated circle of knowledge on 'how it works', in order to understand the artwork, gains in its playfulness in the works of this artist. Playing with 'toys' that draw us in because of our nostalgic past encourages us to enjoy our play and their kinetics. At this we are getting accustomed to the images and sounds that are offered by the screens and microphones, and we also partake in their creation. Through play we understand how it works. We find this entertaining and suddenly a unique painting instrument appears in front of us, and this opens up new possibilities for playing with and enjoying art.

Petja Grafenauer's text translated by Sunčan Stone.

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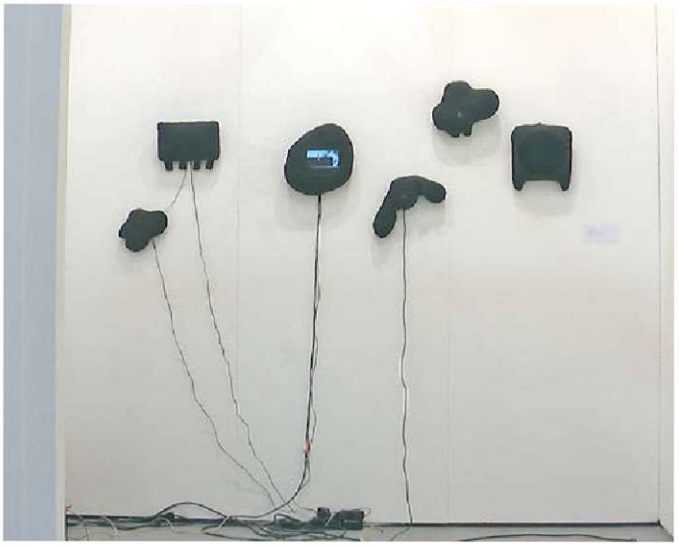
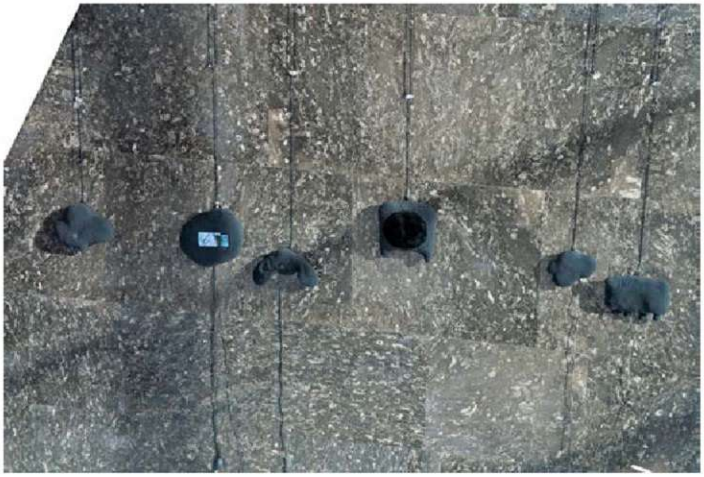
[1] Johan Huizinga, *Homo ludens*, 1971, Beacon Press, London , pg. 13.
[2] Ibid, pg. 9.
[3] Tanja Tomažič, *Igrače*, Zbirka Slovenskega etnografskega muzeja, Ljubljana 1999, pg. 12
[4] http://www.ultramono.org/projects/, viewed 2. 12. 2011.

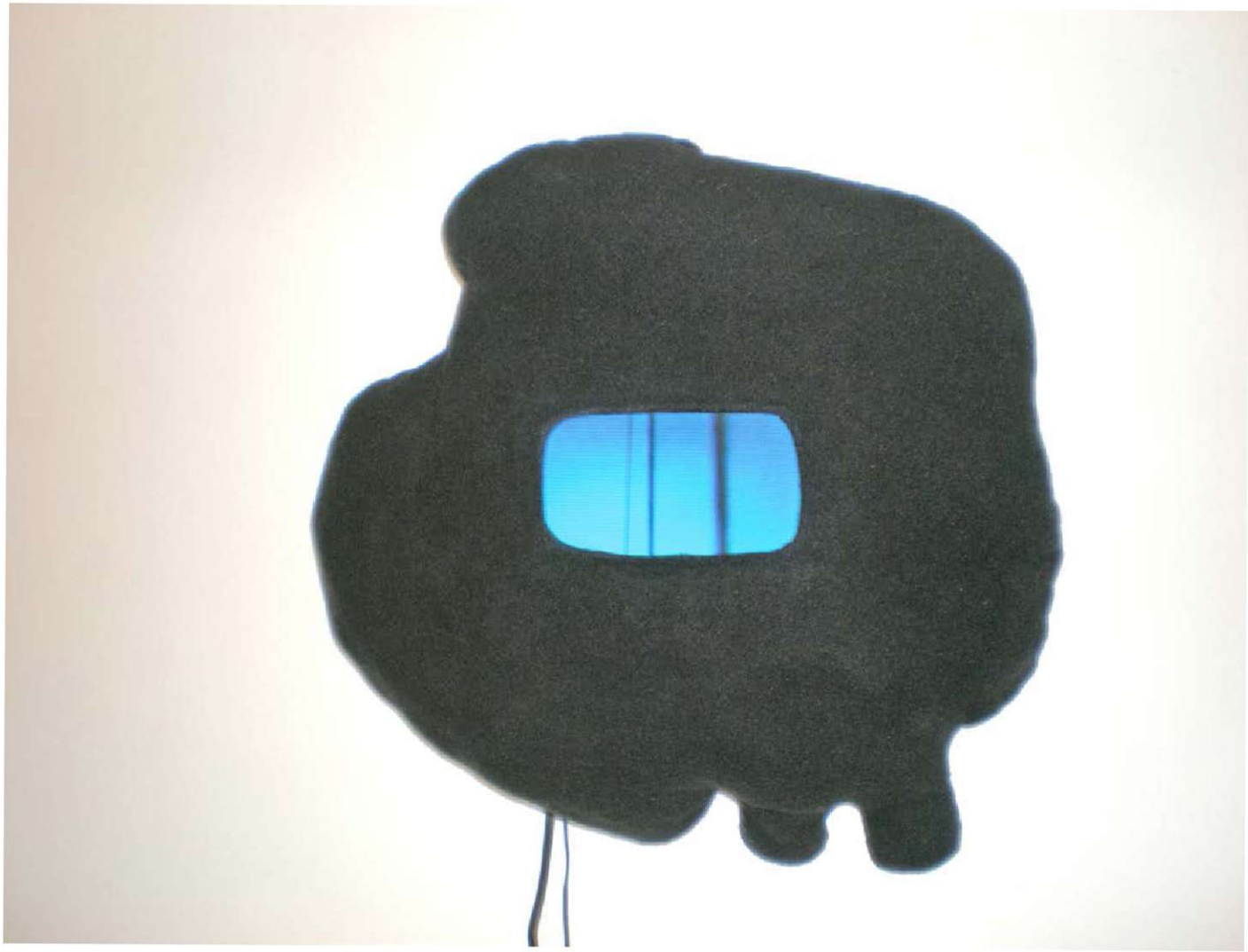


EXTAGRAM 1
Tanja Vujinović
Objects, custom electronics, computer, video, sound
ArtVerona, D'EST - giovani artisti sloveni, quartiere fieristico di Verona padiglioni, October, 2008, Verona, Italy.

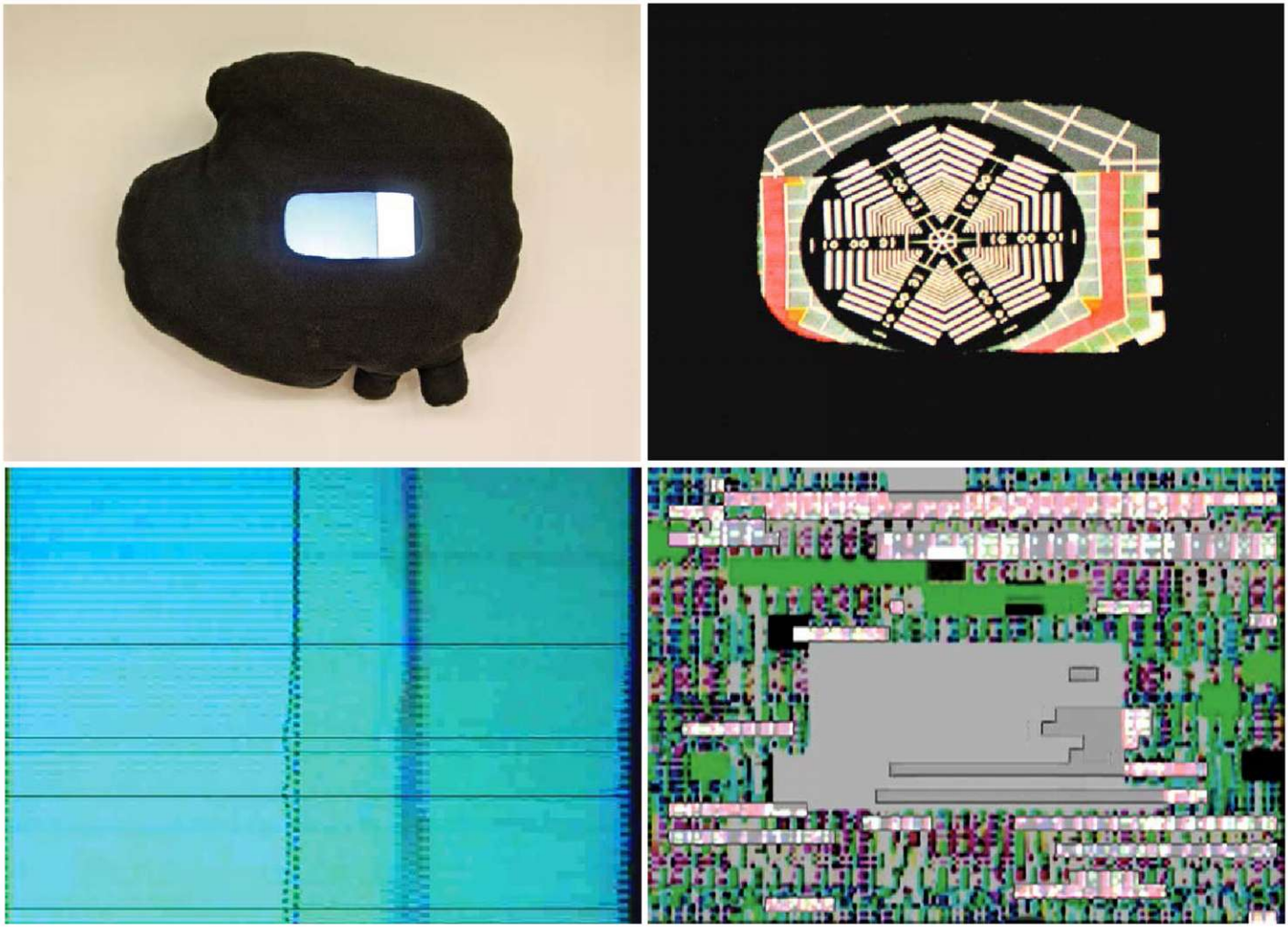
EXTAGRAM 1
Tanja Vujinović
Objects, custom electronics, computer, video, sound
Production: Jan Kušej, Ultramono (exstat), 2007.



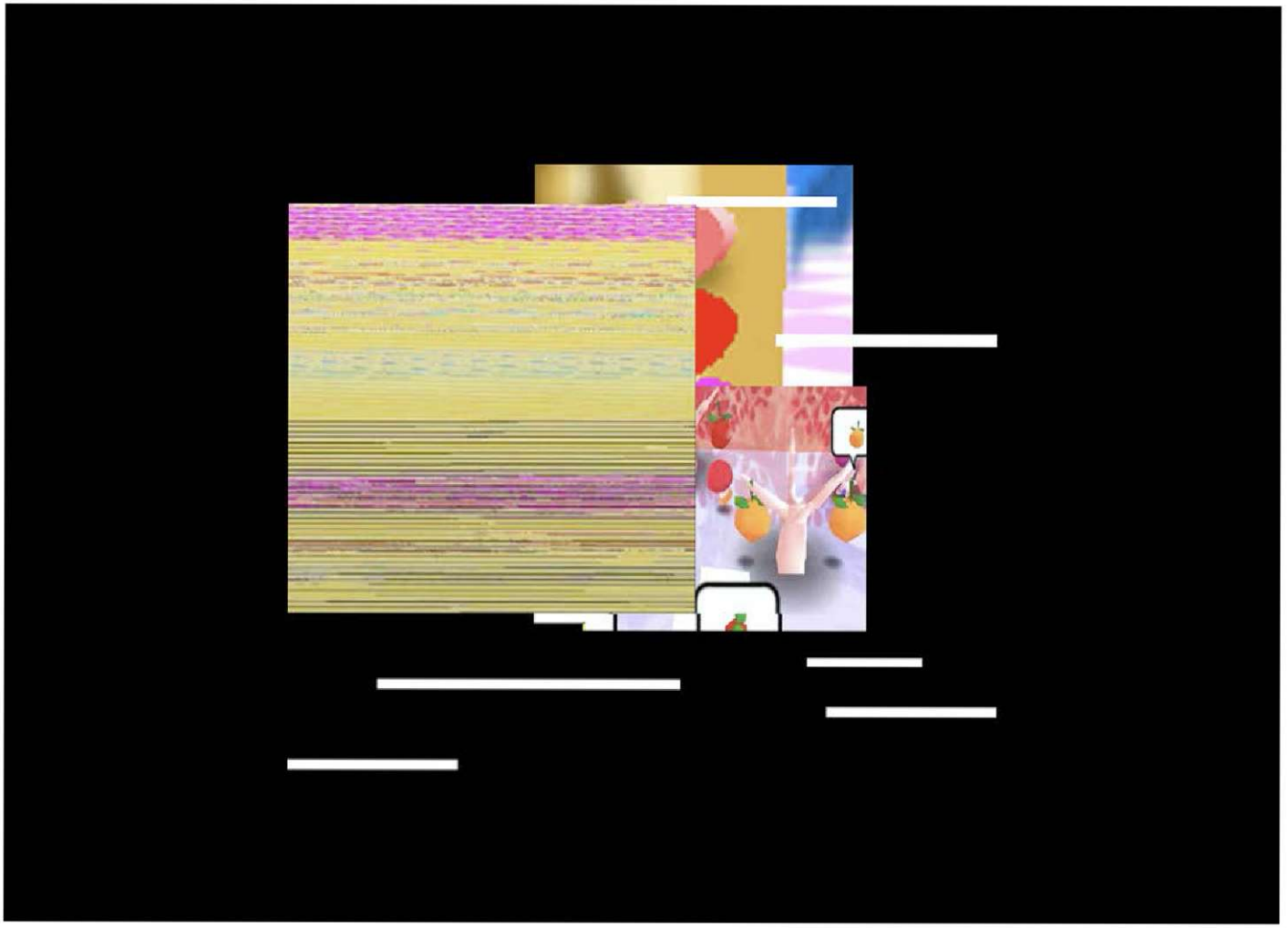
EXTAGRAM 1
Tanja Vujinović
Objects, custom electronics, computer, sound, video
Institute Jožef Stefan Gallery, 2007, Ljubljana, Slovenia.



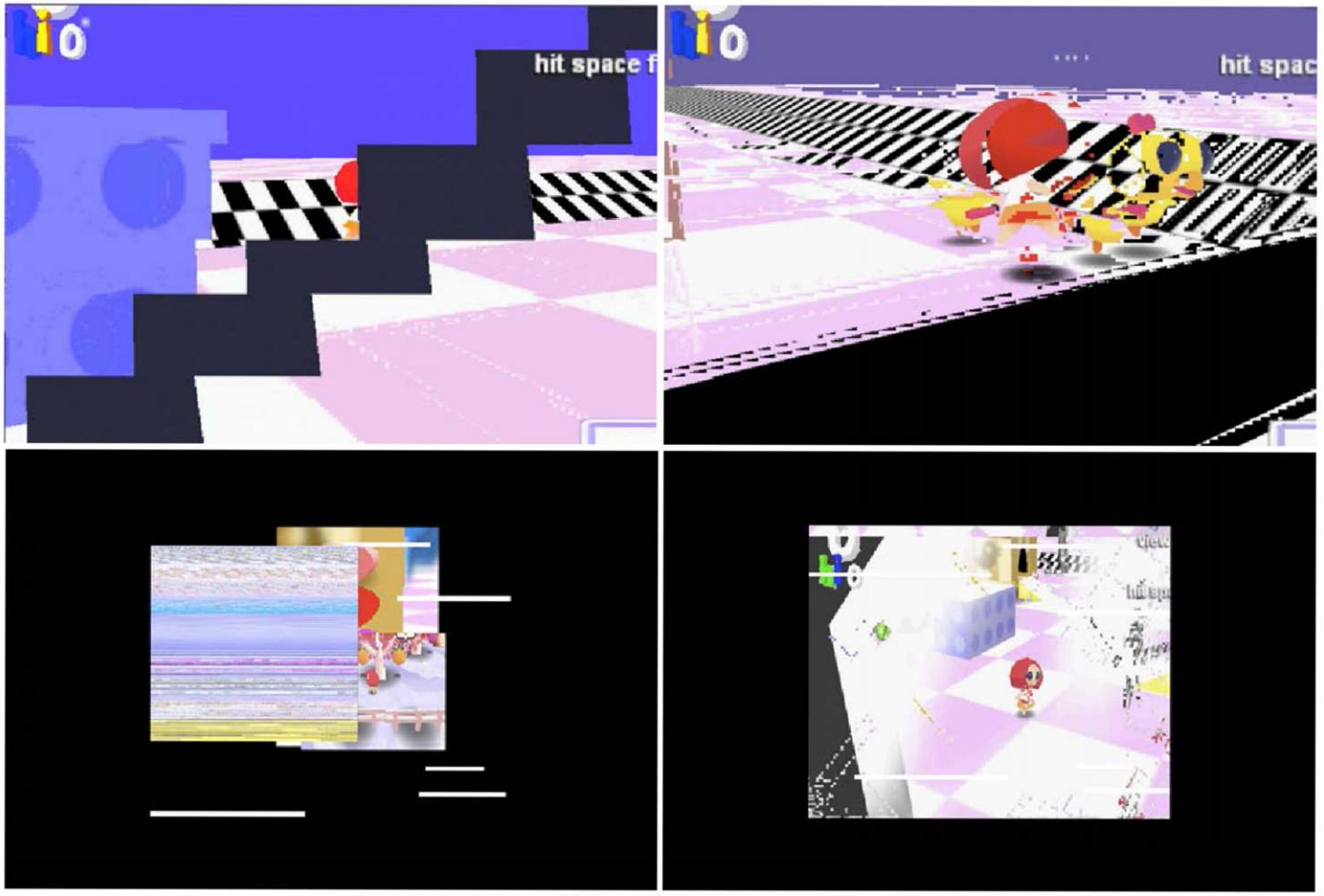
EXTAGRAM 2
Tanja Vujinović
Object, custom electronics, Extagram/Oscilo audio-visual works
Production: Jan Kušej, Ultramono (exstat), 2007.



EXTAGRAM 2
Tanja Vujinović
iDesign 09, London Design Festival, 2009, University of Westminster, London, UK.



AMJUMIX
Tanja Vujinović
Objects, custom electronics, computers, custom-made software, sound, video
Original Amju games and sound © Jason Colman, www.amju.com
Production: Jan Kušej, Ultramono (exstat), 2008.

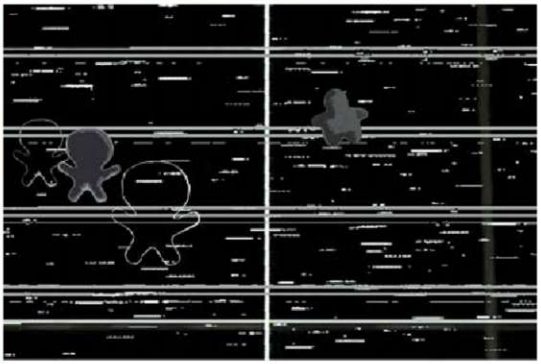


AMJUMIX
Tanja Vujinović
Objects, custom electronics, computers, custom-made software, sound, video
Original Amju games and sound © Jason Colman, www.amju.com
Production: Jan Kušej, Ultramono (exstat), 2008.

AMJUMIX
Tanja Vujinović
Objects, custom electronics, computers, custom-made software, sound, video
HAIP 08, 3rd International Multimedia Festival of Open Technologies, Vžigalica Gallery, 2008, Ljubljana, Slovenia.

AMJUMIX
Tanja Vujinović
Objects, custom electronics, computers, custom-made software, sound, video
HAIP 08, 3rd International Multimedia Festival of Open Technologies, Vžigalica Gallery, 2008, Ljubljana, Slovenia.

SUPERMONO 2/3
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Production: Jan Kušej, Ultramono(exstat) and B-51, 2008.

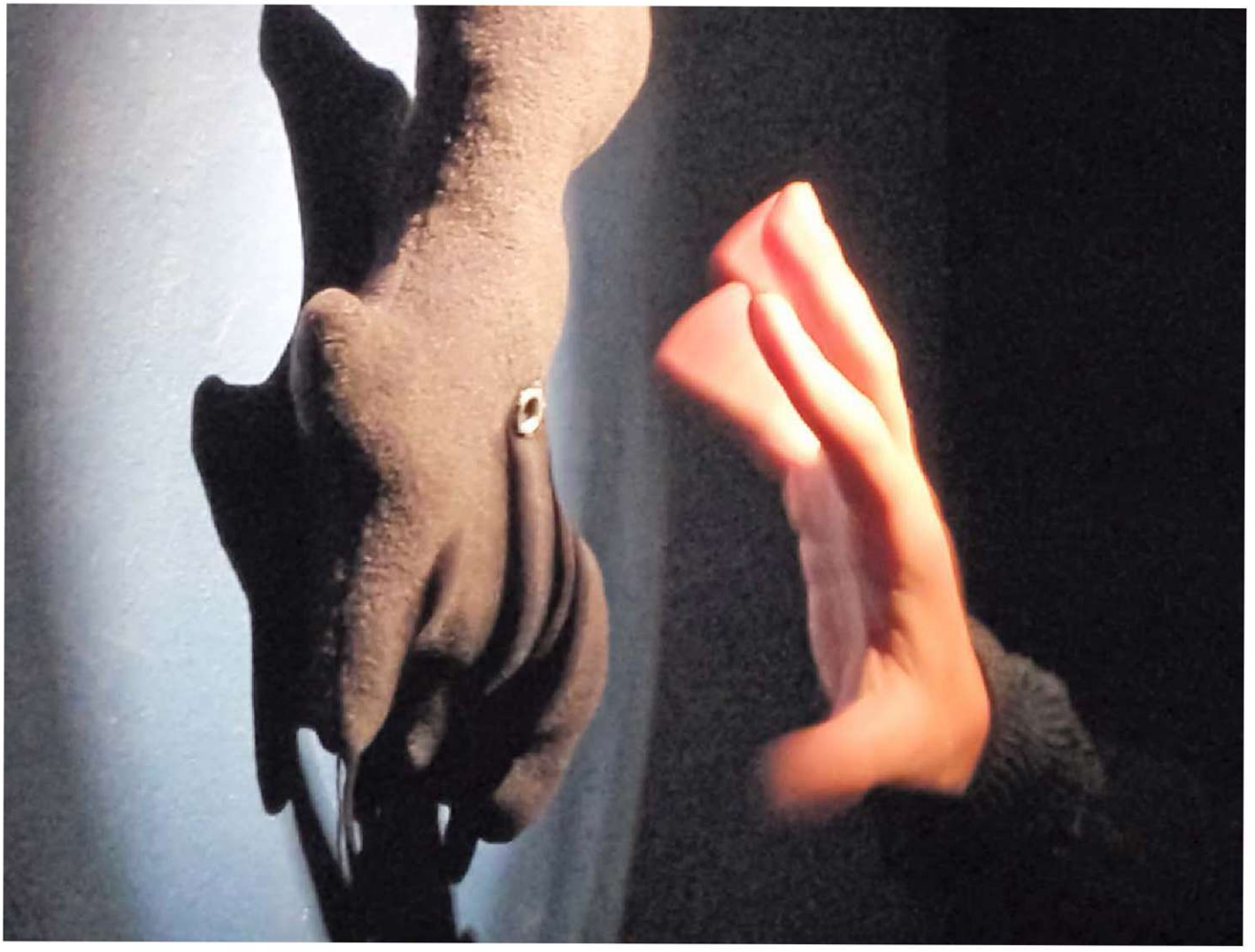


OSCILOX
Tanja Vujinović
Custom-made software, sound
Necessary Discourse on Hysteria, Koroška galerija likovnih umetnosti, 2008, Slovenj Gradec, Slovenia.

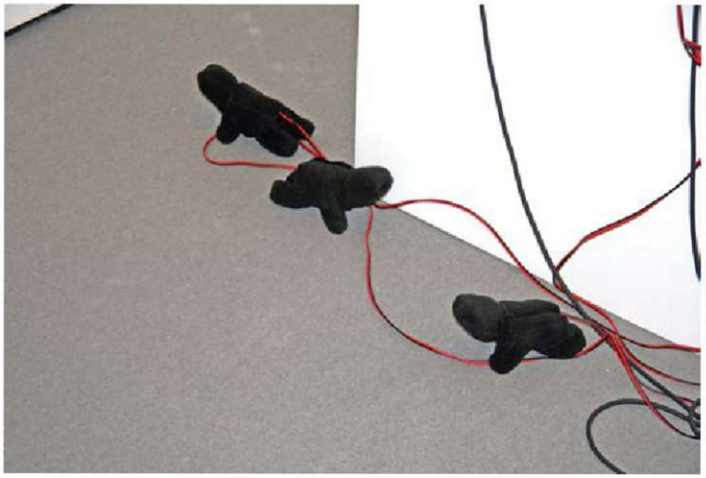
EXTAGRAM/OSCILO, SUPERMONO-M
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Institute Jožef Stefan Gallery, 2007, Ljubljana, Slovenia.

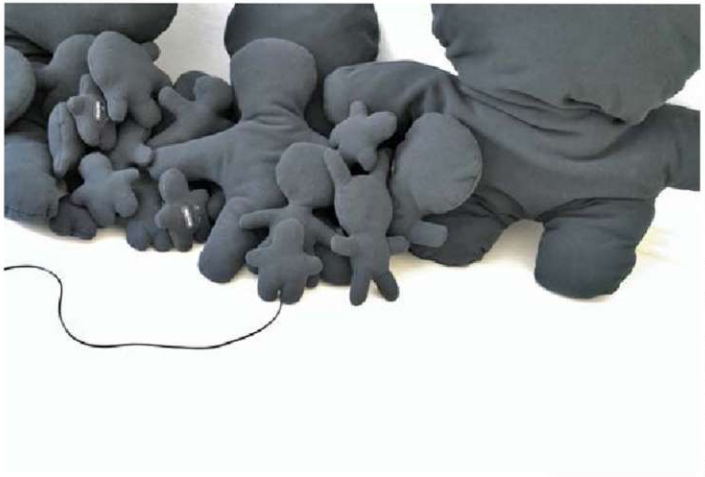
SUPERMONO 2/3
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Kapelica Gallery, 2008, Ljubljana, Slovenia.

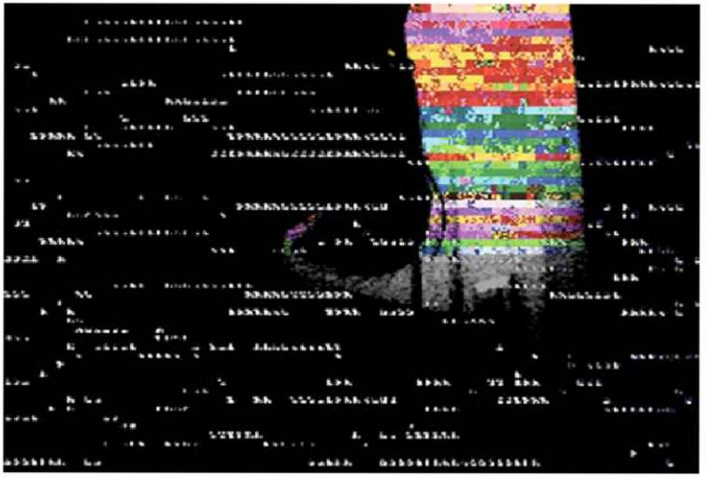
SUPERMONO 2/3
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Kapelica Gallery, 2008, Ljubljana, Slovenia.



SUPERMONO 2/3
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Kapelica Gallery, 2008, Ljubljana, Slovenia.

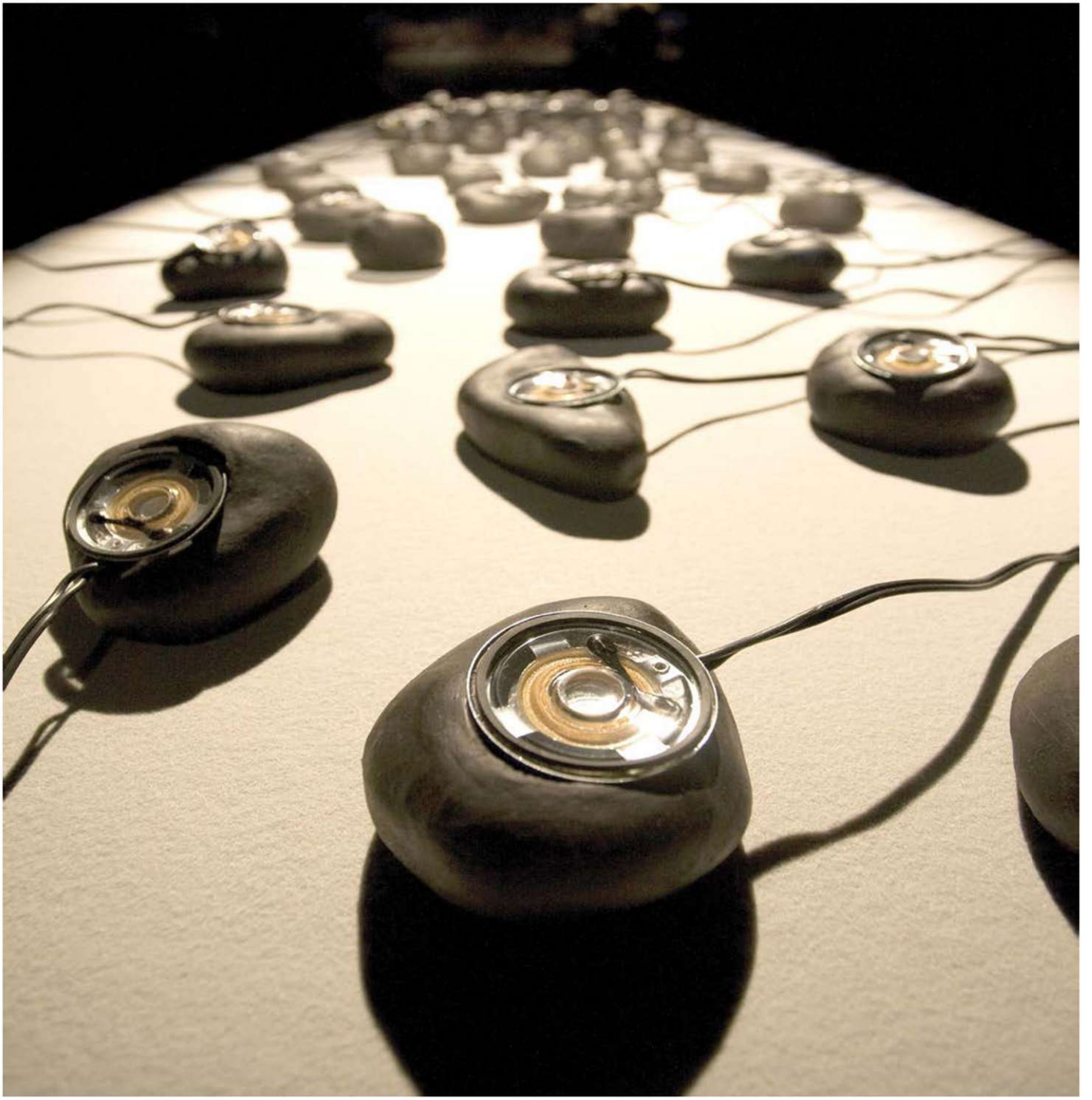


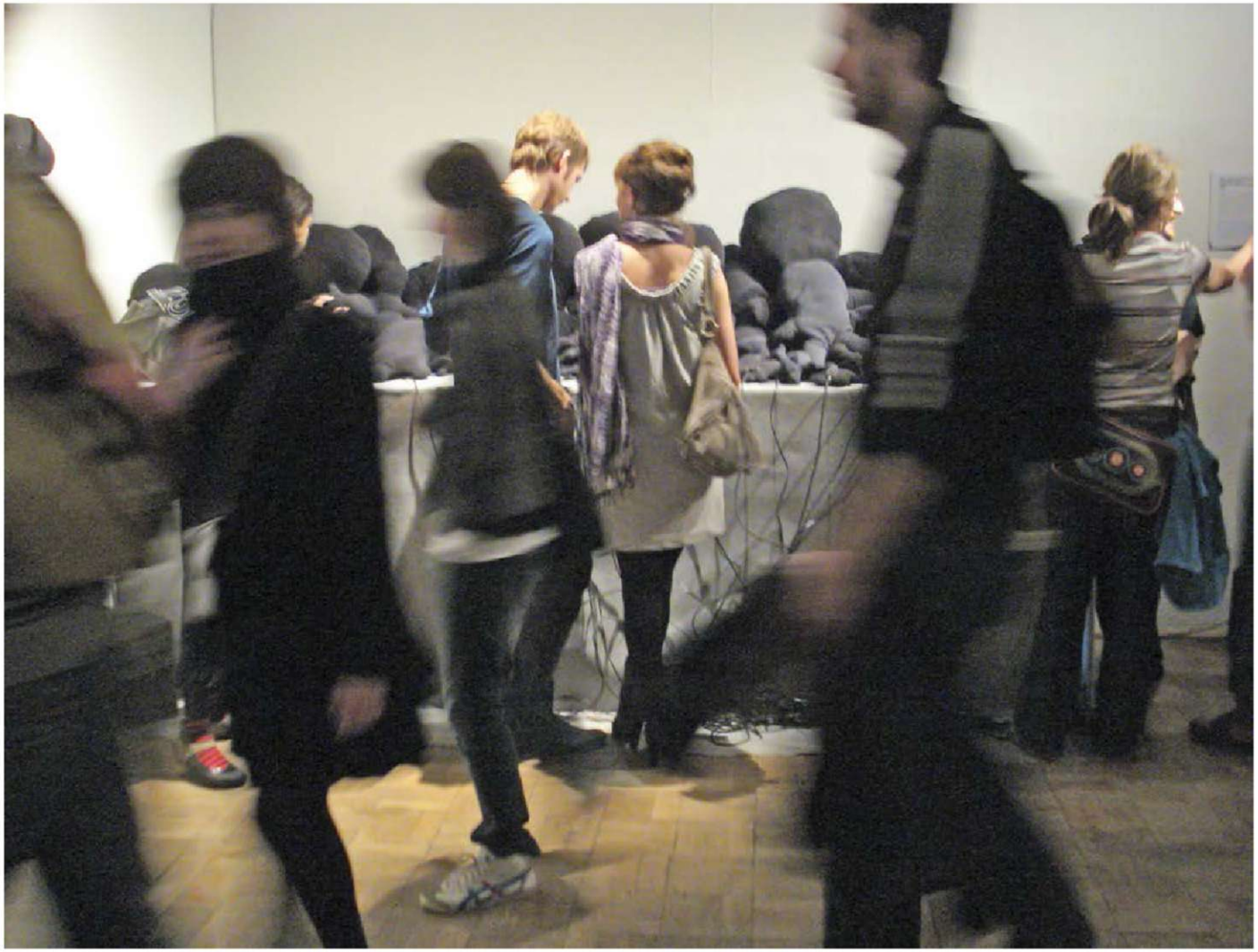




SUPERMONO-M
Tanja Vujinović
Objects, custom electronics, computers, sound, video
ArtVerona, D'EST - giovani artisti sloveni, quartiere fieristico di Verona padiglioni, 2008, Verona, Italy.

SUPERMONO 2/3
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Kapelica Gallery, 2008, Ljubljana, Slovenia.





SUPERMONO 2
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
sound:frame 2009, Kunstlerhaus k/haus, 2009, Vienna, Austria.

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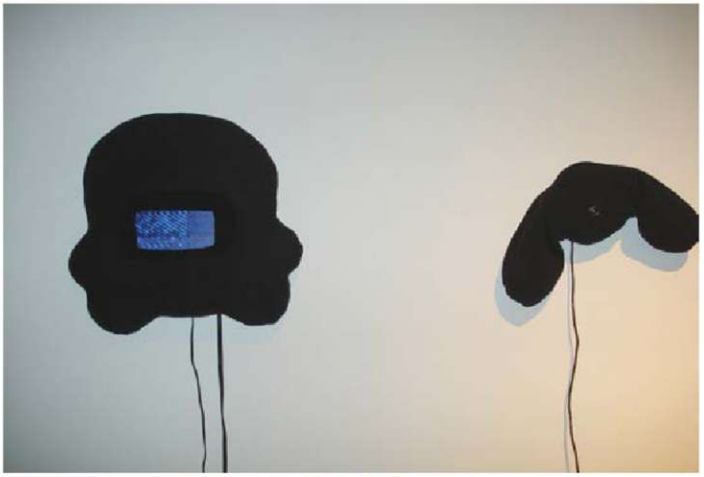
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
sound:frame 2009, Kunstlerhaus k/haus, 2009, Vienna, Austria.



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Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
sound:frame 2009, Kunstlerhaus k/haus, 2009, Vienna, Austria.

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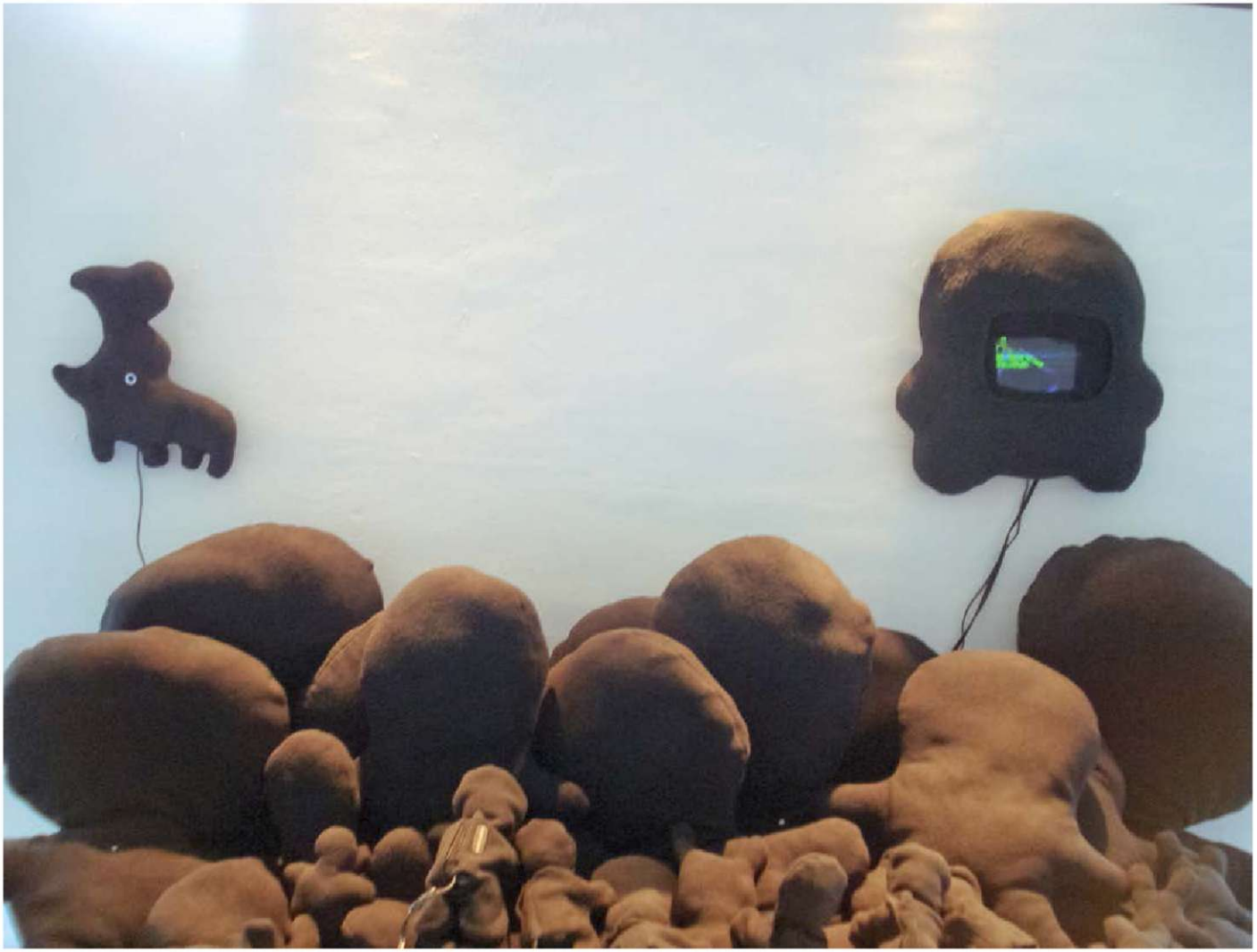
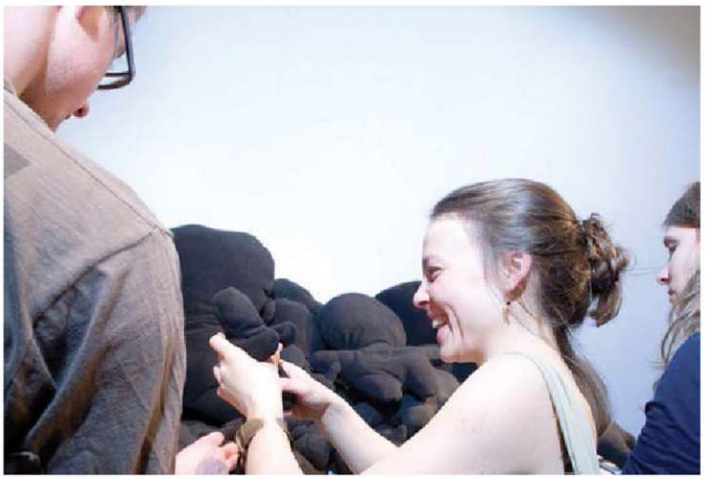
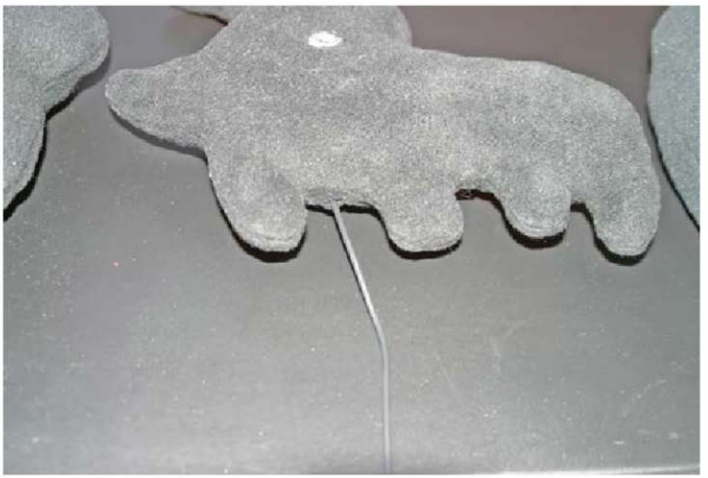
Objects, custom electronics, custom-made software, computers, sound, video
sound:frame 2009, Kunstlerhaus K/haus, 2009, Vienna, Austria.



SUPERMONO 2
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
ISEA2009, The 15th International Symposium on Electronic Art, Waterfront Hall Belfast, 2009, Belfast, Northern Ireland.

SUPERMONO 2
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
ISEA2009, The 15th International Symposium on Electronic Art, Waterfront Hall Belfast, 2009, Belfast, Northern Ireland.

EXTAGRAM/OSCILO, SUPERMONO-M
Tanja Vujinović
Objects, custom electronics, computers, sound, video
ArtVerona, D'EST - giovani artisti sloveni, quartiere fieristico di Verona padiglioni, 2008, Verona, Italy.

SUPERMONO 2
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
sound:frame 2009, Kunstlerhaus k/haus, 2009, Vienna, Austria.

SUPERMONO 2
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Are We Human? Inspace, New Media Scotland, 2009/2010, Edinburgh, Scotland.

SUPERMONO 2
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Objects, custom electronics, custom-made software, computers, sound, video
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SUPERMONO 2
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Objects, custom electronics, custom-made software, computers, sound, video
lab30, Mediale Künste und elektronische Klänge (media arts and electronic sounds), Augsburger Kunstlabor, 2010, Augsburg, Germany.

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SUPERMONO 2
Tanja Vujinović
Objects, custom electronics, custom-made software, computers, sound, video
Kinetica Art Fair, P3, University of Westminster, 2011, London, UK.

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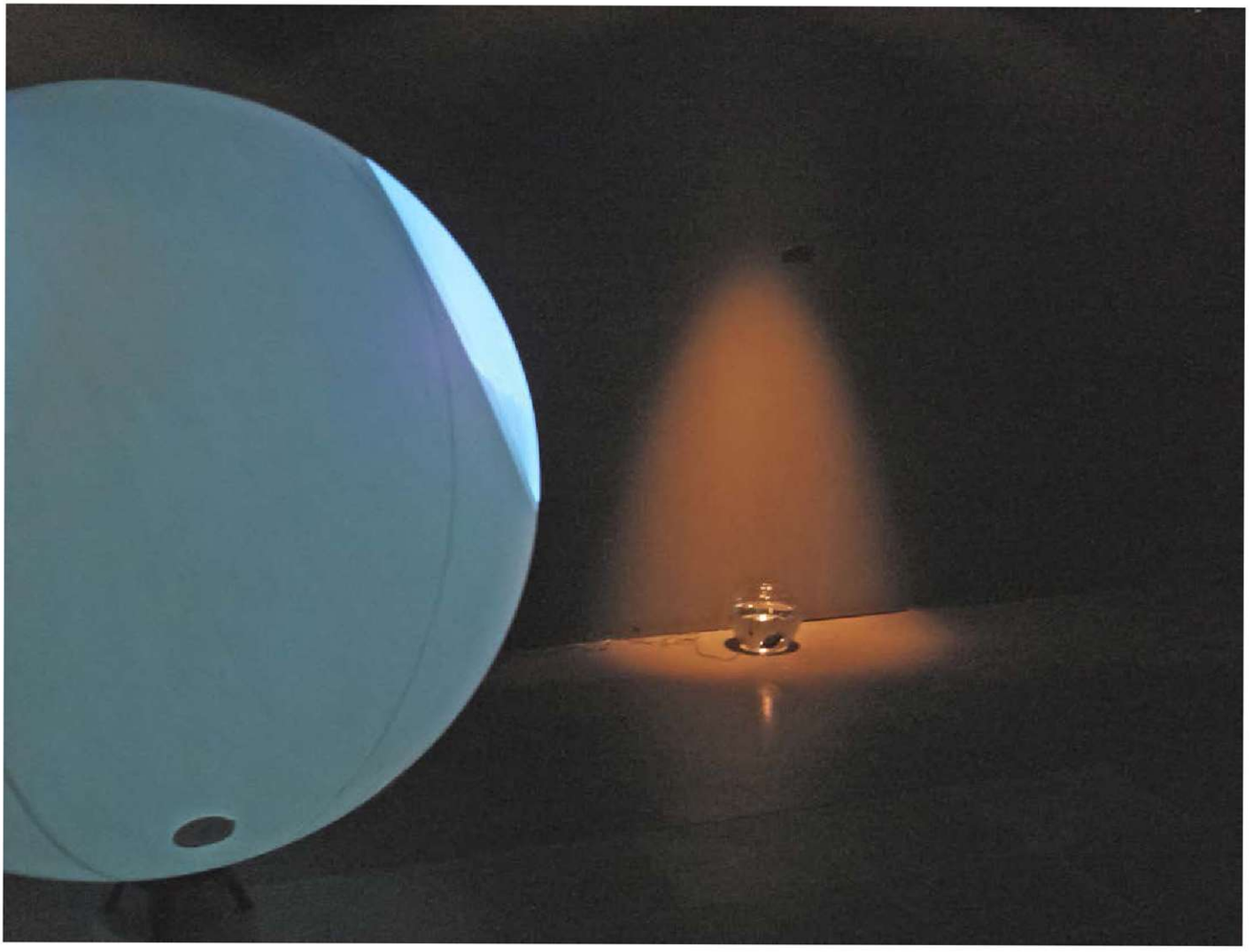
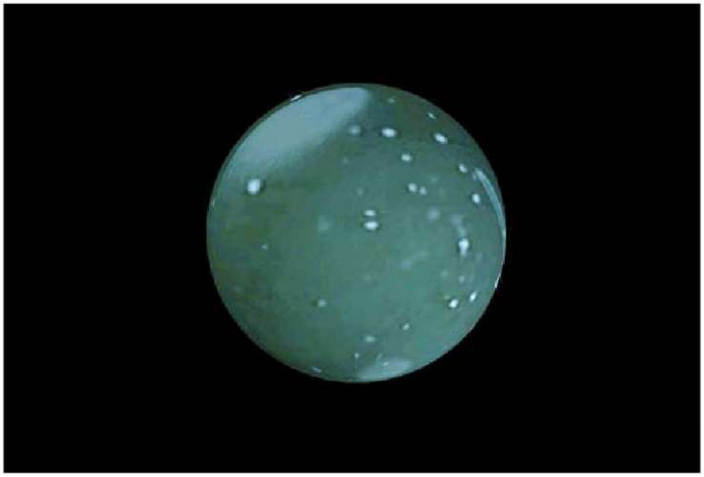
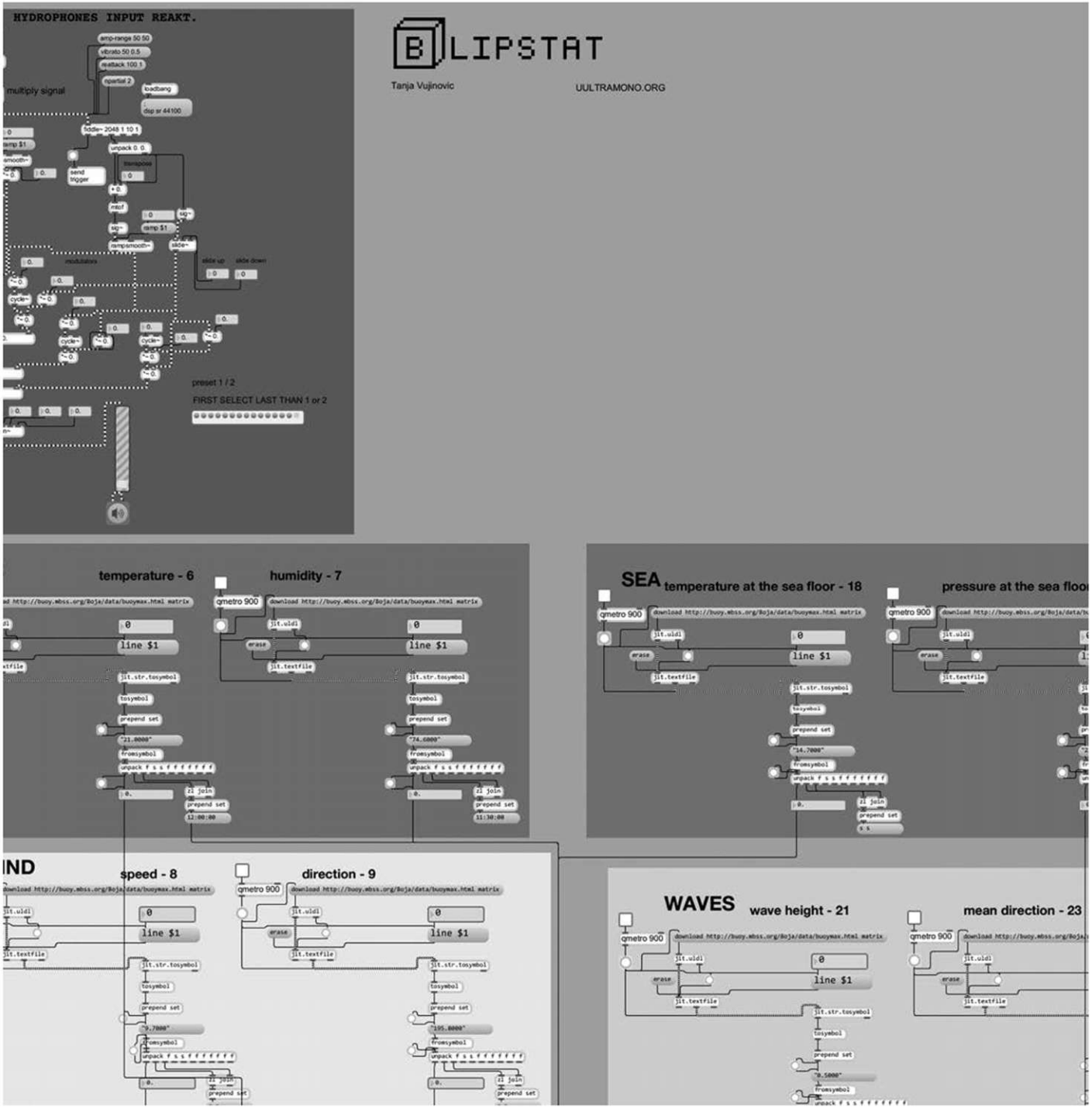
Kinetica Art Fair, P3, University of Westminster, 2011, London, UK.

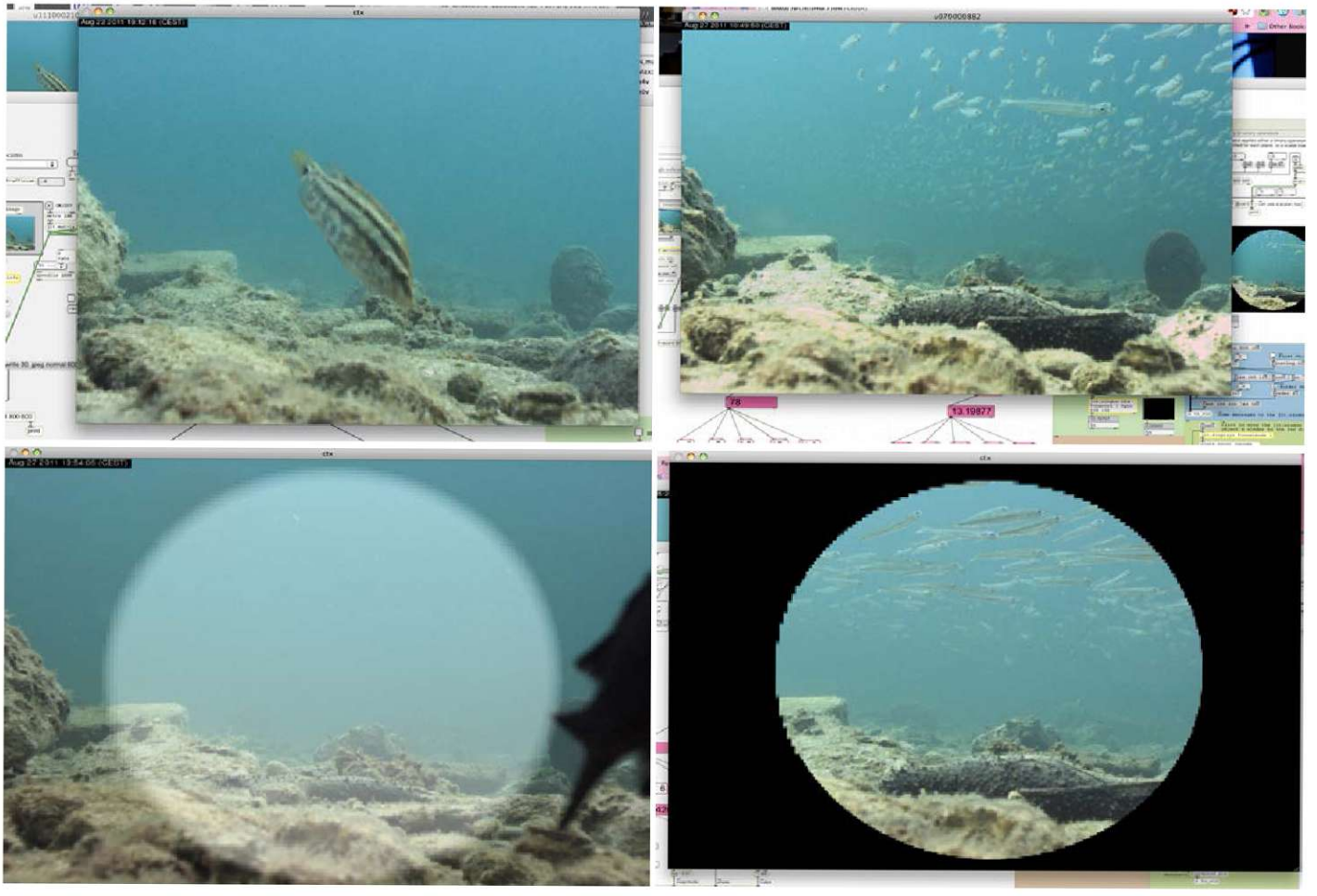


BLIPSTAT
Tanja Vujinović
Video projections, objects, water, hydrophones, custom-made software, live sound and video processing, computers
Production: Jan Kusej, Ultramono (exstat), 2009.
The project has been developed in collaboration with the Marine Biology Station, Piran, Slovenia, http://www.mbss.org/

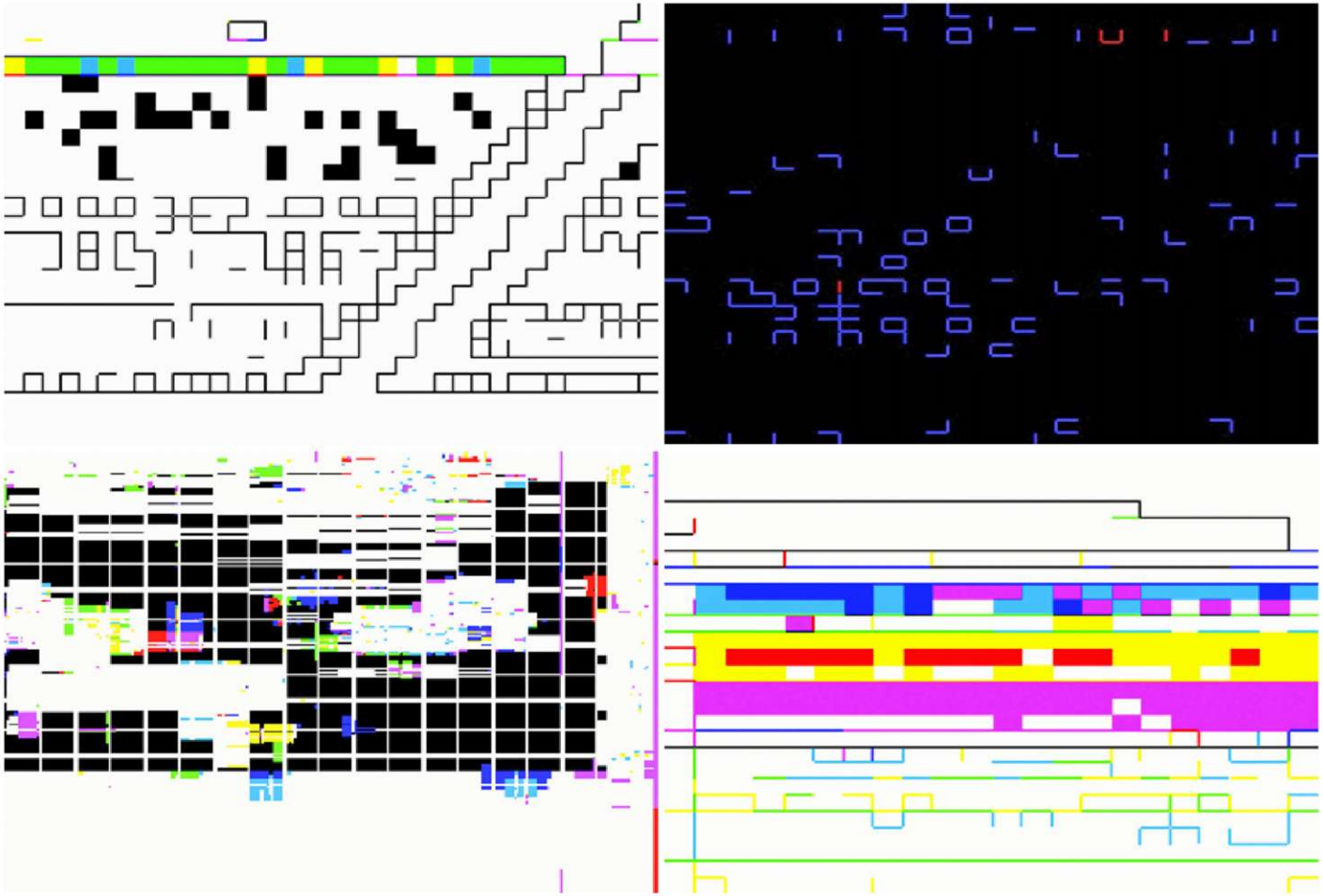


BLIPSTAT
Tanja Vujinović
Video projections, objects, water, hydrophones, custom-made software, live sound and video processing, computers
Sonica, Festival of sound and audiovisual experimental arts, 2009, Galerija Jakopic, Ljubljana, Slovenia.

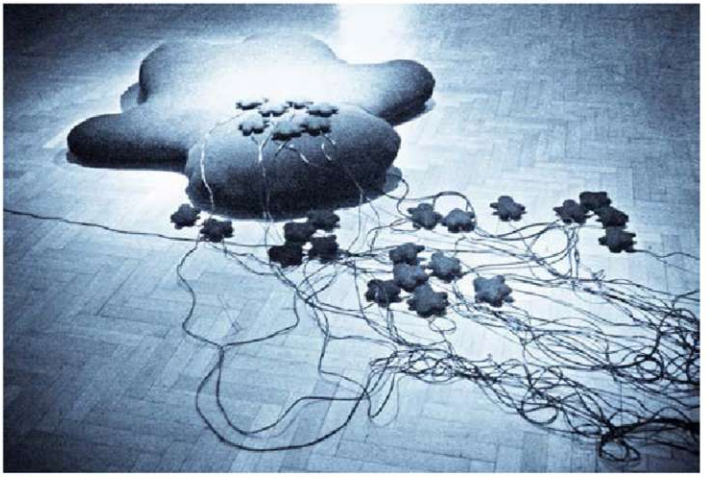

HYDROPHONES INPUT REAKT.
multiply signal
preset 1 / 2
FIRST SELECT LAST THAN 1 or 2
BLIPSTAT
Tanja Vujinovic
UULTRAMONO.ORG
temperature - 6
humidity - 7
SEA
temperature at the sea floor - 18
pressure at the sea floo
speed - 8
direction - 9
WAVES
wave height - 21
mean direction - 23

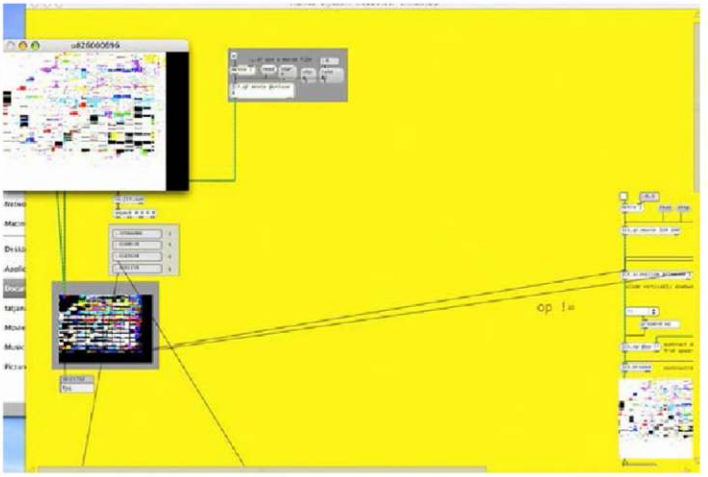


BLIPSTAT
Tanja Vujinović
Video projections, objects, water, hydrophones, custom-made software, live sound and video processing, computers
Production: Jan Kusej, Ultramono (exstat), 2009.
The project has been developed in collaboration with the Marine Biology Station, Piran, Slovenia, http://www.mbss.org/



OSCILORAMA
Tanja Vujinović
Objects in public space and the gallery, custom electronics, custom-made software, computers, video, sound
Producer: Jan Kušej; KID Kibla and Ultramono (exstat), 2009.





OSCILORAMA
Tanja Vujinović
Objects in public space and the gallery, custom electronics, custom-made software, computers, video, sound
Gallery Kibela (MMC Kibla), and the Main Square, 2009, Maribor, Slovenia.

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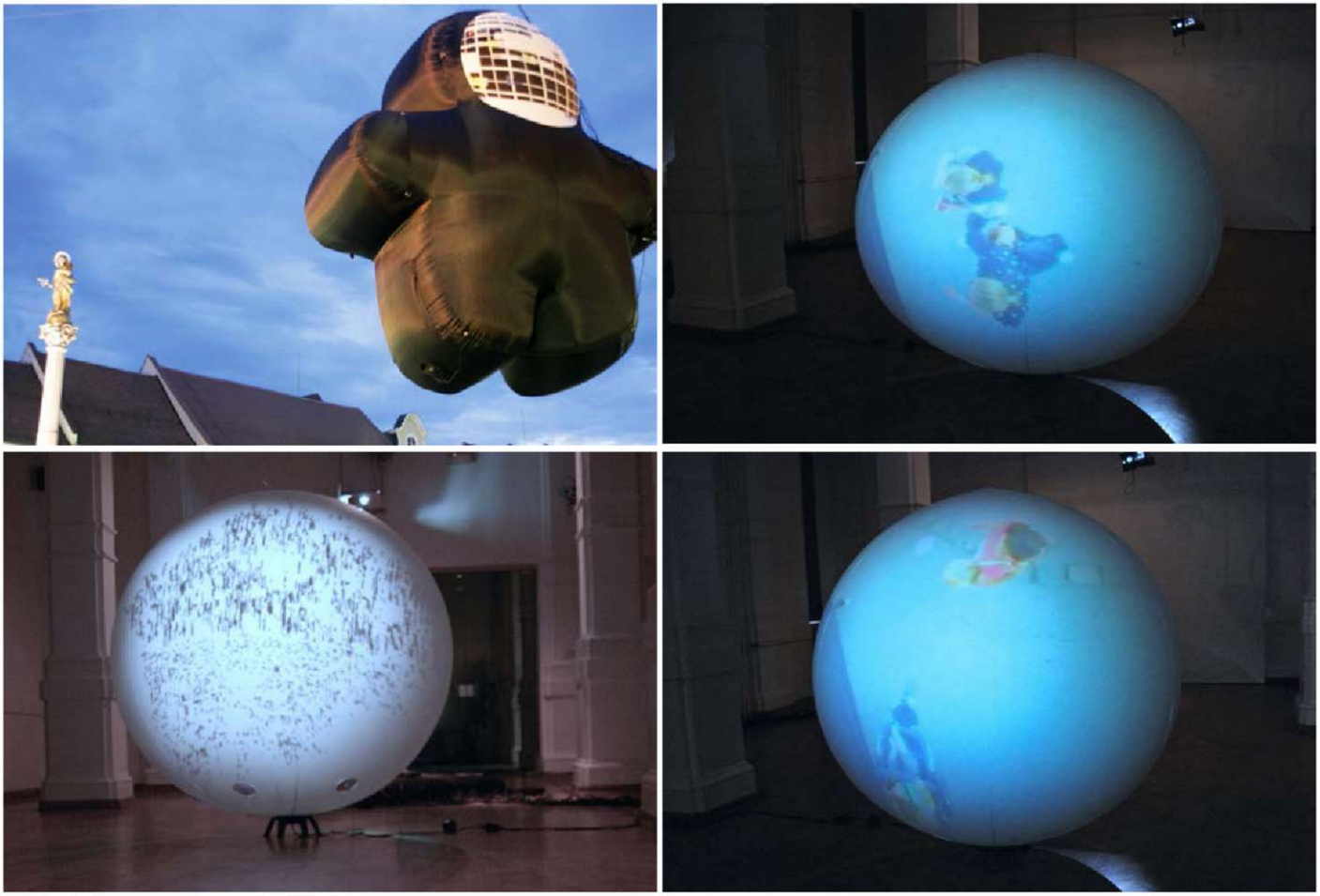

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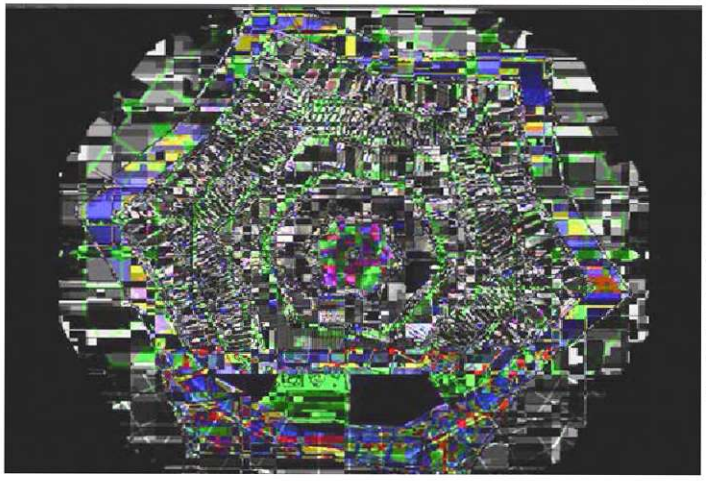
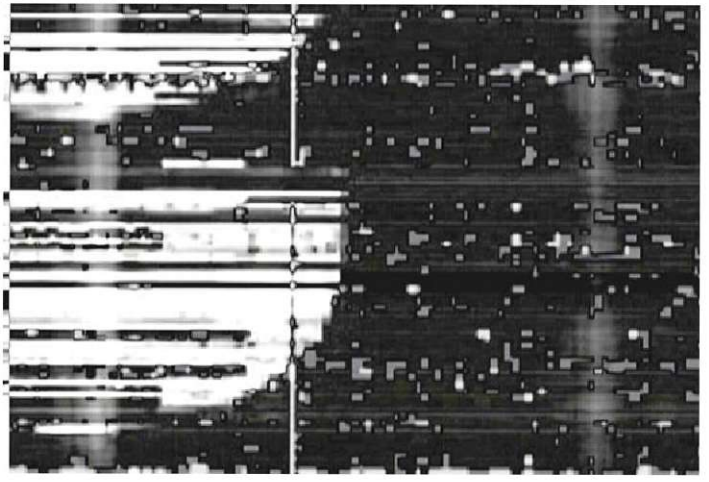
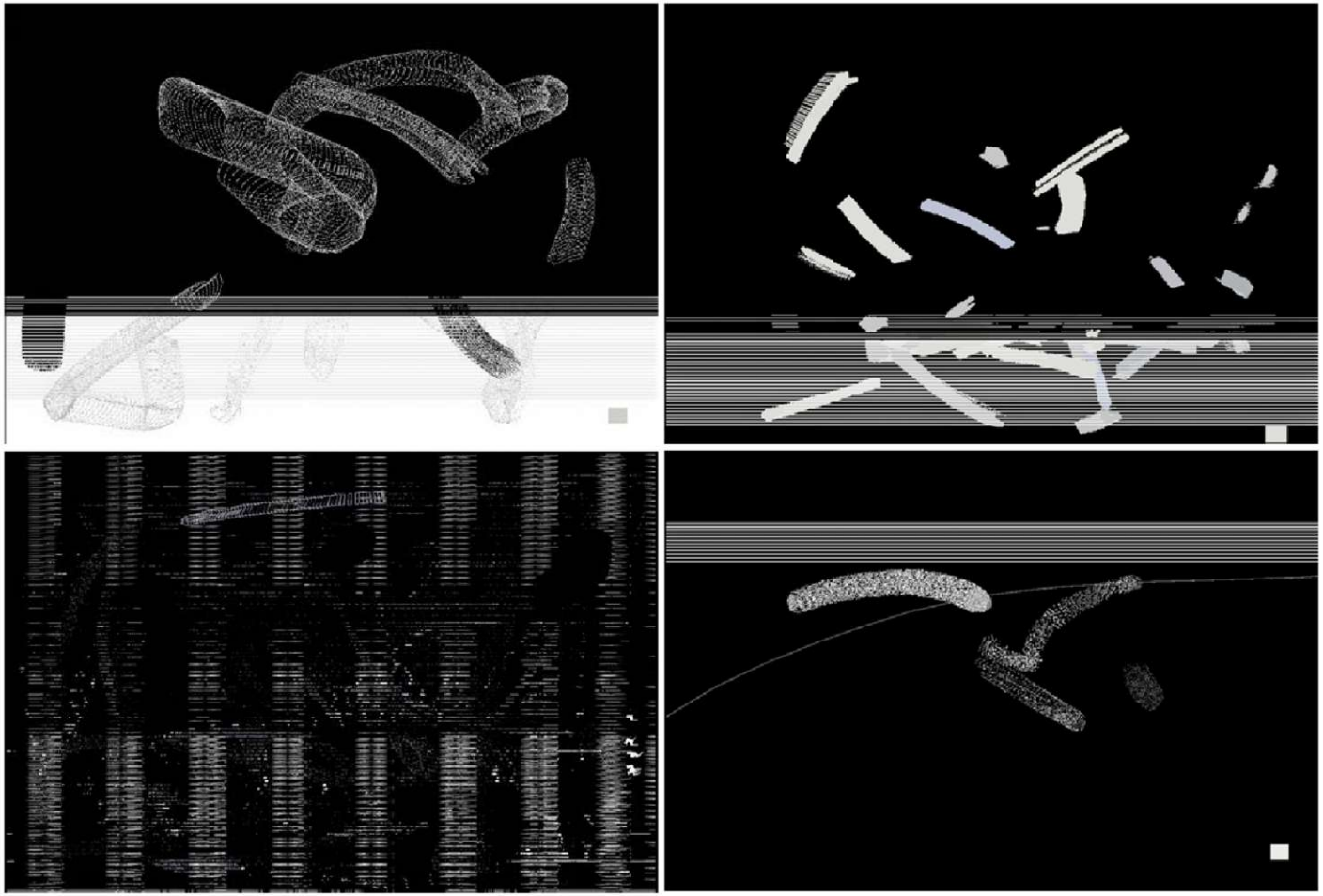
Gallery Kibela (MMC Kibla), and the Main Square, 2009, Maribor, Slovenia.



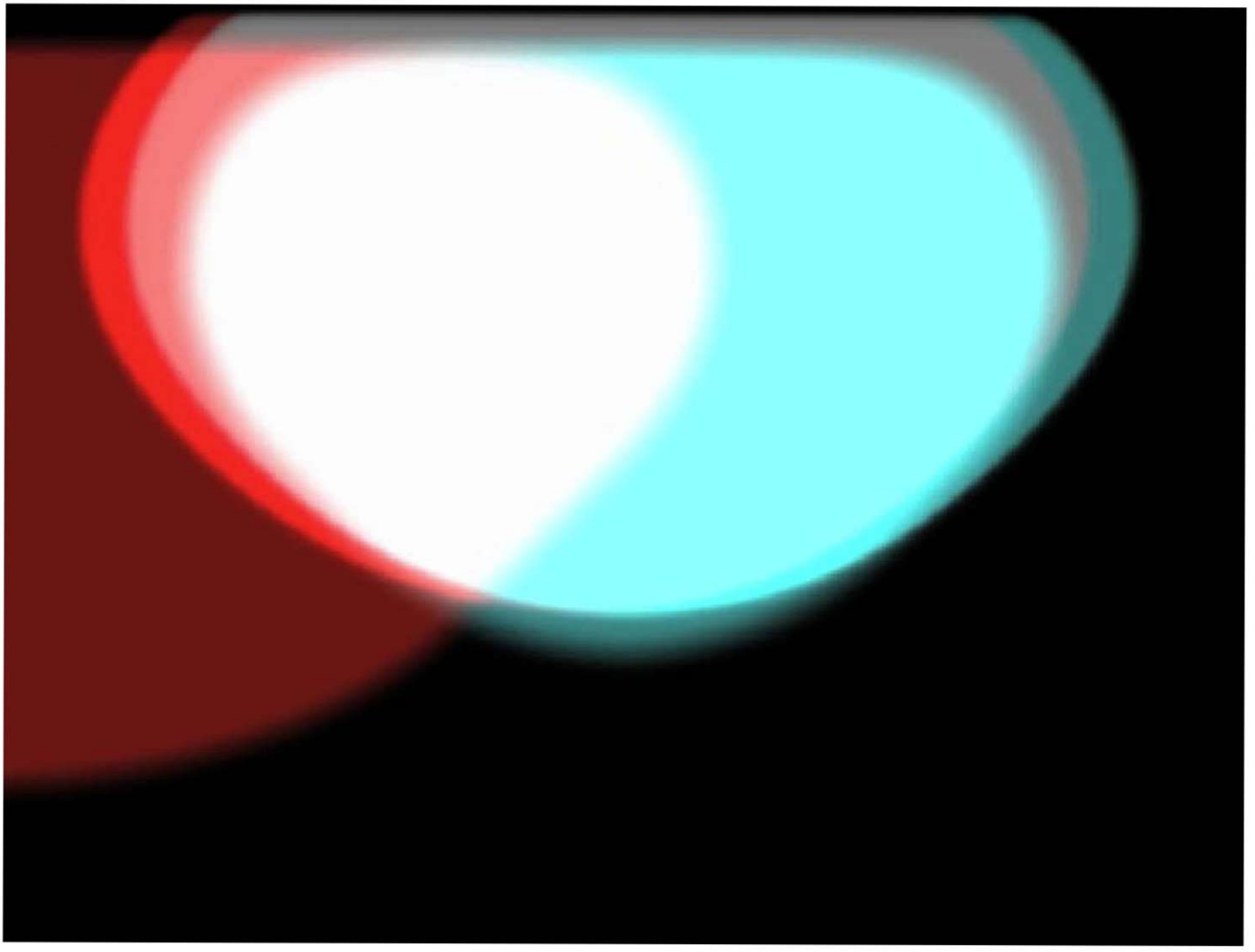


EXTAGRAM/OSCILO
Tanja Vujinović
Compilation of audio-visual works
Format: DVD PAL
Publisher: Ultramono (exstat), 2008.

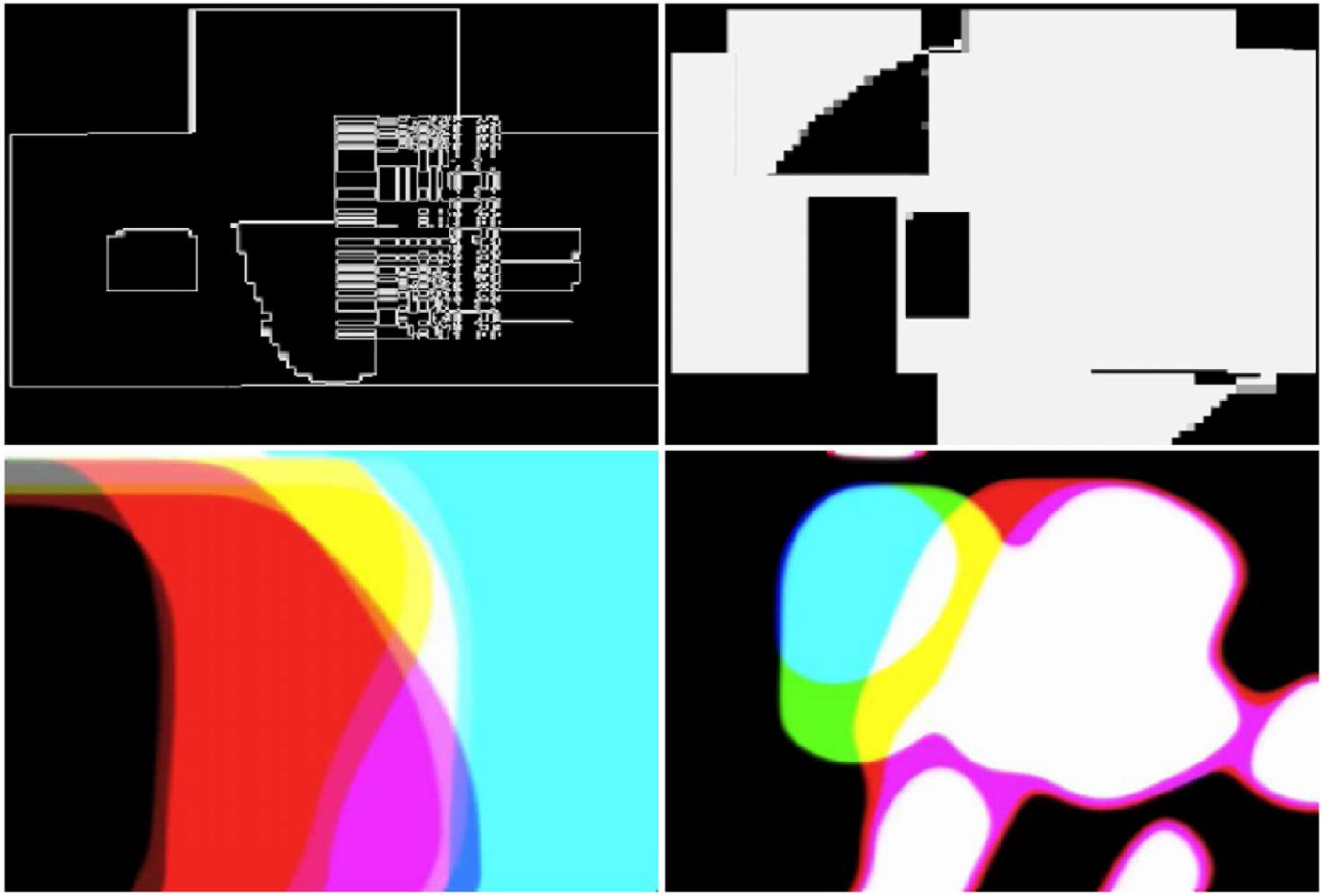
D.E.I.N.D. STUDY #12
Tanja Vujinović
Series of four digital prints, vinyl on a stretcher frame, 700 x 500 mm each
Production: Jan Kušej, Ultramono, 2010.



DEIND STUDY #13
Tanja Vujinović
Custom-made software, sound
Production: Jan Kušej, Ultramono, 2010.



PULPA
Tanja Vujinović
Pulpa.rgb, Audio-visual installation (computer, custom-made software, video projection and loudspeakers), 2011
Pulpa.bw, Audio-visual installation (computer, custom-made software, video projection and loudspeakers), 2011
Pulpa.rgb.2, Video work, 2:32 min., 2010
Production: Jan Kušej, Ultramono, 2010.



Pulpa
Tanja Vujinović
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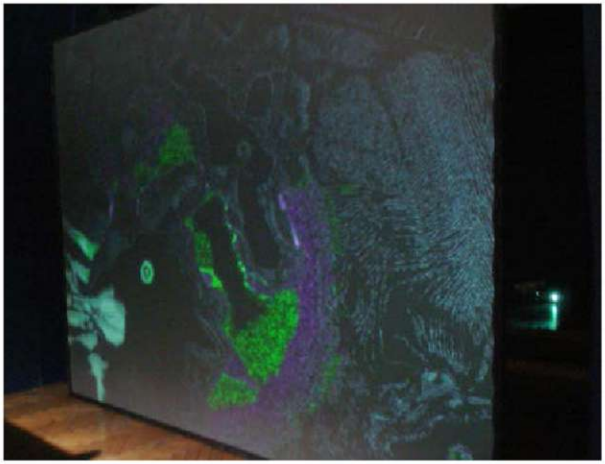

SUPEROHM
Tanja Vujinović
Objects, loudspeakers, video projection, custom electronics, custom-made software, computers, live video and sound processing
Production: Jan Kušej, Ultramono, 2011.

THE TOUCH WITH TACT – ON THE SUPEROHM INSTALLATION BY TANJA VUJINOVIĆ

Janez Strehovec

The *Superohm* project, exhibited in October 2011 at the Kapelica Gallery in Ljubljana, is part of the *Discreet Events in Noisy Domains* (fifteenth study) series, which first of all means that it is an event, and thereby the participant's intervention in time, and there are also noisy domains – hence the effect of sound is an essential component of the event, which has been a constant in Tanja Vujinović's projects. This event doesn't only imply the temporal dimension; indeed, something happens only if we bear witness through intensive participation, which is, in the case of "Discreet Events", a discreet one. This occurs when things are not just observed – which is characteristic of the spectator's visit to traditional art shows – but rather when an intense and individualised relationship comprising a comprehensive sensory and emotional arrangement is established with them. Such an arrangement presumes the involvement of all of the senses, including touch incorporated in a kinaesthetic dispositif due to the fact that a static engagement of touch does not result in a lot of data. It requires a visitor's/user's circulation in the space of the installation, touching objects in motion, their acceleration and stopping, directing and loading.

What are the objects involved? They remind one of living beings, such as stuffed dog toys, as well as (completely harmless) reptiles and vivacious baby goats. They are fitted with sensors and capable of programmed and random behaviour alike; not smart enough to be real robots and too smart to be considered ordinary toys. They produce sounds (constituting noisy domains) and their movement is incorporated into an artificial life in the sandbox (playground) in which they are placed. They can be divided into three types: the largest and laziest, which are supplied with electricity in the centre of the sandbox, the dog-car toys (if pushed by visitors, they gladly move in a particular direction) and jumpy and tumbling stuffed baby goats, which demonstrate the most life (as if they were sort of spinning tops). Everything that is happening in the sandbox is being recorded by the cameras above, and the modulated shots are projected live onto the screen in the installation's background, whereas the artificial life in the sandbox (based on interactions between various analogue and digital components of the system – objects, spectators, light sources, cameras, controller devices) generates a soundscape that one should listen to as well as try to affect it by the ever new kinaesthetic interventions upon the objects placed in the sandbox-playground. The video and sound maps generated on the basis of interactions between objects, visitors and smart devices produce data streams collected and processed by computer software.

Being a project of new media art, *Superohm* is a challenge to theory due to complex interactions between system components, which lead to artificial life based on hybrid states between the analogue and digital as well as the algorithmic. The components include optic sensors, stroboscopic and LED lights, video cameras, microphones and loudspeakers, computer components and mechanical parts in the stuffed object-dogs, baby goats and reptiles. This installation also features a modular approach – flexible components can be adapted to new settings in other spaces and it is also important that the author herself is a programmer in her projects. However, what the contributor of this text con-

siders a huge challenge is to address the tactile perception established by this work.

Indeed, such perception is essential in order to pave the way from (un)usual sensory experience to intensive event, and hybrid objects in the form of stuffed dogs, reptiles and baby goats play an important role in this. They are dressed in durable, warm and touch-friendly textile (which reminds one of the neo-avant-garde artist Joseph Beuys, who also used warm materials, such as grease, wax and plush) that literally invites the visitor to touch it, caress it, until the eventual, resolute taking hold of these half-alive toys. Not only the kinaesthetic, but also the motor skills, of the visitor/user are addressed, because from the initial (timid) observation of things in front of her (when she first enters the gallery space), she passes on to a considerably more intense and investigative relationship with the environment and the objects within. The visitor/user starts taking away the strangeness from these things, which is accomplished through touch, which allows directness, the experience of materiality and incorporation of environmental components into her body schema (Maurice Merleau-Ponty's concept).

The visitor/user is suddenly interested in the things that are there. She reaches for them and, like a child, enjoys seeing that her activity has produced certain changes in the environment, which demonstrates itself henceforth as being an open and friendly one. In addition to this, she sees her interventions documented in real time in a video projection as well as hears sound changes generated by her interaction with the objects. What is this interaction all about? It is about the visitor/user touching the objects, as well as moving them, directing and redirecting, accelerating and stopping. It is important that the things do not evade the touching hand or seduce it, there are no empty interventions or asides; this is about touches and grasps aimed at amiable and warm surfaces of objects constituting the principal and distinctive part of *Superohm*. A hundred other visitors/users and theoreticians who encounter Vujinović's projects are attracted by a hundred other things (qualities, properties, dimensions), but the author of this text prefers to concentrate on her original as-if-alive objects.

The perception of this project as described above is definitely not the only possibility to enter this installation. Particularly in new media art projects, smart technologies enable a dispositif that makes the artist ask essential and even existential questions. They allow for an opening in space surrounded by atmospheres, which "breathe" questions as if it were *2000: A Space Odyssey*, *Solaris*, *Stalker*, *Blade Runner*, *The Matrix* or *Avatar*. Undoubtedly, some visitors/users of Vujinović's installation may find the tactile and motor entry in it as described in the previous paragraphs totally alien. Due to the complex dispositif produced by this work, they might find this installation enigmatic and emotionally discomforting. There are only a few things clear to them, they feel helpless in front of cameras and sensors, they realise they're being watched and that every step they take in the space is being mapped and monitored. They feel uncomfortable in front of objects in the sandbox; they wonder whether they are alive, half-alive or merely simulations of life?

Superohm is an interactive installation that belongs to the concept of "second technique" (Walter Benjamin's term), which is not based on exploitation of nature and is not accompanied by alienation but rather presumes a playful relationship between human and environment. And due to the fact that it is a technical system, it is clear to the visitor/user that these objects reflect a double nature: they are robot toys (this aspect

of the artificial life in the "sandbox" in particular attracted the author of this article) and simultaneously interfaces allowing the spectator/user to experience a complex system of artificial life also expressed in visual and sound manifestations that generate discreet events of emotional discomfort when the spectator/user confronts a situation she doesn't control and which alienates her everyday perception.

Due to the fact that we insist on interpretation focused on tactile and motor perception, let us note that work with such interfaces in an original way stimulates and forms user' movements that are characteristic of such a configuration of object-toys. A modified force feedback is also of relevance, i.e. the information on the object's resistance after being hit, touched or pushed away, pushed or turned upside-down. The *Superohm* user is stimulated to a hybrid perception that results in an integration of senses in new perceptive forms. As a special example of such profiled perception originating from work with contemporary interfaces and smart devices, we would like to refer to *tactile seeing*, based on the collaboration of sight and touch in real time. The user touches the objects and when she sees this has generated changes in the projected landscape (a visual, live camera-recorded system), she starts a new series of touches, which again produce a visual feedback.

When we touch, the principal data about the object touched is supplied by its geometry; when our fingers follow the contours of a particular object, its geometry becomes a guide for our fingers and palms. The geometry defines the movement of our fingers when they hit upon hollows and protrusions; it will send them either upwards or downwards. Therefore, the zero point of touch is reaching into a void, i.e. in its intention to touch something the organ of touch does not strike against a thing that would resist it or react to its movement directed towards it in any other way. This fact is a starting point for a procedure we might call the seduction of touch – which doesn't occur in *Superohm*, there is no evasion involved, "warm dressed objects" do not resist the user but rather stimulate a cultivated, to a certain extent remote touch, which considers the interface nature of touching. This is a touch (as an otherwise eminent sense of proximity, similar to smell) that doesn't grasp but rather keeps things at a distance; it is a touch with tact. It is afraid of the profanity of grasping, it doesn't want to damage things, it investigates surfaces in motion, it is "grateful" to a thing allowing it to get so close but it doesn't want to directly enter the thing. A touch (in the form of a reticent grasp with tact) thus allows the user to enter Vujinović's installation and provides fundamental orientation in it.

It has already been mentioned that the project allows different readings and different entry points and approaches. When it comes to modular, hybrid and the highest possible complex works of new media art, there are definitely no unambiguous and prescribed modes of perception. The author of this article discovers a lot in this work if entering it from a tactile approach, though a programmer's approach, who would first address the software of this project, wouldn't be any less interesting. A programmer wouldn't apply a tactile approach, there wouldn't be any emotions or atmospheres of the extraordinary, raised by noisy domains; she would only be interested in the code of this project and the arrangement of the hardware components that allow movement monitoring in this artificial environment.

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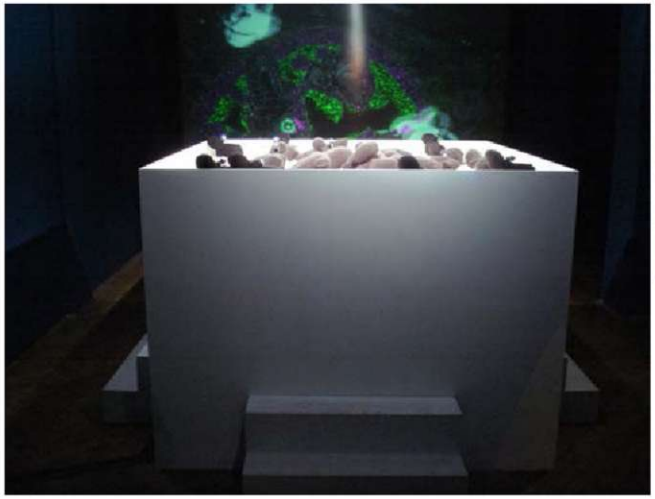
English translation by Melita Silič.

SUPEROHM
Tanja Vujinović
Objects, loudspeakers, video projection, custom electronics, custom-made software, computers, live video and sound processing
Kapelica Gallery, 2011, Ljubljana, Slovenia.



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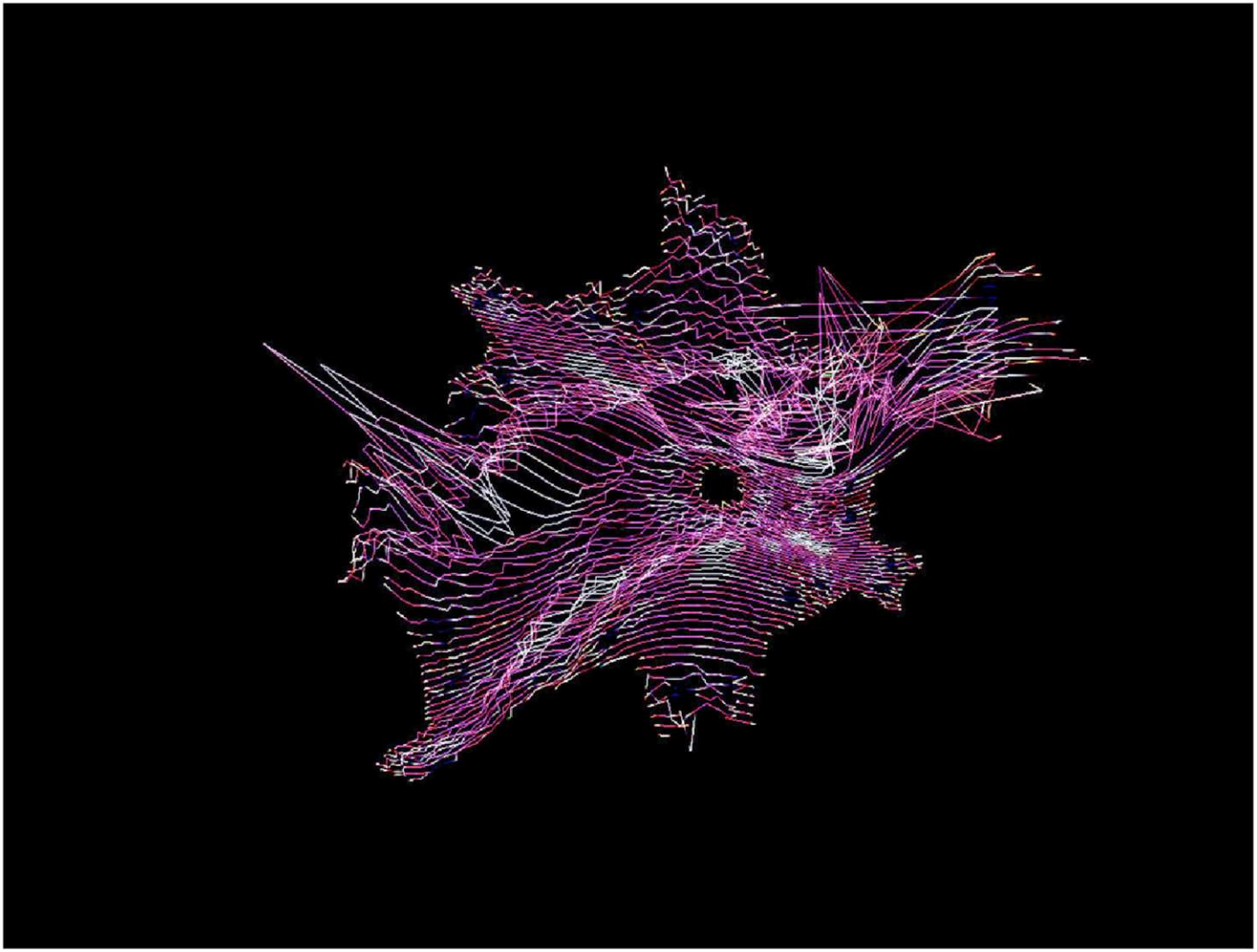
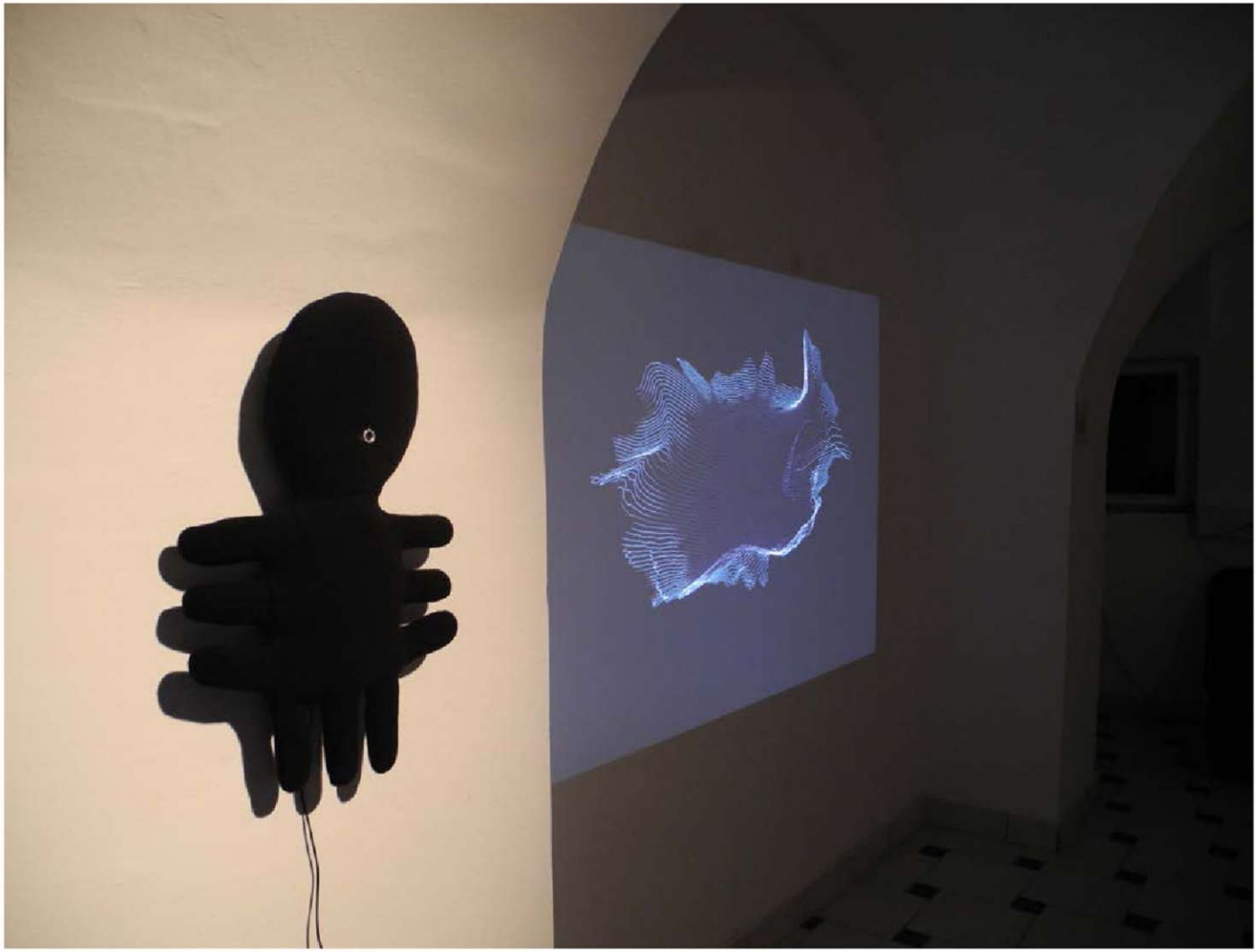


OSKOP
Tanja Vujinović
Object, loudspeakers, video projection, custom-made software, computer, live video and sound processing
Production: Jan Kušej, Ultramono, 2011.



OSKOP
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Object, loudspeakers, video projection, custom-made software, computer, live video and sound processing
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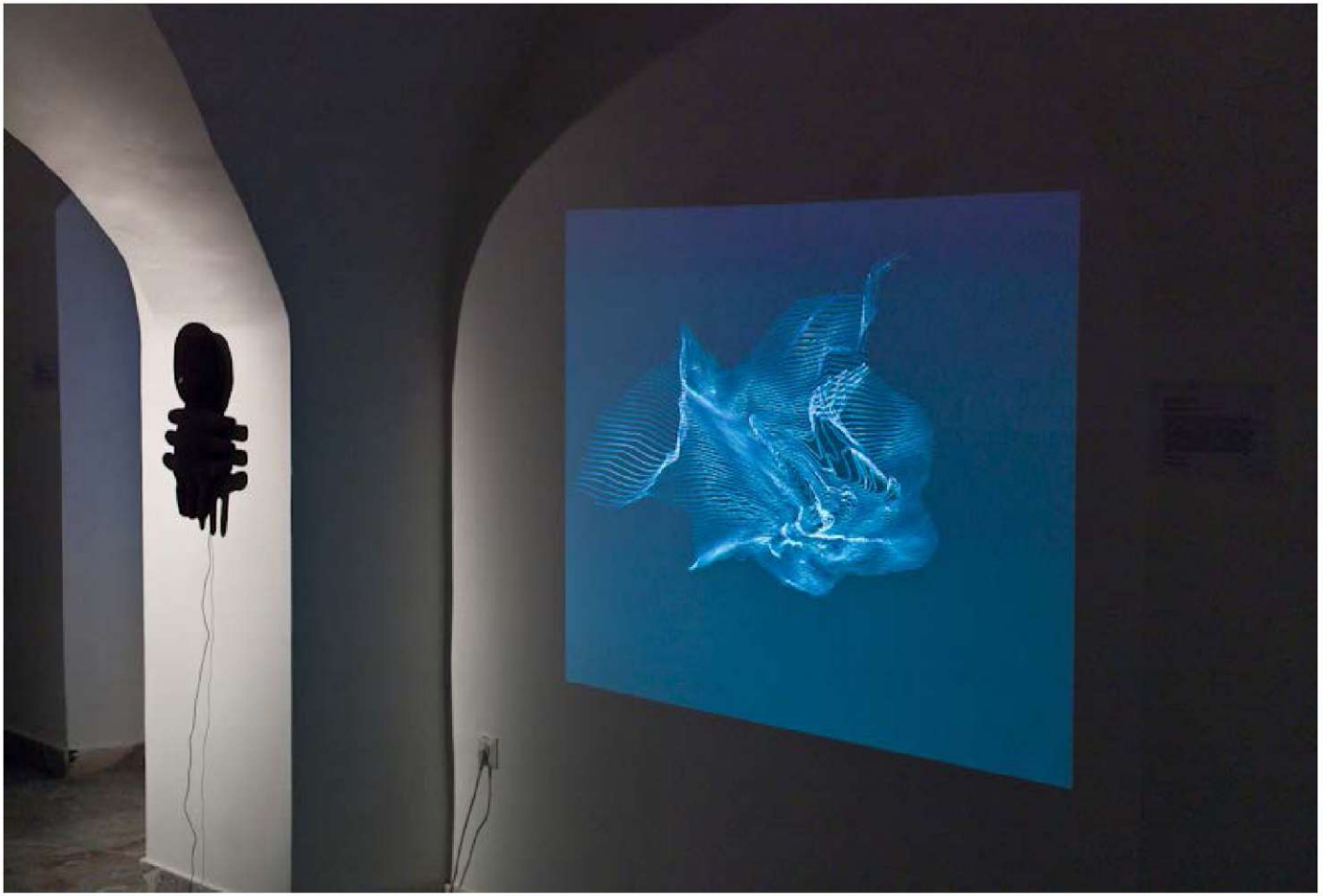

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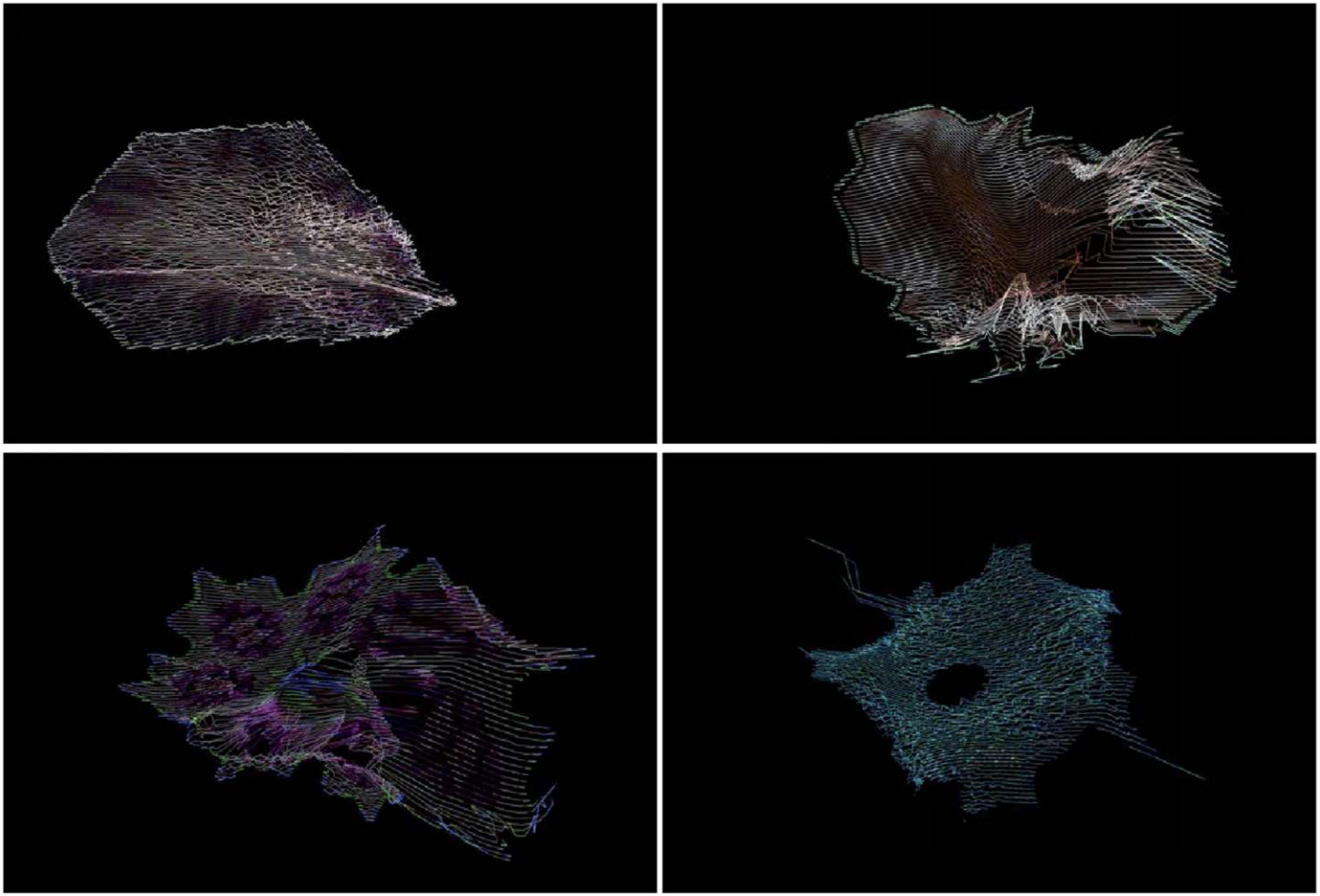

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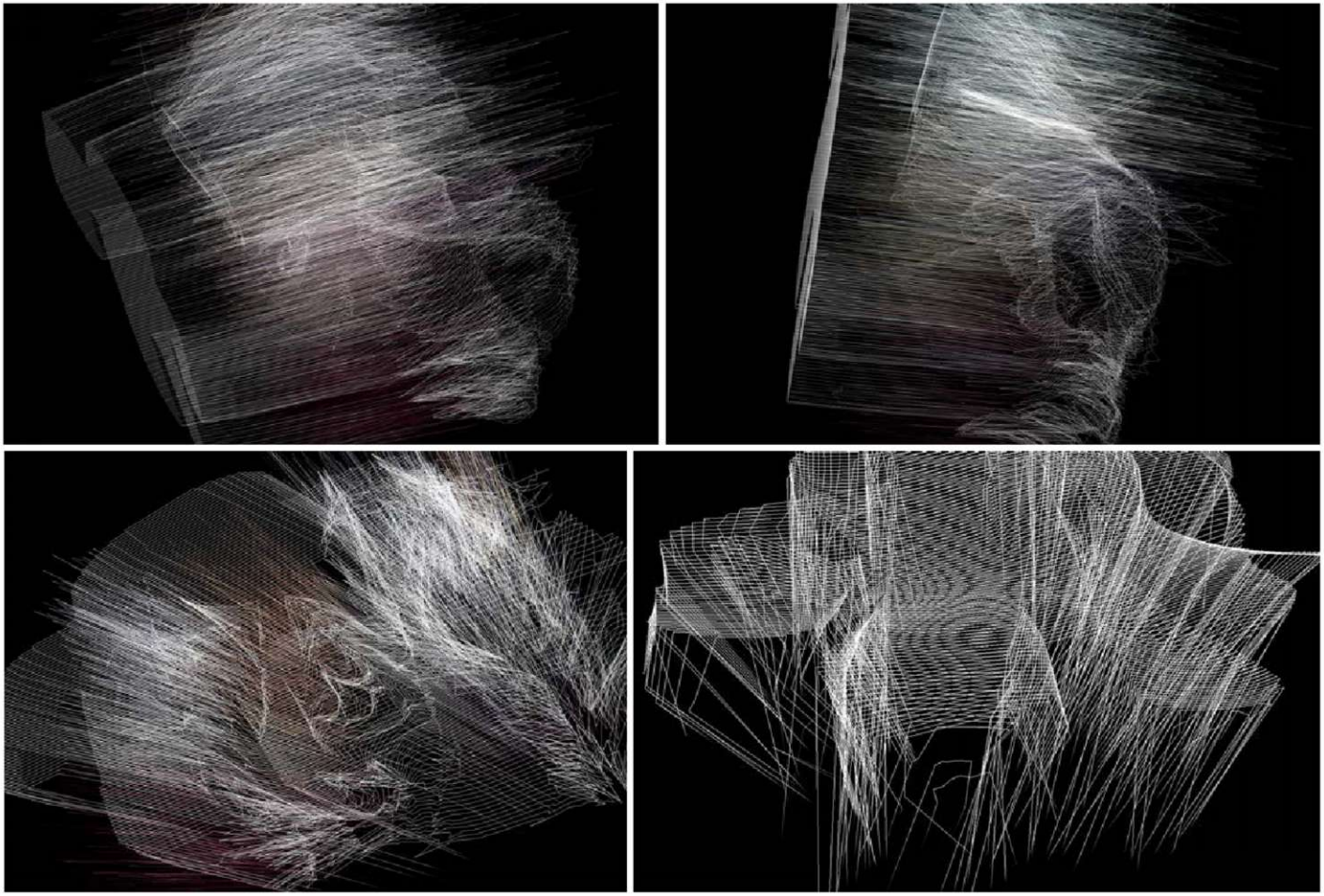
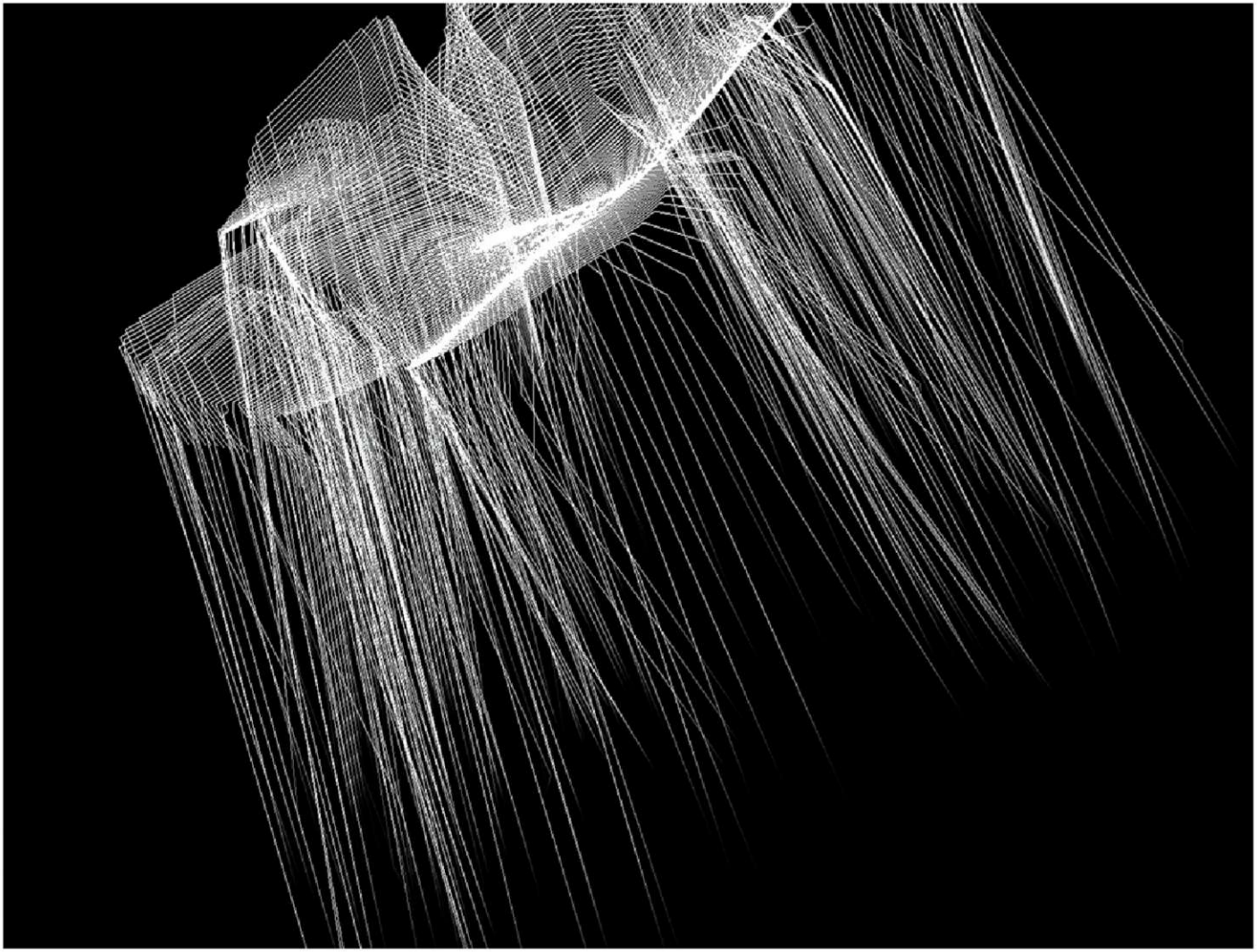


OSCILLON 1
Tanja Vujinović
Object, loudspeakers, video projection, custom-made software, computer, live video and sound processing
Production: Jan Kušej, Ultramono, 2011.

OSCILLON 2
Tanja Vujinović
Object, loudspeakers, video projection, custom-made software, computer, live video and sound processing
Production: Jan Kušej, Ultramono, 2011.



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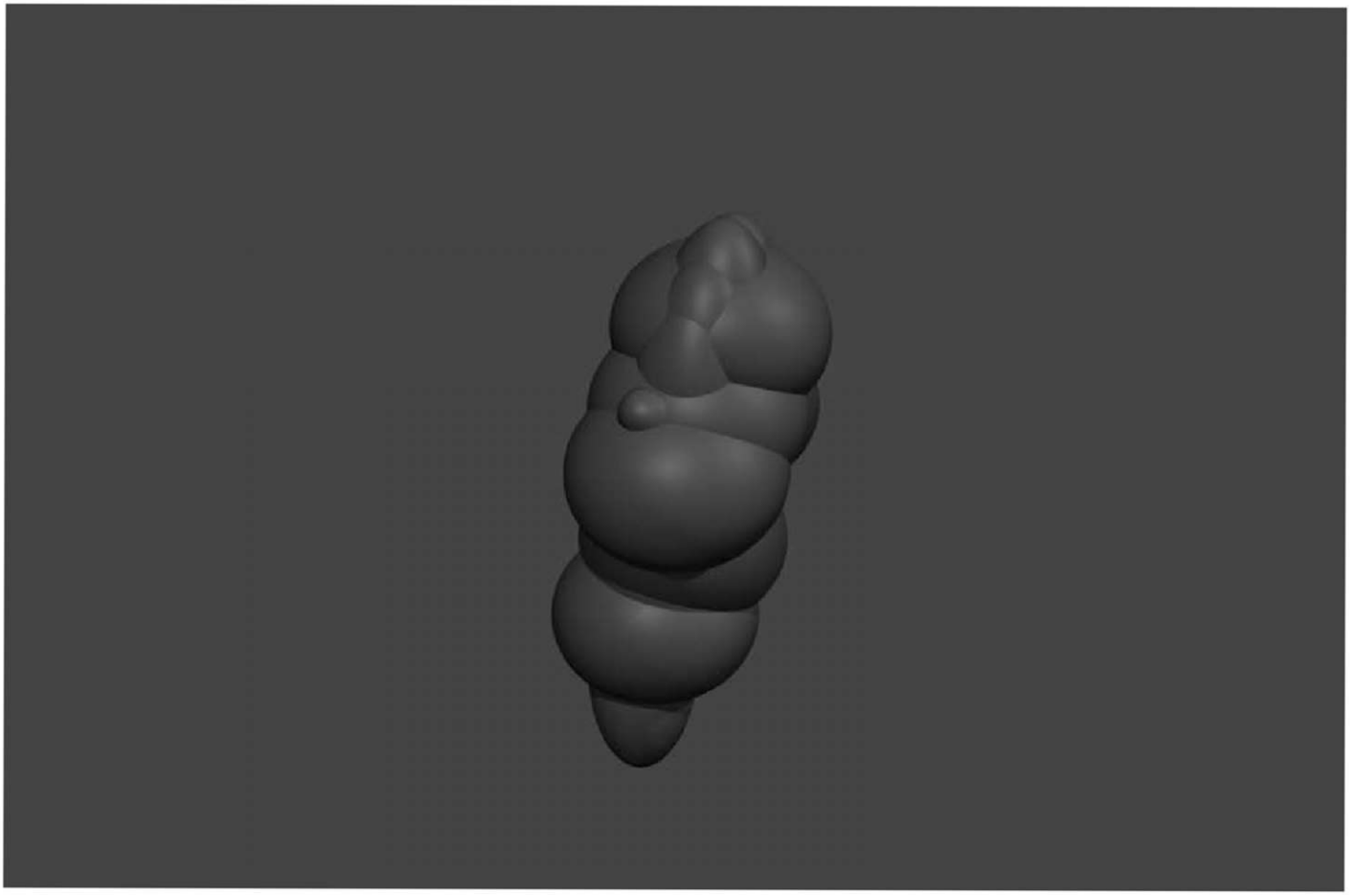
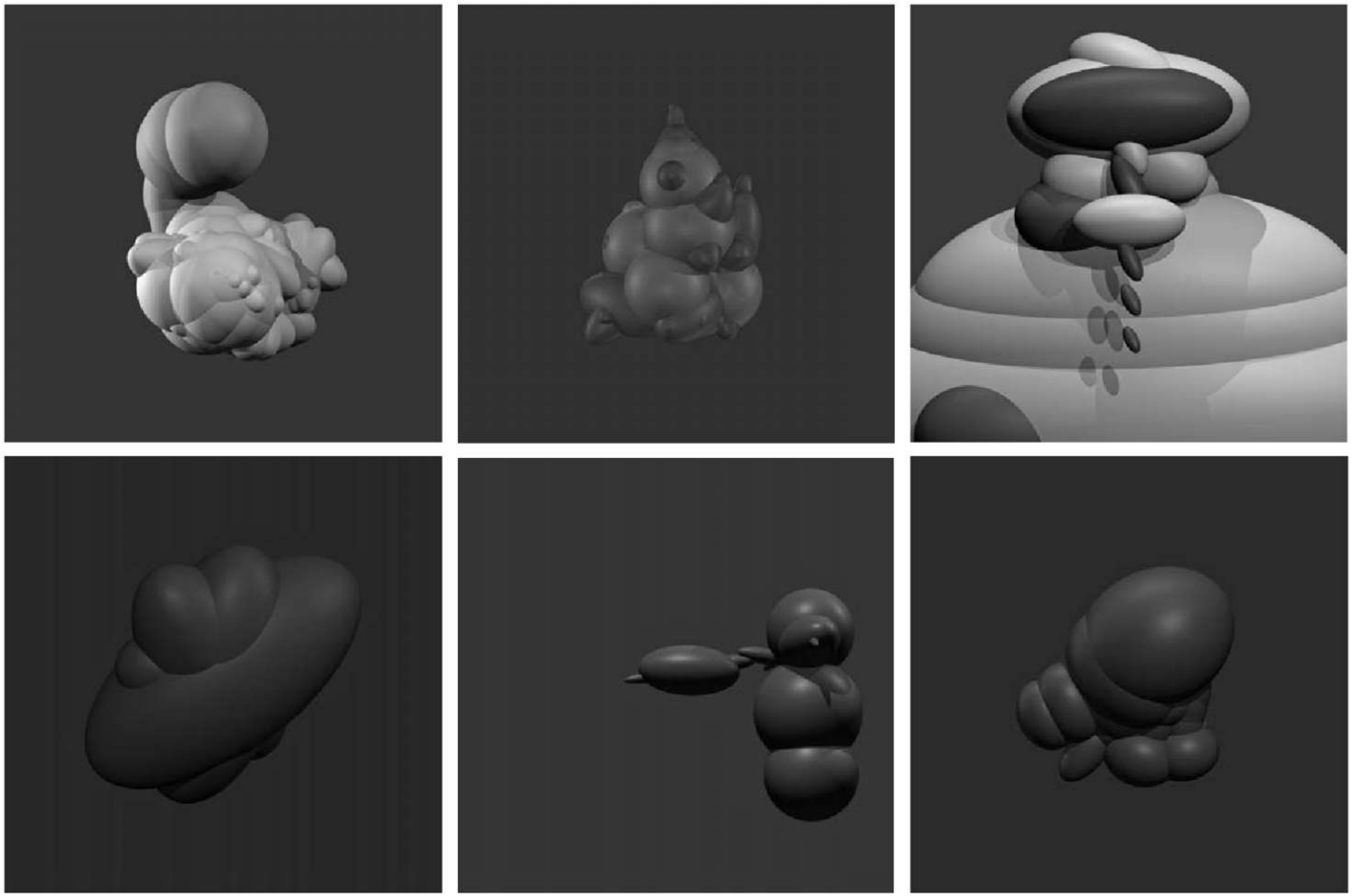
Tanja Vujinović
Object, loudspeakers, video projection, custom-made software, computer, live video and sound processing
Production: Jan Kušej, Ultramono, 2011.



OSCILO 2
Tanja Vujinović
Custom-made software, video projector, computer, loudspeakers, objects, digital prints
Production: Jan Kušej, Ultramono, 2012.



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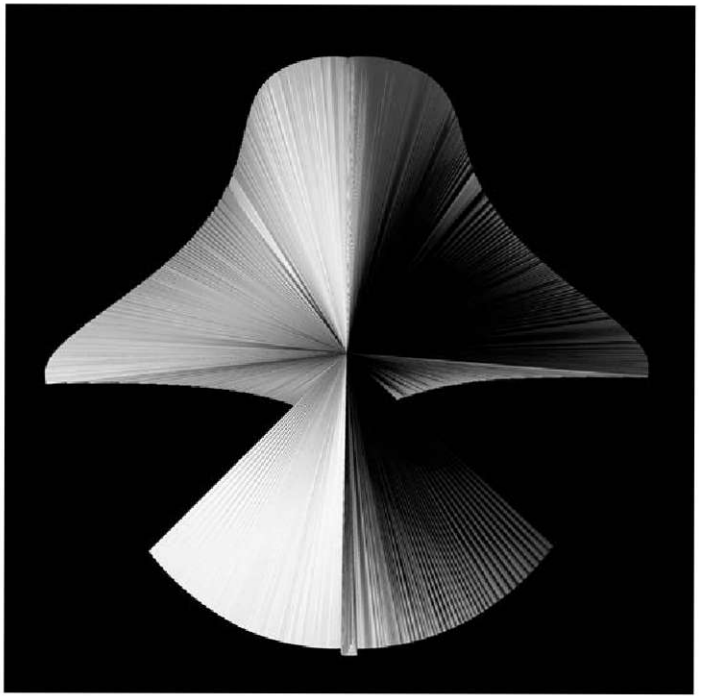
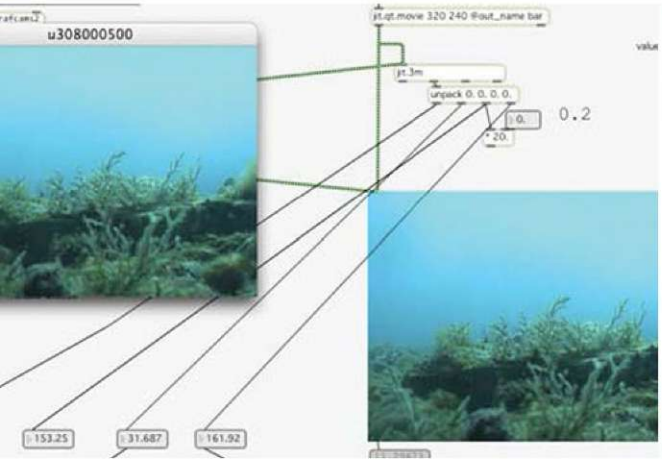
Production: Jan Kušej, Ultramono, 2012.



SUMOGEN
Tanja Vujinović
Series of six digital prints, vinyl on a stretcher frame, 300 x 300 mm each
Production: Jan Kušej, Ultramono, 2012.

OSCILO 3
Tanja Vujinović
Custom-made software, video projector, computer, loudspeakers
Production: Jan Kušej, Ultramono, 2012.



TANJA VUJINOVIĆ (Tatjana Vujinović Kušej, b.1973) is a media artist and researcher in the fields of art and technology. Tanja uses custom electronics, textiles, and various software applications to create playful experiences through dynamic works employing toy-like objects, touch, sound, and visuals. Her Discreet Events in Noisy Domains works deal with the phenomena of chance operations, interfaces, toys, gadgets, noise, and signals.

Her audio-visual works and installations have been exhibited at galleries and museums, such as the Strasbourg Museum of Modern and Contemporary Art, the Museum Kunst Palast in Düesseldorf, the Museum of Contemporary Art - Denver, Kunsthaus Meran, the Medienturm International Forum in Graz, the Cornerhouse Gallery in Manchester, the Istanbul Contemporary Art Museum, and MMC Kibla Maribor. Her works have been presented at festivals, such as ISEA2009, The 15th International Symposium on Electronic Art, Ars Electronica Linz, Kinetica Art Fair in London, the Spor Festival in Arhus, the Zeppelin Sound Art Festival in Barcelona, FILE - Electronic Language International Festival in Sao Paulo and FILE RIO in Rio de Janeiro, among others. She has also presented her work at events, such as the Madrid Abierto in Madrid, Euroscreen21 at various locations, Continental Breakfast in Maribor, and Nuit Blanche in Paris. She has presented her Internet-based works as part of the Ctheory Multimedia's NetNoise, the Web Biennial Istanbul, Helium by Ballongmagasinet and NIFCA, and Sinnlos WebArt.

She graduated from the Faculty of Fine Arts in Belgrade in the year 1999 and has been a guest student at the Kunstakademie in Düsseldorf. She holds a Ph.D in Philosophy and Theory of Visual Culture from the University of Primorska, Faculty of Humanities Koper, Slovenia (Dissertation: Info-Noise Art: Concepts, Tools and Environments of Media Art).

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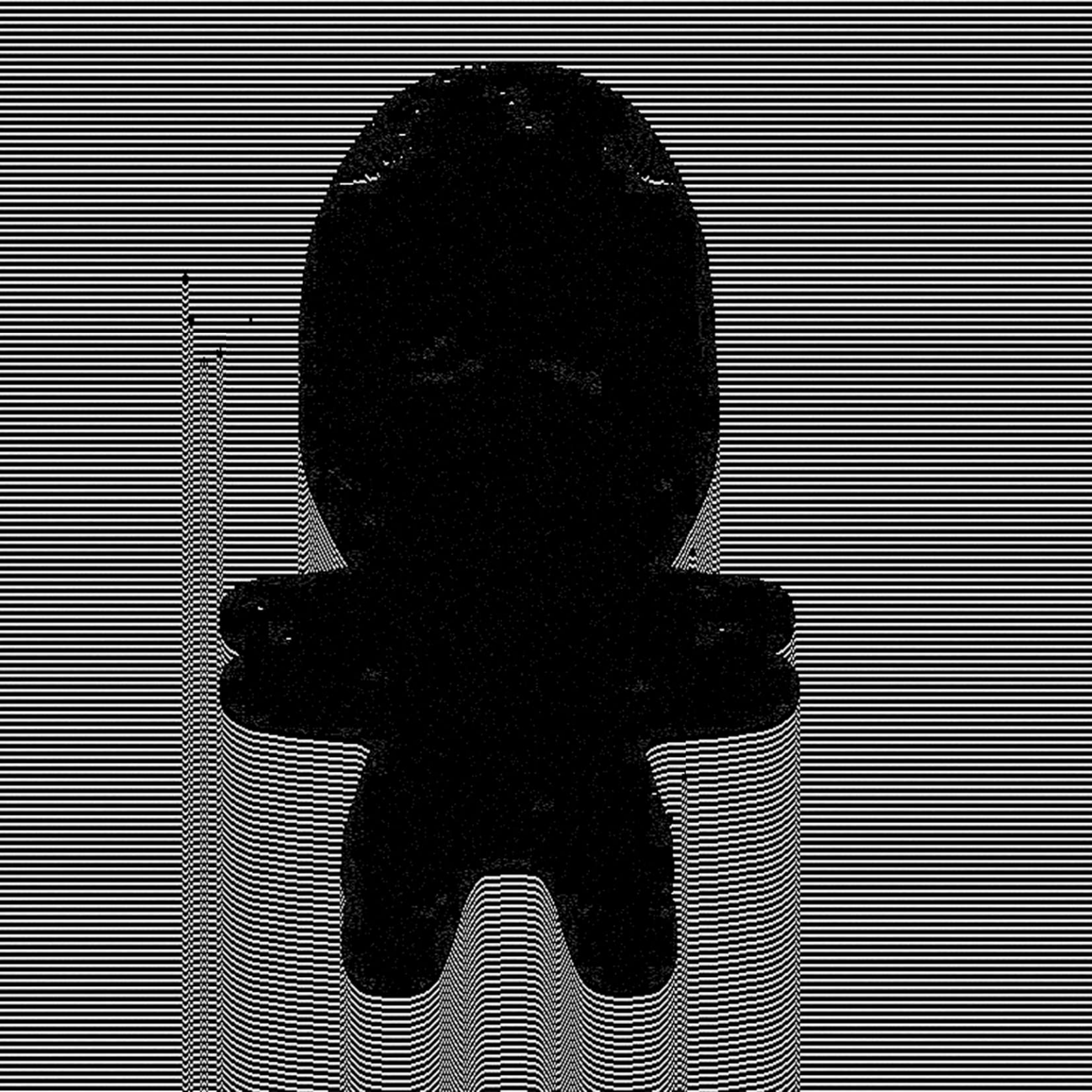
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