Ultramono: generative digital techniques, data visualisation, data sonification, modern electronics and black furry creatures

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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.

[1] Johan Huizinga, _Homo ludens_ , 1971, Beacon Press, London , pg. 13.

[2] Ibid, pg. 9.

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

[3] Tanja Tomažič, *Igrače,* Zbirka Slovenskega etnografskega muzeja, Ljubljana 1999, pg. 12

[4] http://www.ultramono.org/projects/, viewed 2. 12. 2011.

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.