Media art in open urban environment.
Mnemonic traces and new challenges

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Abstract. The proposed paper is in the frame of the discussion about the new challenges, provoked by the so-called media art in open urban environment for the citizens during the last decades. The main objective is to analyse the processes of interweaving of city culture, everyday life and new technologies in the digital era. The approach is interdisciplinary, complemented by the methods and scientific apparatuses of the key humanities and social sciences, media studies, communication theory, cybernetics, etc. Some outstanding artists and works are put in focus as well as the project *One Person* of the Bulgarian artist Venelin Shurelov from 2020, which is given as an example of high-tech installation challenging the mnemonic problems of the past and the current city life. It was temporary situated in the centre of Sofia at the place of the demolished Georgi Dimitrov's Mausoleum in 1999.

Keywords: digimodernism, digital person, digital mummy, city culture, media art, mnemonic traces

The paper discusses the topical problems of the new challenges, provoked by the so-called media art in open urban environment for the citizens during the last decades. The main objective is to analyse the processes of interweaving of city culture, everyday life and new technologies in the digital era. The approach is interdisciplinary, complemented by the methods and scientific apparatuses of the key humanities and social sciences, media studies, communication theory, cybernetics, etc. Over the last half century new concepts have been forged,

which are reflected in innovative art practices including *transhumanism* as biotechnological development of human beings (Huxley 1957; Vita-More 2003; Hughes 2002); *hybridization* as ongoing blending of cultures, arts, media and technologies (Said 1978; Bhabha 1994; Stockhammer 2012); *posthumanism* in the sense of existing in a state beyond human existence (Nichols 1988; Haraway 1991; Pepperell 1995; Halberstam, I., Halberstam, J. 1995; Hayles 1991); *cyborgism* as creation and addition of new senses to the body via cybernetic implants (Kreps 2007); *digimodernism* as post-post-humanism in the digital era (Kirby 2006, 34-37; Kirby 2009; Kirby 2010; Spassova-Dikova 2020). A Bulgarian example is in focus. This is the brand new project *One Person* of the Bulgarian artist Venelin Shurelov. It was realized in 2020. The problems are discussed in the context of the new researches in the field of e-Infrastructures and open access to digitized cultural and scientific heritage, interactive systems in cultural and creative industries and others.

Media art in open city spaces in the context of digimodernism

Some of the main ideas of contemporary art and in particular reactions to technology were developed by Norbert Wiener in his cybernetics theory (Wiener 1985), by Marshall McLuhan in his media theory (McLuhan 2003), by Jack Burnham in his Systems Esthetics (Burnham 1968), and others. The Media Art is bounded with the names of Nam June Paike; Kit Galloway and Sherrie Rabinowitz and their telecommunications projects; with Ben Rubin and Mark Hansen's eavesdropping program; the visual projects of Carsten Nikolai; Jim Campbell's LED diode installations, and others.

Fig. 1. Nam June Paik. *Artwork 1*, Exhibition *Becoming Robot*, Asia Society, New York, 5 September 2014 - 4 January 2015

Nam June Paik is considered the "father of video art". He was a Korean visionary artist, thinker, and innovator. He used video technology and blurred past distinctions between science, fine art, and popular culture to create a new visual language. Paik's interest in exploring the human condition through technology and science has created in a way a new media art and influenced a lot of artists who use various forms of technology in their works (Nam June Pike) (Fig. 1).

The pioneers in satellite-based telecommunications art Kit Galloway and Sherrie Rabinowitz already from the 1970s onwards developed a series of ambitious projects that allowed communities and publics to come together and express

Fig. 2. Kit Galloway, Sherrie Rabinowitz. *The Electronic Café International*, 1992

themselves across geographical distance. These included *Satellite Arts Project* (1977), which connected performing artists in multiple locations to create live dance and music together via satellite; *Hole in Space* (1980), *Electronic Café* (1984), which aimed to connect people on the streets of New York City and Los Angeles through a vivid, life-size streaming video installation, and others. They also established *Electronic Café International* (ECI) (1989-2013), which was a café, networking centre, performance and workshop space and art hub in Santa Monica, California. Galloway and Rabinowitz are recognized as early media visionaries whose work ushered in a new era of interactive practice which is still evolving based on their pioneering work. They foresaw a world of increasing reliance on telecommunications infrastructure and looked for a new way for increasing the social and cultural possibilities of networks for people (Electronic Café International Exhibition & Residency: 1989 - 2013; Galloway, Rabinowitz 1992) (Fig. 2).

Other artists from the new century, who inspired a lot of media art projects, are Ben Rubin and Mark Hanson. Of special interest is their installation *The Listening Post*, composed of over 230 electronic displays set into a grid onto a curved wall. It offered an innovative way of including real-time data into art for the time at which it was conceived in 2001 and had a major impact on the new-media art field dealing with data visualization and sonification. It is a real-time visualization of thousands of ongoing online conversations. The screens display random words picked from these conversations, and these words are pronounced

Fig. 3. Ben Rubin and Mark Hansen. *The Listening Post*, 2001

by a text-to-speech program as they change, all overlapping and creating strange harmonies. With each changing word comes a clicking sound, adding to the sonic landscape of the piece. A last layer of sampled sounds and dreamy musical compositions match the action on the screens. In fact, it is primarily a sonic piece. Ben Rubin explains that he sees this piece as collaborative storytelling in which people engage without being aware of it (The Listening Post) (Fig. 3).

Over the past decade, Carsten Nicolai, who also works across sonic and visual media, has sought to create all-encompassing sensory environments where sound and light frequencies become indissociable; sound is visualized and light made audible. Scientific reference systems and mathematical patterns, including grids and codes, error and self-organizing structures, all find expression in his minimalistic audio-visual compositions. He shares: "Does mathematics really exist or is it an abstraction that we have invented in order to explain ourselves? I think this is perfect for how I see art". Notable projects include *α (alpha) pulse*, part of Art Basel Hong Kong 2014, which generated a pulsating light pattern across the entire facade of the 490-meter-high International Commerce Centre (Nicolai 2014) (Fig. 4).

Jim Campbell is an electronic-media artist whose work combines film, light emitting diodes (LEDs) and sculptural elements. He is a computer engineer who became a filmmaker and later moved to interactive video installations in the mid-1980s. He has been working with LEDs - light emitting diodes - since 1999. In his art Campbell offers ephemeral traces of visual information to tap into a rich vein of emotional and aesthetic content. His materials are complex, and he uses them to create imagery that is allusive and open-ended. His investigations with LED technology have produced immersive, illuminated, sculptural environments that vividly record and recalibrate the presence of time in relation to light, space, and the human condition. Simultaneously shifting the viewer's perception through works that synthesize acts of observation, reflection, and engagement in an all-encompassing pictorial realm, Campbell deconstructs

Fig. 4. Carsten Nikolai. *α (alpha) pulse*. Art Basel Hong Kong. Photo: Art Basel. Courtesy Galerie EIGEN + ART Leipzig/Berlin, Pace Gallery and Studio Carsten Nicolai

Fig. 5. Jim Campbell. *Swirl*, 2016

these grand optical illusions by revealing the mechanisms at play. He uses arranged light-emitting diodes (LED) to suggest movement and recognizable figures. Among his projects are *Exploded Views Series* (2011-2012); *Home Movies* (2014); *Topography Reconstruction Wave* (2014); *Light Topography Wave* (2014); *Scattered* (2016-2017); *Swirl* 2016; *Topographic Wave* (2019), and others (Jim Campbell) (Fig. 5).

There is a Bulgarian example of media art project in open space realized by Venelin Shurelov named *One Person*. It was installed in the centre of Sofia in 2020 and was there for a year and a half. The artist shares that his work is inspired by many artists among whom he points out Pike, Galloway, Rabinowitz, Rubin, Hansen, Nikolai, and others (Shurelov 2020).

The Project *One Person*

One Person is a pilot project under the programme *Outside* of Sofia Municipality for temporary art installations in urban environment. The high-tech interactive installation is a live system, an anthropomorphic modular 8-ton steel structure with a height of 13 meters with 42 LED screens located on both sides. The electronic body broadcasts dynamic visual content, generated via a specifically developed computer algorithm that combines video-surveillance, data-analysis, and AI-generated text (Shurelov 2020; Chalakova 2020; One Person - Urban Electronic Corpus 2021).

Fig. 6. Venelin Shurelov. *One Person*, 2020

The visual content includes footage from everyday life on *Knyaz Alexander Battenberg I* Square and data about Sofia. The images generated by a computer algorithm represent a reflection of the city in real time. It suggests to the citizens and guests of Sofia city a new experience of media digimodern art in open urban environment (Fig. 6).

The work has a predetermined temporal character and is created on the basis of certain preliminary technical conditions and parameters. Apart from having its own time frame, the work was presented to the demanding Sofia audience at one of the key points in the city - the former party leader Georgi Dimitrov's Mausoleum, where his body was kept for many years. The place remained empty after its demolition in 1999 (Fig. 7). It is important to outline that the installation *One Person*, which dominated this public space for a while, is not a specific historical figure, but a composite of an ever-actualizing multitude of random by-passers or intentional visitors. The interactive element gives the opportunity for game interaction and why not even acute social messages about the past, present and future (One Person - Urban Electronic Corpus 2021). In this respect, *One Person* is much more than a polemical image accidentally placed on the ruins of a long-gone ideological dispute.

As a conceptual artist Venelin Shurelov through the years has been worked on several projects such as *Fantomat* (2009), *Man ex Machina* (2011) and *Rotor* (2016), which aimed to achieve certain hybridized biorobotical man-machine creatures (Spassova-Dikova 2014, 271-289; Spassova-Dikova 2020, 143-144).

Shurelov experiments were in the field of the so-called *subhuman theatre*, following the ideas of Natasha Vita-More in her *Transhumanism Art Manifesto*

Fig. 7. The demolition of Georgi Dimitrov's Mausoleum, 1999

(Vita-More 2003) and *Primo Posthuman* project - 2004 + (Vita-More 2018). In his first installations the machine (automat) was animated to become more human. These creatures talked and had some feelings. Shurelov's performance *Rotor* from 2016 already aims at extension of the human being with the machine in a certain symbiosis and hybridization (Shurelov 2016). In 2020, he created his latest interactive installation *One Person* using the new discoveries of AI.

The functions of *One Person* could be grouped in several modes. The first mode is connected with a signal coming directly from two cameras placed on both sides of the figure, marked with a red and a blue point. The cameras take turns in broadcasting their footage every minute and make a 10-second recording, which is uploaded as a fragment on the screens. That way, the large "screen body" seems to consist of multiple media cut-outs of reality, visual scratches of randomly passing-by people, meteorological conditions, light flickers, shadows, turning it into a self-actualizing digital graffiti. Every full hour the system displays a live signal of the cameras giving the opportunity to the viewer to place his/her whole silhouette in the full scale of the figure (Fig. 8).

The second mode is generated through data analysis. Technology-wise this is the most innovative part of the project. This mode is about computer-operated systems connected to infrastructures and environment, large amounts of data collected in real-time through sensors, the formation of a new information space called Big Data. *One Person* functions via a program code, which collects, analyses, and visualizes information about the city, its dynamics, the quality of the environment, and so on. The visualization and

Fig. 8. Venelin Shurelov. *One Person*, 2020

interpretation of this information as an artistic material is the "electronic tissue" *One Person* consists of.

Finally, *One Person* has a voice. Its speech is formed by news titles from six websites selected before-hand that give it themes, such as politics, economics, technologies, urban lifestyle, arts and culture. With hacker methods, it searches through the news flow on a daily basis and suggests its version of the titles to the content moderators. The acquired sentences are interpreted by an AI component (machine learning) and syntactically converted into the first person singular. That way, the newly formed statements of *One Person* connect it with the global information flow and at the same time express its "personal" thoughts, decisions, actions, conditions. The creator Shurelov shares: "Usually, the art work does not make decisions on its own. *One Person* is an example that the art work could slip out of the author's control" (One Person - Urban Electronic Corpus 2021).

According to his creator, "*One Person* can be interpreted as a special kind of theatrical event. It is a large body that takes in many other bodies. The figures composing it are actors with various motivation and role. They often look embarrassed as called on the stage casual spectator. Others find this stage-public instrument as natural extension of their digital stretching in the network. A kind of another media mirror. There are also some who see themselves enlarged, technologically overexposed, rescaled in the urban environment, and this turns out to be an incentive for action... cult action. I sometimes call *One Person* "media extension". For extensions, we know that they help a lot in strengthening our own significance and are an important factor in our culture development. If the theatrical behaviour in front of *One Person* has a basis in some archetypal human nature, then this is the phenomenon of focused attention. 'Under the spotlights', as this phenomenon of the stage playground in the cinema or theatre is called" (Shurelov 2021, 204). The space around *One Person* in the agora, in the heart of the city presupposes certain exposure, exhibition of the passers-by involving them in a kind of theatrical performance (Fig. 9).

The case of *One Person* is an explicit example of the new digimodern hybrids where man and machine, inner and outer worlds, human and AI, past and future are combined. As the author himself defines it, *One Person* is a living system, a collective body, a constant self-actualization, a public and media space, video and dataveillance, datificated interaction, a consequence, a human-computer symbiosis, a coexistence, a

Fig. 9. Anyone could be *One Person*. Photo Joanna Spassova-Dikova, 2021

relentless mirror, digital graffiti, *Homo Arbiter Formae* (One Person - Urban Electronic Corpus 2021; Shurelov 2022).

Resembling a giant in the stereometric form of a cross or ark *One Person* also in a way looks like a digital mummy at the place of the ex-mausoleum, reminding about the past, mirroring and digitalizing the present life to be preserved for the future.

May be this a bit scary inorganic intelligent *One Person* is to remind us about life and death, up and down, here and there, temporary and eternal thus affirming life.

As the original Greek-Australian artist Stelarc (Stelios Arkadiou), who focuses mainly on extending the capabilities of the human body, claims: "The dead, the near-dead, the brain dead, the yet-to-be born, the partially living and synthetic life all now share a material and proximal existence, with other living bodies, operational machines and executable and viral code [...] The body is no longer merely an object of desire, but rather an object that requires redefining and redesigning. At a time of digital contamination of the body's microbiome, what it means to be human is perhaps not to remain human at all. What artists do best is to generate contingent and contestable possibilities - possibilities that can be experienced, interrogated, evaluated, possibly appropriated but most likely discarded" (Stelarc).

In conclusion, I would like to argue that such new forms of interactive digital art really impact our human beings. They attack our minds. Sometimes they are shocking with their automata, artificial intelligence coldness and lack of feelings, negotiating the real life. On the other hand, they could provoke our memory, combining our past, present and future. Moreover, I affirm that the new technologies, especially used in art, expand the human possibilities, facilitate the mnemonic power and the life sources of the globalized world. Ultimately, art has always used technological innovations in the sake of improving, reflecting, exposing, affirming and preserving life. *Ars longa, vita brevis*!

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