Abstract: It becomes clear that new media begin to function as multiplicators of new worlds, creating numerous virtual environments. This diversified, compound reality in many ways takes a shape of a network. New media art in this field of events has various functions. From one hand, it is one of the most refined instruments in the process of networkisation. From the other hand, it is also the tool of verification for these processes, critically but without prejudice evaluating its development, attentively observing what shapes do they took, as well as their real or possible results. In each case, new media art is an active participant of these processes, making full use of possibilities provided by the network system. Frequently while performing its activities it is intersected or linked with the processes which are a part of the world of science, creating together with them new cultural paradigm. Monika Fleischmann and Wolfgang Strauss undertook their joint, creative actions in combined fields of art and science in late 1980s. It was a special moment of a breakthrough for the formation of the character of modern civilization. Events taking place back then, as being a part of a sphere of phenomena generated by communication and information sciences, had enormous influence on the process of shaping a new cultural formation – cyber culture, and because of this, at the same time, had enormous influence on our ways of reality perception. From the beginning of their cooperation, Fleischmann and Strauss have found the tools appropriate for the realization of their works in the environment of the internet. Their art has developed in parallel to the development of computer and internet environment, depicting dynamics of this network and inscribing, with the undertaken issues, in the circle of problems generated through out a development and transformations of accompanied cyber-cultural concepts.

Keywords: cyber-culture, digital media, social reality, cultural hybridization, internet, virtuality, Monika Fleischmann, Wolfgang Strauss

Contemporary social reality is not homogeneous. It is comprehensively hybrid. We can find the presence of this property in many, if not all, establishing it spaces. In these spaces from one hand we can find, deepening differentiation of elements, factors and aspects, which establish it,
from the other hand, the tendency to group these various components in some kind of mosaic or collage sets, the tendency for searching new patterns of organization, and even – what still seems the most radical form – the inclination towards building complex entities founded on acceptable or propaganda diversity, to build new communities deprived form their essence, devoid of identity, made only from examples.\(^1\)

Hybridization develops perhaps in the most visible and distinctive way, not to say: the most spectacular, in the cultural space. Creation and prevalence of the global media created the platform conducing diffusion of symbolical orders. Henceforth, continuously generated, mixed cultural forms – results of this process – are joining the consequences resulting in simultaneous deepening of global migration processes, second next to globalization of the media and communicational systems, basic process shaping present social reality.\(^2\) Progressing in the effect of this two dimensional globalization omnipresent deterritorialization of cultures determined planetary perspective, in the framework of which developing variety is the factor of a basic meaning. Within the limits of this planetary, multi-faceted, constantly changing culture appear different types of processes of convergence\(^3\), which deepen and add other dimension to characterizing it hybridity.

A role of media, and above all, presently the role of new digital media, doesn't restrict itself only to support the process of cultural hybridization. Media itself generate processes, maybe not as easily observable as cultural transformations, but when we talk about its consequences for shaping orders of reality not less (on the contrary, maybe even more) crucial or spectacular. It becomes clear that new media begin to function as multiplicators of new worlds, creating numerous virtual environments, which with its presence in our environment expand spectrum of experienced reality. Some of the researchers like Jean Baudrillard, Paul Virilio, and to the certain extend even not having any, as it could be thought, catastrophic inclinations Wolfgang Welsch, discern in it the source of the processes of reality virtualization, which begins to be socially constructed basing on the pattern of virtual worlds, and becomes as these worlds liquid, ephemeral and unstable. I myself lean toward the conclusion that this situation is a source of hybridization of reality, and it is not a new type of its homogenization.

This diversified, compound reality in many ways takes a shape of a network. And nowadays, to the bigger extend the role of networkisation generator plays modern communication and information technologies. From the screen of our computer or a mobile phone through GPS tools up to virtual environments such as *The Second Life*, the networks of between-or trans-environmental connections are being developed. Systems of interactive connections are being developed. New media art in this field of events has various functions. From one hand, it is one of the most refined instruments in the process of networkisation. From the other hand, it is also the tool of verification for these processes, critically but without prejudice evaluating its development, attentively observing what shapes do they took, as well as their real or possible results. In each case, new media art is an active participant of these processes, making full use of possibilities provided by the network system. Frequently while performing its activities it is intersected or linked with the processes which are a part of the world of science, creating together with them new cultural paradigm. Monika Fleischmann and Wolfgang Strauss undertook their joint, creative actions in combined fields of art and science in late 1980s. It was a special moment; we can say the moment of a breakthrough for the formation of the character of modern civilization. Events taking place back then, as being a part of a sphere of phenomena generated by communication and

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information sciences, had enormous influence on the process of shaping a new cultural formation – cyber culture, and because of this, at the same time, had enormous influence on our ways of reality perception and the methods of our operation in it. At that time Tim Berners-Lee was finishing creation of a new, revolutionary concept of the Internet, suggesting a new vision of architecture of the world of information, as well as new rules of access and data usage. This concept laid solid foundations for the further development of cyber-reality, at the same time outlining the directions of its transformations. This what happened in this area during next twenty years, starting from the inventions of the Berners-Lee himself, HTML language, World Wide Web environment, internet browser, and further through out creation of the tools for internet searching, creation of VRML language, creation of Web 2.0, social networks and social portals, up to the newest concepts of information clouds, Semantic Web or Web 3.0, all this created direct context for manifold creative actions developed with the usage of digital technologies. It also created an environment for the Fleischmann and Strauss works. In this environment, from the beginning of their cooperation, they have found the tools appropriate for the realization of their works, and from this environment the discourses and discussed issues undertaken by them have emerged. In this environment also we should search for the schemes and patterns describing the rules of negotiation of these works meanings, as well as criteria which could help us determine their value. The dependence described above, has of course a reflexive character, because the artists not only use this environment as a source but also work for this environment, developing its resources and potentials, refining its instruments, deepening and promulgating its issues.

We can say that the art of Fleischmann and Strauss has developed in parallel to the development of computer and internet environment, depicting dynamics of this network and inscribing, with the undertaken issues, in the circle of problems generated through out a development and transformations of accompanied cyber-cultural concepts. It is worth to mention though, that the structure and the range of problems of works created by them, under certain, often crucial circumstances, were ahead of theoretical findings shaped by the world of science. It concerns especially the character and the status of their field of their intervention – the cyberspace. David Silver, for example, sketching outline of history of theoretical reflection over the subject of cyber-culture and analyzing its development phases has noticed, that within the first of them, which he located at the beginning of 1990s (and even, to the certain extend, also in the second phase, reaching beyond the second half of the 90s), digital, virtual environments created around Internet were perceived as separate and autonomous, governed by their own rules, and they were acknowledged as areas, which experience should be entirely independent from real reality. Accomplished at that time interactive installations of Fleischmann and Strauss didn't propose to its viewers drowning in depths of alternative, separate worlds, but offered interactive experience of being between connected worlds, experience connecting in hybrid entity real and virtual environments. These works prefigured in this way more advanced phases of cyber-cultural theories.

These first, joint realizations of Fleischmann and Strauss: Berlin – Cyber City (1989–91), Home of the Berlin (1990–92) and Liquid Views (1992–93), as well as later installation Murmuring Fields (1997–99), in spite of the fact, that they were still made and located out side of the internet, also share some kind of network structure. They own this to the extended arrangement of interactive connections appearing between experiencing these works viewers-users and extended, multi-dimensional resources of materials (also virtual), consisting for these works. Hypertextual organization of an access to these materials makes receptive experience of these works with its navigational character, similar to internet experience.

Interactivity appears to be a very important and at the same time a uniquely characteristic feature not only in these early, presently discussed realizations, but above all in other works created by Fleischmann/Strauss duet. This feature, by Lev Manovich perceived as the obvious attribute of digital media, from the Fleischmann and Strauss perspective appears not only (and not above all) as a feature of a medium, but as a structural indicator of works created by them, as an expression of deep logic of these works, finally as a basic system determining viewer's experience. Second, not less important than interactivity, attribute of work of these two artists is, already mentioned earlier, the tension and fluctuation of their works between real and virtual reality. Both these features: real-virtual fluctuation and interactivity shaping its rhythm and dynamic, together add to most of the Fleischmann and Strauss works, already described before, hybrid character, and together ascribe them the feature described as Mixed Reality or Augmented Reality. Inevitably in this environment Fleischmann and Strauss locate viewers of their works. Consequently, viewers become integral components of these works, the intelligently working components. As a result, perceptive experience of Fleischmann and Strauss installations takes transgressive shape; it is an activity overtaken in one environment but bringing effects in another, and the results reflexively are coming back to the functioning interactors, building a developing context of interactions, motivating their further behaviors and co-creating in this way, the structure of interactive work-event.

The first joint work presented by Fleishmann and Strauss: Berlin-Cyber City has these features already developed to the very defined grade. Its viewers, operating on the suggested to them interface and at the same time using a map of the city's space – a sensor installed on the finger helps them to directly, in a bodily and sensual manner, experience (live through) theoretic concept of Marshall McLuhan about technology as an extension of person's senses – travel not only through its space, but also through its history, showing different time layers which build the character of particular places. Berlin, after the collapsing of the Wall, became a space of infinite potentiality, the opening generated by determination of presence, and at the same time conditioned or limited by relics of the past. Berlin-Cyber City installation suggests to its users hybrid experience of an extended reality, interactive peregrination through time and places.

The installation Home of Brain brings its viewers other kind of experience. Its spectators, equipped in displays filling the whole field of vision (Head Mounted Display) as well as gloves allowing a navigation in the cyberspace (Data Glove), become emerged in virtual, digital environment, wholly generated by the computer system. Characteristic for the previously discussed installation, hybrid, real-virtual reality of transgressive interactions becomes here replaced by virtual reality (interactivity is also an attribute of this work). But even in this case, artists managed to the certain extend disrupt clearness and homogeneity of this work's environment. And achieved it not only by using this technology, which in ways typical for present technical abilities, absorb only some of the viewers senses (but maybe the most important from the point of view of the process of acquisition of information about the environment), in result it establishes and draws a boundary running through his or her body, boundary preventing them from forgetting even for a while abort hybrid in essence, momentary condition. Even more important, because consciously and with premeditation chosen by artists, hybridizing feature of this installation is organization of the virtual worlds around the thoughts of four philosophers (Vilém Flusser, Marvin Minsky, Paul Virilio and Joseph Weizenbaum), whose concepts on the subject of modern culture determine the map of its interactive experiences. The virtual environment of the work becomes in

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and its synaptic character (viewers visiting virtual expanses of the installation, which shapes mental space, through undertaken interactions gives it a neuronal form, creating possibility of a dialogue between different concepts, complying in this dialogue the role of synaptic connections), at the same time giving it meta-artistic dimension of metaphor of life in the network of the Internet culture, in which deteritorialized and decontextualized bits of numerous different symbolical orders anchor in a new, common environment, creating hybrid order of global cultures. As artists themselves emphasize, it is also a metaphor of virtual space as a scene, on which discussed processes appear, a scene on which cyber-culture is created and re-created.

Together with the Liquid Views installation Fleischmann and Strauss come back to the concept of extended reality, as an environment of work and at the same time as an interactive space of transgressive receiving experiences. This time, interaction realized through out the contact with a touch screen becomes extended by telematic relation with a designed picture. Both (touch screen and the projected motion picture showing the content of the screen) perform a function of a mirror reflecting a portrait of a viewer (at the same time time problematising both notions). This portrait is systematically interfered and blurred by the effects of the touching interaction with the screen, because interaction with physical materiality of the screen is at the same time interaction with virtuality of the presentation (surface of the screen presents and identifies itself with the sheet of water, which simultaneously reflects and disturbs our images). Timelessness of the screen and its resources is confronted with temporality of interaction, and their interplay builds a narcissist dimension of the representation. Possibility of interaction of the viewer with his/her own image gives created by the installation portrait the features of an interactive self-portrait. This game, between two forms of representation – portrait and self-portrait – merges two perspectives of viewing of the subject – from within and from without.

The structure of the experience described above, shows a meaning and a role of corpolarity in the works of Fleischmann and Strauss. Bodies of viewers-interactors play in them the role of interfaces and also the instruments if hybridization. They show up in the spaces of all the installations both in a real and in virtual form. This duality of their presence co-determines hybrid dimension of these works – because activities of the viewers are undertaken and realized in both appointed dimensions simultaneously (in a real time), so that the environments of works escape a possibility of an explicit identification. This appointed feature gradually deepens in Fleischmann and Strauss works, taking new shapes and establishing new meanings. For example, in the next created installation – Murmuring Fields – movement of viewers’ bodies becomes a source of sounds released in the work’s environment. In this work articulated sounds virtually filling the space of the interactions, are actualized and formed during the actions of viewers-interactors. Viewers can in this way take responsibility for the shaped discourse, at the same time entering into interactions with expecting their actions words and statements give their gestures a character of certain reflection. Interaction in this case becomes a form of emotional thinking. Similar ways of using corpolarity of the viewers can be seen also in the series of works made during 1997–2005, using EFS interface (Electro Field Sensing). Corporal activity of the interactors becomes there a matter of their performances, and within their frames electrical energy of their bodies functions simultaneously as the interface and as the initiator of an interactive event.

Presented in the public space installation Energie-Passagen (2004) has started the newest, developed until now, period of Fleischmann’s and Strauss’s work. The Energie-Passagen work was preceded by numerous projects-inventions (tools for data analysis or relation between them, interfaces). In the works created during this period, e.g. Digital Sparks Matrix (2006) Medienfluss (2006) or

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7 Krzysztof Miekus (ed.), Peforming Data [DVD, catalog], Warszawa, National Centre for Culture, 2011.
Performing the Archive (2007), the artists immerse their viewers in the tides of information clouds. These clouds fill and widen real spaces of our current existence, co-create omnipresent, hybrid environment of all types of human activities. Sometimes, as in Energie-Passagen, bodies of interactors retain in this new situation and develop their own independently fulfilled function of interface. But in case of most of the works from that period emphasis moves already onto mental activity, exploring in different ways the resources of informational environments. Fleischmann’s and Strauss’s works become in this period the virtual archives, and simultaneously have a significant educative value.

From this point of view, for the contemporary digital culture of digital networks 3.0 the function of works by Fleischmann and Strauss is similar to the function of the works created with the usage of analogue and digital synthesizes by Woody and Steina Vasulka in 1960s and 1970s. The function, which can be described, as I have already mentioned, as an educative one, or following the analysis of Laszlo Moholy-Nagy, as an adaptive one. Moholy-Nagy ascribed this function in 1920s to cinematographic works, assuming, that dynamics, and multidirectional developed structures, adopted and prepared to life in the world of technical revolution, development of the cities and accelerating pace of life. Moholy-Nagy, as well as Vasulka and Fleischmann and Strauss with their artistic works and theoretical concepts built and are building vision of art, which in its development reaches for the most advanced tools of their times, enters in relations with the fields which to the greatest extend shape the face of present times, at the same time become specific introduction to them. In case of Fleischmann and Strauss works, these fields are communication and information science, and technologies which emerge from a development of this field of science. The newest works of these two artists introduce their viewers into the life in real-virtual, hybrid world; teach them how to connect aesthetical and cognitive experience, artistic with scientific creation; help wisely and creatively live between reality and virtuality, in the hybrid world of present reality.

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Život između realnosti i virtualnosti – o umetnosti
Monika Fleišman i Volfganga Štrausa


Ključne reči: sajber-kultura, digitalni mediji, društvena realnost, kulturalna hibridizacija, internet, virtualnost, Monika Fleišman, Volfgang Štraus