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Strategies of interactive art

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Abstract

An interactive artwork takes on the shape of an event. An artist does not make a final, completed piece of art, instead produces an area of activity for the receivers, whose interactive actions bring to life an artwork-event. Regardless of what shape the final product of an artist's activity takes on, an interactive artwork finds its final formation only as a result of participative behavior of the viewers. The latter ones in that way become participants, performers, executors, or (co)creators of an artwork-event.

What I consider the basic area of research in interactive art are the strategies organizing fields of activity for the receivers-participants. They can be understood as scores that project the interactive behavior of the receivers.

The typology I put forward in this essay distinguishes eight strategies of interactive art: strategy of instrument, game, archives, labyrinth, rhizome, system, network, and spectacle. The analysis of individual strategies reveals that all the common elements that occur there and characterizing an interactive experience en globe are organized differently each time. These elements are interface, interactions, data (database), data organization (hypertext, cybertext), software/hardware system, relations among participants, and performance/spectacle. In every strategy, a different factor takes a position superior to others and plays the basic role in the process of organizing interactive activities of the receivers. This means that it is not the occurrence within the frames of individual strategies of elements that are different each time, but their organization and hierarchy different each time that play a decisive role in providing strategies with their specific character.

Discussing all strategies I shall distinguish their basic characteristic features but also pay attention to their range and variety of their forms observed so far. The latter aim I shall realize by pointing out to various actual examples of artistic usage of particular strategies.



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Keywords: *new media art; interactivity; participation; performance; event; game; archive; labyrinth; rhizome; network*

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An interactive work of art, both in theoretical aspect, and also when looked at from phenomenological approach and from the perspective of its experience, **inevitably takes on the shape of an event. An artist does not make a final, completed piece of art, instead produces an area of activity for the receivers, whose interactive actions bring to life an artwork-event.** Regardless of what shape the final product of an artist's activity takes on, an interactive piece of art finds its real, final formation only as a result of participative behavior of the audience. The latter ones in that way become participants, performers, executors, or (co)creators of an artwork-event. There are certain consequences resulting from that fact for methodologies of research into interactive art. Its analyses should not be searching for the objects of their main ponderings in the sphere of artifacts, space arrangements, or esthetic and semantic parameters of dispositives or apparatuses created or used by artists. Therefore they should not aim at describing their forms in the first place either, at pointing out styles or poetics. The activities undertaken by viewers-interactors initiate, update and extend the dynamic nets in which other numerous factors are also involved. Eventually, they also become part of it themselves. As part of these nets, there are also, besides the interactive practices, the used technologies and activated social and cultural components. What I consider the basic and conditioning all of the others, area of research in interactive art, **are the strategies organizing the dynamics of such nets, communication regimes that bind all the particles in one system and pointing at the suggested fields of activity for the receivers-participants.** It is precisely the strategies understood in this way that become, in fact, from the perspective of a created work of art, the basic input, creation, or a choice of an artist working in this area. They can be understood as scenarios or scores that project the interactive behavior of the receivers, thus projecting the dynamics of the changeability of an artwork-event. These strategies are fleetingly connected to individual artworks, neither they are their creations, nor should they be equated with the attitudes of individual artists themselves. Being a product of a many years' interactive art history, they are shaped in the course of actions of many artists. They may be—in their

multitude—recognized as a repertoire of model possibilities, which the artists reach for in their artistic activities, but also a paradigm order that is a result of the research of this type of art, which at the same time serves as an analytical instrumentation in theoretical deliberations concerning individual works of art.

Theoretical frames of interactive art are created in my theory mostly by two concepts. Both were, which is worth emphasizing, originally created with no direct connection to the art, and even less so, to interactive art. The former comes from the theory of community patterns by Giorgio Agamben, considering the connections between that what is general and that what is particular, between that what is common, and that what is individual; connections usually seen as disputatious in philosophical tradition. Agamben challenges the basic opposition between them, at the same time questioning the benefits of the ideas of identity and essence, and supporting a specific form of singleness, deprived of identity, remaining with no connection to any essence, and drawing its descriptors from links to the idea that determines the set of its possibilities. He cites the category of example that escapes the above-mentioned antinomy and represents this new, described by Agamben type of being. According to Agamben, an example is just a being that is an example; this being however does not belong to it, it is totally common.¹ Relating these deliberations to interactive art allows to explain how each individual interactive experience of an artist's creation constitutes an individual work of art, at the same time remaining in close connection with the idea (common to all experiences of the same product of the artist) that is an example and from which it draws its characteristics. Also theoretical suitability of Annick Bureau's² idea is revealed; apart from the level of perception and performance/execution in the structure of interactive work, it singles out the level of idea. When we interpret Bureau's suggestion in the light of Agamben's concept, we will also come across bonds between singularity of the artwork experienced and constituted by a viewer-interactor and this idea with which it is inevitably linked and connected in the way described above.

The latter concept, contributing to the theoretical frames of my reflections, is the theory of

Michel de Certeau, which I discussed widely in another place.³ I would like to incorporate an opposition of strategy and tactics suggested by de Certeau into my deliberations. As for interactive art, earlier partly characterized by me, strategy continues the program of interactive experiences found and discovered by the receivers. It is sort of a score determining the order of activities anticipated for them. Tactics, however, are real and actual ways of audience behavior, diversified methods of updating and adapting strategic orders. Even though each of them may flit in a completely different way, very often tactics fit into the frames anticipated for them by strategies.

Excellent examples of such relations between a strategy and tactics may be found among installations of Simon Biggs, e.g. *Solitary* from 1992, or *Shadows*, which is a year older. In both cases the movement of audience in the space of the installation shapes the variety of interrelations between audience and virtual characters, but any system occurring there seem to be included in a strategic score. Frequently, however, these relations between a strategy and tactics may take on absolutely free shapes. In some cases, the latter ones turn out to be methods of transgression or even annulment of a strategy. Tactics may take on a form of improvisation related to a given subject that occasionally divert (sometimes even very much so) from the forms of actions suggested within the limits of a strategy connected to them. Some of the interactive works of art, e.g. the installation of Rafael Lozano-Hemmer's *Body Movies* (2001) suggest a form of strategy that encourages to subversion.

In any case, however, be it provoking to transgression or just encouraging to interpret the suggested score, tactics are a form of creative activities of the interactive art's audience. If the research perspective suggested by de Certeau is to serve the studying of any social phenomena, interactive art seems to be—according to its model proposed here—its empirical type, a sphere of events that on one hand stay under control of strategies that organize and predetermine it, whereas on the other hand, it remains under pressure of liberating aspirations of viewers-interactors who transform the supervising strategies in their actions into their creative applications—tactics. In other words, interactive art is

presented here as never ending and not bringing any definite results of confrontation between strategies of control and tactics of freedom.

The typology I put forward further in this essay, distinguishing eight strategies of interactive art, is a result of reflection over interactive art's history to date, perceived comprehensively. It is of open character since its further development may bring other solutions, new types of strategies, not presented here. The analysis of individual strategies reveals that all the common elements or factors that occur there and characterizing an interactive experience *en globe*, are organized differently each time. These elements or factors are interface, interactions, data (database), data organization (hypertext, cybertext), software/hardware system, relations among participants, and performance/spectacle. In every strategy, a different factor or its different type takes a position superior to others and plays the basic role in the process of organizing interactive activities of the receivers. This means that it is not so much the occurrence within the frames of individual strategies of elements that are different each time, but rather their organization and hierarchy different each time that play a decisive role in providing strategies with their specific character.

Further on in the essay I shall discuss all strategies in the following order: **Strategy of Instrument, Game, Archives, Labyrinth, Rhizome, System, Network, and Spectacle**. In each case I shall distinguish their basic characteristic features, but also pay attention to its range and variety of its forms observed so far. The latter aim I shall realize by pointing out to various actual examples of artistic usage of particular strategies.

By the end of these introductory remarks, I would also like to draw the reader's attention to the fact that categories that I have chosen to give names and descriptions of individual strategies of interactive art (hopefully the pertinence of these shall be confirmed in their analysis) belong to the most important ideas used in contemporary philosophical and theoretical, and social analyses. We can find them in conceptual, modern, and postmodern instrumentation. I take it as one more indicator of significance that the participation paradigm plays in the modern western civilization, of which the most sophisticated form is interactive art.

STRATEGY OF INSTRUMENT

Works of art realizing the Strategy of Instrument do not only offer their users the experience of a ready-made form, but they don't even suggest navigation through any form of data organization that had been—as a being—set prior to its exploration. Interactive experience is of purely performing character here. It is organized around an interface and is precisely the interface that plays the basic role in the Strategy of Instrument. However, contrary to the typical forms of interface applications, which give the user the sense of communication with someone or something, or provide the sense of steering an information system, in the Strategy of Instrument the interface plays the role of a device that generates visual or audiovisual events. By exposing it, placing in the foreground, puts emphasis on the interface itself, its uniqueness, at the same time weakening its connections with other elements of the system. Strategy of Instrument suggests the audience creating a performance with the use of this interface that becomes a generator of events.

A representative and at the same time exceptionally spectacular example of such a work of art is an installation by Toshi Iwai—*Piano as an Image Media* (1995). In this work, interface in form of a standard computer track ball offers a possibility to use it as an instrument creating an audiovisual spectacle. *Piano as an Image Media* represents a large group of installations that make it possible for the audience to create a sort of audiovisual concert. Next to numerous works of Iwai himself, we can find there also works of many other artists, for instance *Small Fish* (1999) by Kiyoshi Furu-kawa, Masaka Fujihata, and Wolfgang Munch, *Scrapple* (2005) by Golan Levin or *reactable* by Sergio Jord, Guenter Geiger, Martin Kaltenbrunner, and Marcos Alons, presented for the first time also in 2005.

Affinity between the interactive artworks reaching for the Strategy of Instrument and a domain of musical instruments may be considered even more visible in works that, like *Very Nervous System* (1982–1990) by David Rokeby, are of purely audio character. There are plenty of other such works that can be found. In case of Rokeby's installation, a computer observes body movements of the viewer-performer through a video camera and translates them into an improvised

music. Performing tactics take on form of a dance very often. An earlier example of a work of similar kind is *Sternmusic* (1979) by Polish artist Wojciech Bruszewski, where a camera transferring an image into a stereo sound creates music, to which “Stern” magazine (leafed during the performance) becomes a score. An even earlier example can be a reactive environment *Glowflow* (1969) by Myron W. Kruger.

The name of the strategy should not by any means suggest that in every case of its use we are faced with a work of art of a musical character and the undertaken tactics inevitably take on the features of a sonoric or audiovisual performance. In many works realizing the Strategy of Instrument, interface does not generate audiovisual spectacles but an event of a completely different kind: it sets and specifies the frames of a performance executed by the receivers themselves. As an example of such a different event we could use a series of telematic works by Paul Sermon. An installation of 1992 *Telematic Dreaming* is an arrangement of two distant (sometimes very much so) beds, tied with a teleconference ISDN system. Cameras transfer images projected then in such a way that the people in those beds can commune with each other telematically (Figure 1). In a similar manner functions a year earlier installation *Telematic Vision*, in which case characters interacting are the people sitting in distant sofas. In each work of this series, the audience is given a chance to partake in telematic performances (including those initiated by themselves). Susan Kozel, while describing her experience with *Telematic Dreaming*, emphasizes that she constructs her reflections on the installations solely on the basis of her own performance.⁴

Another disparate way of applying the Strategy of Instrument provides the work of Seiko Mikami's *Molecular Informatics* (1996–1999), which I analyzed in another instance.⁵ **Eyeball movement of a receiver-interactor generates endless chains of molecules that reproduce it, which gives him/her a unique chance of seeing a presentation of their own look. The performance created by the receivers is of specifically virtual character.** On the other hand, in case of a teleroptic installation by Ken Goldberg and Joseph Santarromana entitled *Telematic Garden* (1995), the telematic, Internet performance becomes a form of realization by a robot care over distant plants. Yet another



Figure 1. Paul Sermon, *Telematic Dreaming*, 1992. Photo courtesy: the artist.

character has a strategy concerning installation by Ken Feingold *Sinking Feeling* (2001), which determines the verbal conversation as space for interaction (Figure 2). Contrary to the work of Luc Courchesne, *Portrait no. 1* (1990), where in a dialog with a virtual partner, previously prepared answers are used by selecting them from the menu (it is precisely for this reason that I am placing Courchesne's installation in the context of a Labyrinth Strategy and not an Instrument)—Feingold's strategy assumes generating the utterances of both participants freely in the real time.

The above-mentioned installations, *Telematic Garden* and *Sinking Feeling*, differ from the other examples of the application of a Strategy of Instrument by their subjective and sculpture-like treatment of the interface (this concerns mostly Feingold's work). Since, however, such tactical actions undertaken by the receivers usually take on a form of performances in which these sculptures-interfaces are used solely as props in a totally functional, one might say—instrumental way (though it should not be claimed that the look of our interlocutor in the installation *Sinking Feeling* is absolutely incidental and deprived of any meaning—it is a Feingold's lookalike), I decided eventually that they both belong to the sphere of the Strategy of Instrument. It can otherwise be stated that the clarity of the interface is one of the ways of stressing its basic role in the construction of the Strategy of Instrument. Finally though, the final word while making a decision that determines the type of strategy found when

examining a work of art has the type of interaction and the character of experience suggested to the receivers by the art's dispositive.

Similarly, subjective but also purely functional character that leads to its totally performing character of experience in using an art work, thus inducing to reflecting it as an example of applying the Strategy of Instrument is another, created in 1998 as part of works for Institute for Applied Autonomy, activist instrument *Graffiti Writer*, a remotely controlled vehicle designed for creating signs in places to which access is limited and, of course, anticipated to be used for social or political reasons (though the instrument's construction does not exclude the possibility of some other, subversive application resulting from strategy and tactics' dialectics). It is worth mentioning in this context the Device Art phenomenon which, although having totally different social meaning, is currently developing in the context of Japanese culture because the numerous interactive objects included in this phenomenon allow it to inscribe in the context of similarly understood strategy of instrument.⁶

A work by Julius von Bismarc *Image Fugurator*, rewarded with the first prize in Ars Electronica in Linz in 2008, is of a very specific character—a prepared photo camera that inscribes in photographs taken besides it using a flashlight (**without the photographers' knowledge**)—items actually not present on a set. This work particularly becomes a tool of intervention in the sphere of memory.



Figure 2. Ken Feingold, *Sinking Feeling*, 2001. Photo courtesy: the artist.

Each of the works cited above gives the receiver: the user of an interface-instrument that generates audiovisual spectacles, or the participant of an event implied by the strategy managing the interface and creating the action's space, conditions to undertake independent actions, to create in the suggested space their own individual artwork-event that partakes in the holistic concept. Strategy hidden in these installations, suggesting the receivers of the score's events that are to be made of particular artworks, opens up inevitably according to the concept of interactive art accepted by me, to the tactical activities that take over the work's space and inscribing in its temporary, ephemeral exemplifications. The Strategy of Instrument, due to its specific abstract character (that does not obviously exclude the possibility of its ideological coloring on the construction level), allows the receivers of interactive art works realized with its use in the process of providing

an abstract structure some specific, individual shape, to considerably apply independence. Precisely because of this such works bring the receivers stronger than in case of other strategies sense of creative character of their participation in the events that are its core.

A slightly different character has the Strategy of Instrument in art developed in the endless expanse of the Internet. For it does not create there any conditions within which the receiving tactics could take on forms of a performance, in return providing the tools allowing the users to manipulate the material and the settings found in the global net. Internet works of art created in such a way may be compared to the alternative cinema "found footage" or "video scratch" trend developed earlier, which are somewhat parasitic tendencies building on the material found, made by someone else. The difference between them is only in the processing, event-oriented result of

the Internet-instruments users' work. Works of such kind created in the Internet do not take on, as found footage or video scratch do, forms of final, closed shape, but are on-going events lasting only as long as the event itself does. Some of the distinguished forms of Internet art, e.g. alternative searchers or browsers, generative art or all sorts of art works founded on the idea of open software, provide the receivers with digital instruments allowing them to explore the vast stores of the Internet in a non-standard way, they may even supplement them with their own works of art. Some of the particularly interesting ones are, among many others, *The Web Stalker* (1997) created by Matthew Fuller, Collin Green, and Simon Pope, *The Shredder* and *Digital Landfill* by Mark Napier (both in 1998), *Netomat* (1999) by Maciej Wisniewski, and *Heritage Gold* (1998) by the artistic group Mongrel. Sometimes the authors of such works suggest the user to relate to the instruments themselves, which in this way serve not only to manipulate the discovered or (also this time) created data, but at the same time they are getting transformed that become a process of improving their development. The trend of instrumental phenomena that encourages to creative work in the first place and only later to make use of them for other purposes, contemporarily gained theoretical background in the concept of meta-design. The work which particularly contributed to the development and publicity that this tendency achieved these days, is *Processing*—rewarded in 2005 in the category of Net Vision at Ars Electronica competition, the software users environment initiated by Ben Fry and Casey Reas, but at the same time treated by them as collective—based on the idea of *open software*, as a result of which it started to develop intensively and applied in order to create individual works of various kinds.

All of the above cited works of art and most of all the Strategy of Instrument itself create in this way a model example for the concept of interactive art of Roy Ascott, thus becoming a base for the creative activity of a receiver. This observation does not, however, do away with the legitimacy of asking questions that we put forward to all interactive works of art, questions concerning limits introduced into free creative space of the receivers through strategic score imposed on them each time by the construction of the dispositive,

software used for it, and the overall concept of interaction. Creative activity of the receivers gains the form of a tactical reaction to strategic limitations in this context, a form of their somewhat poaching transgression.

STRATEGY OF GAME

Strategy of Game organizes events each time becoming a work of art evolving around interaction itself. Obviously, interaction as a crucial and defining characteristic of interactive art per se, it is to be found in its every aspect, regardless of the strategy updated at each given moment. However, this interaction usually is entangled in other elements or aspects of an art work that subdue it. Or it may be conditioned by the relationship between the interface and a spectacle generated by it, or subdued to the data organization in which a navigational experience is taking place. It may also aim toward the shaped net of links or present inner logic of system technology. In this case, however, the occurring supervision of interaction as opposed to other elements of the artwork is based mostly on the aim that is found in itself, in its own organization. As a basic characteristic of the Strategy of Game, I consider placing it in its logical center of a task to be performed. Each one of the viewers-users of an interactive work of art realizing the Strategy of Game, becoming its participant, in the introductory phase of the viewer's experience, find themselves as a lonely individual or a member of receivers' community who are obliged (and I would be inclined to treat this as an artistic form of an artwork connected with strategy realized by him/her) to undertake actions resulting in certain consequences. Participants have at their disposal the rules and tools and a certain amount of space for the game. As part of interaction taking on a form of action within the game, participants are faced with various challenges and tasks and the course of interaction may take different qualifications; it may, for instance, become a subject to evaluation, as a result of which a participant of such interaction can be accepted for further stage of a series of events or be eliminated from it.

Works of interactive art realizing Strategy of Game differ from phenomena that are merely games, which do not claim the right to belong to the world of art (though of course the question of

such affiliation are in this case, as in many others, incredibly complex) in at least two terms. Firstly, they are of **metadiscursive** character, **they draw the attention of the users not only toward the tasks that are outlined, but also toward the interaction's course, its architecture, relations between the game's structure and its properties, and also the other discourses included in the event.** They place in the discursive opposition not only the player and the game, but also the process of playing, in this way gaining the possibility to make all these aspects of the game and the game world as understood generally debatable. Secondly, they introduce other strands into the game itself, which make the game a method of undertaking issues different than the game itself, issues that are not directly connected with the game. This opposition may lead toward another one: between two types of Game Strategy artwork.

As an example of a work of art of the first type, installation by Feng Mengbo *Ah_Q-A Mirror of Death* (2003) could be used, where participants,

as a result of strategic and thus preprogrammed shaping of their own work experience, without infringing the structure of the game itself but only by introducing an additional perspective, can develop discourses within its own structure that are critical toward the game.

As a very interesting example of an artwork of the second type, I would like to point at a work *Can you see me now?* by Blast Theory group (realized in 2001 in cooperation with Mixed Reality Lab, University of Nottingham) that takes place between the Internet virtuality and physicality of the real world (Figure 3). On the one hand it is a game taking place in the streets of the city and on line in frames of which its terrestrial participants, equipped with hand-held computers, transmitters, and GPS systems chase the Internet participants of a game in its expanded reality, finding each other on computer screens. As a result, *Can you see me now?* initiates a net of cross-border relationships and a game develops in hybrid interworld expanses. On the other hand,



Figure 3. Blast Theory, *Can You See Me Now?* 2001. Banff Center, Canada, 2006. Photo courtesy: the artists.

however, besides the game entertainment, the work suggests deliberations concerning the notions about presence and absence, closeness and distance, and the transformations they undergo nowadays, in the new media communication environment. It does so using both specificity of technology that was applied in the work and—what seems more important—through construction of the game itself, its particular location, and assumption of a conflict. I consider that fact important because it proves that both dimensions are closely related to each other, that the experience of the game may directly lead to an existential experience. Integrity of both dimensions also constitutes its value. Duality of *Can you see me now?* influences the character of the strategy that shapes the work is presented differently in both dimensions, and also cooperates with its tactical perspective. It is worth noticing that the first attempts to link the Strategy of Game with the expanded reality may be found in the beginnings of interactive art, in reactive environment of Myron W. Krueger's *Psychic Space* (1971).

The above-mentioned juxtaposition of two versions of interactive works of art using strategy of game logically corresponds with another juxtaposition that occurs there: the works created as a result of transformation of the already existing games and works created independently, only with the use of

the general logic of the game. Logically, because transformations of the games already existing correspond very well with metadiscursiveness, and the works that only use the logic of the game gain a multilayer format quite naturally. This is not, of course, a rule that is blindly obeyed, about which we may be persuaded by Lillian Ball's installation *GO Doñana* (2008), where an ancient Chinese game Go is joined with an ecological discourse. Incidentally, I would like to add that Ball has explained the idea of a game used by her in the work in a very interesting way for me, as a method of applying a strategy in which she overtakes a territory by counterbalancing the tactics (Figure 4).

A very valuable example of a work of art making a transformation of a game that had already been functioning in the players' environment alongside the already cited work of Feng Mengbo's *Ah_Q-A Mirror of Death*, is the subversive installation *Moving Mario* (2007) by Keith Lam, made of Super Mario Brothers game, undertaken in order to suggest the users a disparate vision of a relation between a player and a game. In such works, subversion, by stating the character of the strategy developed by them, is at the same time the source of meanings that complete those emerging directly from the practice of playing. On the other hand, as an example of an autonomous work of art, we may use an installation by Julian Oliver *levelHead*



Figure 4. Lillian Ball, *GO Doñana*, 2008. Photo courtesy: the artist.

(2007), which faces the user with a task of taking the virtual character through equally virtual environment using manipulation of a material object. In the same category I would also place Christa Sommerer and Laurent Mignonneau's installation *Phototropy* (1995), where interaction of a viewer with virtual insects turns, together with interpretation of events, into a kind of a game that builds up ecological awareness.

Virtual environment of Internet became nowadays not only the seat of interactive works that reach out for Strategy of Instrument and about which I wrote in previous part of that essay. Nowadays, more and more commercial computer games are placed there, mostly the net ones. It comes as no surprise then, that numerous interactive works are created there too, implementing Strategy of Game, particularly those that, similarly to the works cited above, undertake the subversive dialog with commercial games. We find there, for example, a joined work of Jon Thompson and Alison Craighead's *Trigger Happy* (1998)—the result of working out a classing computer game *Space Invaders*; *SOD* (1999) by Jodi.org—a radical formatting of an equally classical game *Castle Wolfenstein*; the work of Brody Condon *Adam Killer* (2000–2002) that was made as a result of modifying game called *Half-Life*; or finally, the work of Eddo's Stern *Summons to Surrender* (2000) that conducts a complex, parallel dialog with environments of three games: *EverQuest*, *Asheron's Call*, and *Ultima Online*. Next to subversive works, similarly as was the case with artistic games-installations, there are other, numerous interactive works of art in the Internet that are organized around the Strategy of Game and they do not have their source in any of the existing commercial games, but are phenomena created autonomously. As an example of such tendency, we could quote here the work of Mongrel group *BlackLash* (1998) or a work of art by Natalie Bookchin *The Intruder* (1999), organized around the stories of Jorge Luis Borges.

STRATEGY OF ARCHIVES

The dominant factor of the Strategy of Archives is information, (audio)visual data gathered, organized, and made available to the audience. Its character, variety, characteristic, and ability to have impact on public determine each time the

course and quality of interactive experience of a work. Each time interaction takes on a form of exploration of the resources of a presented collection, an exploration happening with the use of sort of presented map of data territory and tools supplied as part of the work's dispositive. This map, while bringing information about the structure of data organization, makes its experience dimension, as fully explained, move on to the background. A similar thing happens to the sphere of exploration tools; made accessible at the same time as the map, they also are no longer in the center of attention. The users' interest is directed at the unknown dimensions of a work of art. The interface structure, interaction, or the way in which it moves in the working environment, all of these factors of an interactive art work that play a very important role in other types of strategies, do not serve any particularly important role in works evolving around the Strategy of Archives. Of course, this does not mean that they have no meaning at all there. As in any interactive work, also here they are significantly present in the experience of a viewer-interactor. Their crucial and only function at that time is however limited to determining an area of data exploration and creating such conditions for this event that the accessed information can play an assumed role in the course of an experience. It is only as a result of interactive working out the data comprising the archive that the subsequent levels of organization of any further work can develop in a receiver's experience.

Works of art realizing the Strategy of Archives offer, as part of the space of an experience, data resources ordered in a transparent structure of database. Individual receiving tactics on the other hand, through exploration decisions undertaken by each user, shape, within the collected information material made available to public, various relationships, and orders. Under the term of database I understand a set of information inscribed in a specified way in structures correlating with the assumed model of data together with specialized computer program that allows to collect and process this information. Such program (or a set of programs) is described as a Database Management System. We can thus claim here that the term "database" means a collection of information organized by a system managing it.

In the field of art, database is a relatively neutral form of organizing information. In comparison with other systemic configurations, it draws the attention of the receivers-users to itself in the least degree, mostly concentrating as I said already on information itself. Lev Manovich⁷ quite convincingly proved that the basic idea of the term “database” is the easy access to its content and—which for me is of not less importance (though in a sense it results directly from the previous observation)—the fact that it does not present the data but contains it, making it accessible for the user. Manovich’s thesis stating that database relates to the world seen as a collection of items at the same time not imposing any order, whereas representation possesses order as a specific basic feature, relates in fact to the whole of interactive art, to each interactive piece of art, regardless of what strategy it realizes. Manovich, when talking about database, relates in fact to its selected, most important properties that database shares with other, more specialized forms of organizing information, for instance with hypertext.

Put in this way, the term “database” is a basic feature of interactive works of art. All of them are characterized by a nonlinear system and freedom of simultaneous access to all individual elements, lack of predetermination of the way in which they are set up and experienced. When it comes to creating, as a result of interaction, a temporary

structure presenting on a material level, as Manovich emphasizes quite rightly so, it becomes solely an organization of ideas, whereas the elements themselves remain stored in database. Representation in this case turns out to be more virtual here than database itself.⁷ The term “database” interpreted in this way is placed in the very center of deep interactive logic and creation, becoming a characteristic of interactive art *en globe*. When I state here that database is dominant in organizing a work of art-event, I accept its basic, narrower meaning, and assume that such work of art was organized around the Strategy of Archives.

A work of George Legrady *An Anecdotic Archive from Cold War* (1993) placed on a CD-ROM platform and appearing also as installation, could serve as an example of such realization (Figure 5). In this work, Legrady, using a plan of the former Museum of Revolutionary Movement in Budapest, constructed virtual space in which he placed digital documents presenting a period of a communistic regime in Hungary and other Soviet bloc countries. Photographs, posters, banknotes and coins, recordings, and amateur films have been accompanied by materials presenting a private history of Legrady’s family and their journey to the West after the Hungarian uprising in 1956. Information collected in *An Anecdotic Archive from Cold War* allow to follow historic events which have social dimension and are linked to individual



Figure 5. George Legrady, *An Anecdotic Archive from Cold War*, 1993. Photo courtesy: the artist.

lot of particular individuals that were entangled there.

An Anecdotic Archive suggests its users exploring information data collected and made available by the artist to the public as a whole. Whereas in some other of his works—for instance, *Pockets Full of Memories* (2001)—the artist prepared only a structure of the archives and specified the tools useful when loading and accessing the data. The collection itself is a common creation of receivers-participants. For it is everyone who visits the installations gets the proposition to join the resources with an object that they carry with them. Dispositive offers a possibility to scan it, what's more the benefactors are asked to fill in a form including a question about the objects added to the collection. The Internet work of Antonio Muntadas' *The File Room* (1994) is of similar character, in which case the receivers—cocreators of the archives introduce information about censorship actions known to them and aimed at art. Such works complete the experience of individual exploration of resources with an enterprise of community that makes the participants responsible for the work of art or for the idea that lies behind it. Numerous works created with the use of Strategy of Archives (or with some relation to it) have also been done by Bill Seaman and Victoria Vesna. Seaman, in his installations, e.g. *The World Generator* (1996–1997), linked the esthetics of a

database with the generative esthetics, describing the result of such symbiosis as recombinative poetics. The result each time was a work of art in which participants get involved in the processes of combinations and recombinations of the generated texts, images, and music and sound elements.⁸ On the other hand, Vesna in her works created with the use of strategy of archives, such as *Virtual Concrete* (1995) or *Bodies INCorporated* (1995), places the emphasis on the complex issue of relationships between the bodiness and its digital representation. These works very often combine the material gallery space with the virtuality of the Internet and are created in cooperation with populous communities of participants.⁹

Of a fairly different character is a work of art by Agnes Hegedus, *Things Spoken* (1999), realized on a CD-ROM platform (Figure 6). The artist has gathered in the archives personal belongings of various sort and origin, labeling each item with a classifying and archive description. The users, applying the menu of the collection created in this way, may choose any item they wish to be familiarized with and this is always accompanied by the artist's narration (listened and shown in text version on a mobile bar), where she explains the origin of a chosen item, its meaning and the role it had played in her life, on top of that, it is also full of the artist's secrets and thoughts provoked by the character or stories of the items



Figure 6. Agnes Hegedüs, *Things Spoken*, 1999. Photo courtesy: the artist.

she talks about. In this way, the work, which has its own objective character, throughout the development of its experience is transformed into an intimate narration within which, through the objects, we commune with the individuality of the collection creator. We may also turn on the counterpoint commentary of another person connected to a given object, thanks to which the artist's image and her self-presentation gains a deeper context. The work of Agnes Hegedus is thus completing a spectre of interactive art created around the Strategy of Archives with yet another aspect, important for her. Its objective and social perspective is complemented with a subjective viewpoint.

STRATEGY OF LABYRINTH

In the center of the Strategy of Labyrinth there is not so much information, but most of all its organization, and more precisely—their **hypertext** structure. Contrary to strategy of database, the interactor does not have any introductory knowledge at hand and neither does (s)he have any source of information that make up the background of a work of art nor the structure that outlines the space and the course of experience. This structure may undergo significant changes throughout the experience (the so-called dynamic mapping), depriving any knowledge gained about it of any usefulness whatsoever. As an example of such deceiving data organization, Mirosław Rogala's interactive environment, *Lovers Leap* (1995) could be cited. Lack of knowledge about the space of experience makes the emotions and sensations evoked by it: anxiety, the sense of being lost and challenge, but also sensations of cognitive character: making decisions and undertaking activities, searching for answers, analysis of interactions' results—they all become the central attributes of an interactive work of art that realizes the Strategy of Labyrinth.

Under the term of hypertext, I understand such data organization that takes on a form of a set of independent text blocks joined by hyperlinks. A hypertext is characterized by nonlinearity and lack of structure of a text block system, which means that no defined order of experiencing linked texts occurs, prior to the course of navigation, which depends solely on the user's decision. According

to the above, text block is the basic, the smallest fragment of a hypertext. It includes hyperlinks leading to other text block items. Theodor Nelson, as was mentioned in greater detail in another instance,³ introduced the hypertext category and the concept of text as network of text blocks was proposed by Roland Barthes.

A very important feature of interactive artworks that realize the Strategy of Labyrinth is their final and closed shape. Due to the potentially possible great number of text blocks combination that is characteristic for many labyrinth works, this feature does not have to reveal itself directly in every real experience of a work of that sort. But it does indirectly: navigation through hypertext labyrinths may bring the experience of endlessness, but is not however able to suggest an experience of creating new text blocks or new links between them.

Strategy of Labyrinth became immensely popular among interactive artists, both those interested in interactive narration (e.g. Dennis Del Favero, Hugo Glendinning, Christopher Hales, Pat O'Neill, The Labyrinth Project, Debra Petrovitch, Jill Scott, Grahame Weinbren) and those who are more concerned with possibilities of creating navigative worlds (such as Jean-Louis Boissier, Luc Courchesne, Agnes Hegedus, Lynn Hershman-Leeson, Perry Hoberman, Myron W. Krueger, Mirosław Rogala or Jeffrey Shaw). It appeared at the beginning of interactive art history—as evidenced by the reactive *environment* by Kreuger's *Psychic Space* of 1971—and it still draws attention of artists nowadays. As a result of this long-lasting interest, there have been and still are created numerous works offering a labyrinth experience. They appear on various platforms: on CD-ROM/DVD-ROM (properties of this media designed only for reading—*Read Only Memory*—seem excellently adjusted to the character of a labyrinth's strategy, which combines the endlessness of the experience with actual enclosure), but also as installations, works reaching out to technologies of *virtual reality*, interactive *performances* or Internet works of art.

A classic early example of a work of such kind is an installation by Jeffrey Shaw, *Legible City*, realized in 1988–1991 (Figure 7), where a viewer-user, using the interface that—from the perspective of experience (an entry system)—has



Figure 7. Jeffrey Shaw, *Legible City*, 1988–1991. Photo courtesy: the artist.

the form of a bike, moves through virtual cities (built on the plans of Karlsruhe, Amsterdam, and Manhattan). In another work of this artist, in an installation entitled *Virtual Museum* (1991), a labyrinth navigation subject of which was located in an armchair that plays the role of a driver, takes place in the construction of the many levels of a virtual museum and its virtual collection that develops during the experience. In case of Lynn Hershman's installation *Deep Contact* (1984–1989), the interface input is made of a touchscreen and the work takes us on a journey across the meanders of identity problems, voyeurism, media technologies, and interpersonal relationships shaped by them (Figure 8). In Perry Hoberman's installation *Bar Code Hotel* (1994), the receivers who use a bar code reader as interface, manipulate the objects and events represented by those codes. The Hoberman's work, contrary to the earlier ones cited here, offers simultaneous access to many receivers-interactors. Interactive *environments* of Mirosław Rogala the *Lovers Leap* (1995) mentioned before, or *Divided We Sing* started in 1997 organize space navigations stimulated by monitoring systems. Grahame Weinbren's installation, *Frames* (1999), suggest on the other hand, navigation taking place through an indicating gesture, in the labyrinth of the world

in which a photographic presentation of a case of a mental disorder turns out to be a tool for compulsory identification and enslavement instead of helping to understand the patients (Figure 9). Numerous works of Hershman, Shaw, and Weinbren, but also installations of Luc Courchesne (Figure 10), Jean-Louis Boissier or Masaki Fujihata (Figure 11), represent different manifestations of such interactive strategy.

Excellent examples of Strategy of Labyrinth are interactive films created on a DVD-ROM platform. A very successful form of such a realization is *Tracing the Decay of Fiction: Encounters with a Film by Pat O'Neill* (2002), a work realized by O'Neill together with Rosemary Comella, Kristy H. A. Kang, and The Labyrinth Project group, and *Bleeding Through Layers of Los Angeles 1920–1980* (2003), where interactive narration of Rosemary Comella and Andreas Kratky takes a theoretical-cultural discourse of Norman M. Klein into the world of moving images and was created as a result of productive cooperation of the earlier mentioned The Labyrinth Project group and Zentrum Für Kunst und Medientechnologie (ZKM) in Karlsruhe. Both of these interactive, labyrinth narrations offered to be purchased on DVD-ROM, take the environment of interactive experiences into private space of the users. In

LYNN HERSHMAN LEESON



Deep Contact, 1984-1989
installation with Microtouch monitor, interactive video, screen,
DVD

Deep Contact, the first interactive sexual fantasy videodisc, invites participants to actually touch their "guide," Marion, on any part of her body via a Microtouch monitor. Adventures develop depending upon which body part is touched, and users embark on a series of episodes with either a demon or Marion. The title refers to the player's ability to travel through the fifty-seven different segments into the deepest part of the disc, determining his or her unique route to its center. Along the way, viewers choreograph their own voyeuristic encounters.

Distinctions include the first touch-screen art work and the Prix Ars Electronica Honorable Mention.



installation view at Henry Gallery, Seattle

Figure 8. Lynn Hershman, *Deep Contact*, 1984–1989. Photo courtesy: the artist.

another way, also other numerous works of such kind are made accessible on the Internet.

STRATEGY OF RHIZOME

In the construction center of works realizing the Strategy of Rhizome, as is the case with the Strategy of Labyrinth, there is also a structure of organizing information resources. This time, however, this organization takes on a form of cyber-text. This category, suggested by Espen J. Aarseth,¹⁰ I understand, generally speaking, as regarding the open forms of shaping data sources which could undergo development and expansion

beyond their current limits during an interactive experience. Such development may take place during completion that takes place both in the sphere of the applied material and as far as its organization goes. While hypertext enables multidirectional navigation only within the limits of a certain structure, cybertext makes it possible to create new paths and areas. Thus, the name of such strategy—a rhizome is a metaphor of a multidirectional, unpredictable development.

Discussions evolving around the concept of cybertext invariably leave this idea as something far off from full clarity. Despite singling out the basic functions (exploring, configurative, and



Figure 9. Grahame Weinbren, *Frames*, 1999. Photo courtesy: the artist.

text-creating) and structural factors of the cyber-text (textones and scriptones) as well as operations performed on them, applying this category seems to be each time connected with the necessity of its interpretation. In my case, however, it appears a little easier than for literature theoreticians as any reflection over the cyber-text issue in the context of interactive art transfers the discussed construct

from the level operating on semantic structures onto the surface of actions performed also on material objects and digital immaterial forms. In other words, we are faced not only with practices of proliferating the senses, but also of their (im)material carriers; on top of that it is precisely the latter sphere of actions that plays a crucial role in the process of distinguishing cyber-text forms of



Figure 10. Luc Courchesne, *Portrait One*, 1990. Photo courtesy: the artist.

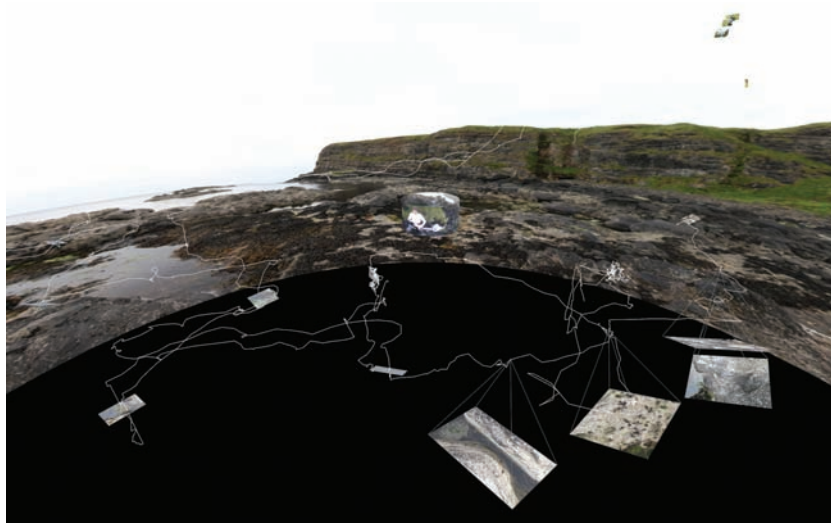


Figure 11. Masaki Fujihata, *Simultaneous Echoes*, 2009. Photo courtesy: the artist.

using the strategy of rhizome. Furthermore, by distinguishing just two of its forms from among the strategies of interactive art, those two that are outlined due to their way of organizing data, I can also establish their meaning in mutual references, which—for the notions of hypertext and cybertext that become their foundations—may result in the possibility of finding, in the works with which they are associated, explications that explain (or clarify) them. Assuming that cybertext category as understood here, may be of use not exclusively in the digital areas of interactive forms, I cannot avoid mentioning here that it is precisely in this area that phenomena described in this way may find their complete and unique possibility of real existence.

Category of rhizome, which I use in order to determine the strategy discussed here, comes obviously from the rhizome theory of Gilles Deleuze and Felix Guattari. I refer to it precisely to describe the strategy that assumes multidirection, endlessness and—to certain extent—unpredictability of the interactive work's development for reasons that are—I suppose—quite clear. This category was created in order to conceptualize the complex heterogenic, nonhierarchical, acentric phenomena that are deprived of the beginning and the ending, but equipped with environment, though they cannot come down merely to unity or variety, they are not created out of units, but out of dimensions or movable directions that are more nomadic than historic. As Deleuze and Guattari put it: rhizome has no beginning or the end, it is always

in the middle, between things, it is the alliance, solely the alliance. Where are you heading? Where are you coming from? Where do you wish to arrive? Such questions are quite useless. The environment is not means, on the contrary—it is a place where things accelerate. Amongst the things there is no relation to be defined and that goes from one to another and vice versa, but there is simply the perpendicular direction that lifts the one and the other, a brook with no beginning and no ending, rolling both banks, and accelerating in the environment.¹¹ The most radical forms of interactive art find themselves excellently in the area of category of rhizome understood in this way.

Works that apply the Strategy of Rhizome, due to the range of designed and acceptable creative kinds of behavior among the viewers, belong not only to the most radical, but also often to the most attractive forms of interactive art. Sharing the numerous features regarding the character of experience with the previous type (labyrinth causing the sense of endlessness of the exploration field), they differ greatly precisely because they transform and develop multidimensionally throughout and as a result of interactive experience. At the same time they take on various forms of the strategy of this development.

1. They may be converted as part of the process order, thus reacting to interactive interventions of the participants, but still they would be transforming remaining in accordance with their own transformation logic. An excellent

example of such work is an installation created in 1994–1995 by Christa Sommerer and Laurent Mignonneau—an artificial ecosystem *A-Volve*. The users design creatures—forms of artificial life settling them later in the ecosystem, evolving as a result of further interactions with their creators and interactions with each other (Figure 12).

2. They may also undergo transformations at the same time keeping the memory of their original shape, which for the interactors means a possibility to experience both the work's original form and its transformed stages—as is the case with Polish artist Piotr Wyrzykowski's work *Poczet Królów Polskich* (*A Roster of the Kings of Poland*, 1993).
3. They can present permanent changeability as well, caused only by interactions themselves, as can be observed in *World's First Collaborative Sentence* (1994) by Douglas Davis.

Currently, the works created with the use of the Strategy of Rhizome can most often be encountered in the Internet; open architecture of this medium makes it a place particularly friendly for projects covered by this strategy. They can be found most easily among realizations that Rachel Greene defined as *open works*. *Glyphiti* (2001) by Andy Deck is the interface that may be modified in any way by the users who each time give it a

personalized character. Similarly, a *communimage* project installed in the Net in 1999 by Johannes Gees and calc group (Teresa Alonso Novo, Looks Brunner, tOmi Schneiderbauer, Malex Spiegel, Silke Sporn) within which the users can not only load graphics by themselves, thus making a collective collage, but can also use it to communicate, in this way creating relationships that can lead to emerging a commune from among them. A project of Mongrel group (Graham Harwood, Matthew Fuller, Matsuko Yokoji, Mervin Jarman, Richard Pierre-Davis) started in 2003 and entitled *Nine(9)*, initiates a cooperation in public context, allowing the participants to create simple, multimedia “knowledge maps” that can later be connected by hyperlinks with analogical information constructions created by others. The whole system automatically generates electronic mail communication among the involved people, thus creating relationships between them.¹² Social character of these projects relates them to the strategy of net discussed by me later on. On the other hand, a project by Rachel Baker *Platform* (2002), creates a platform for text messages sent from trips, creating a mutual environment for further explorations. A realization by Graham Harwood and Matthew Fuller *Text FM* (2000–2001) is of similar character, where text messages and e-mails are transformed into announcements uttered by a speech synthesizer and emitted on the radio.¹³

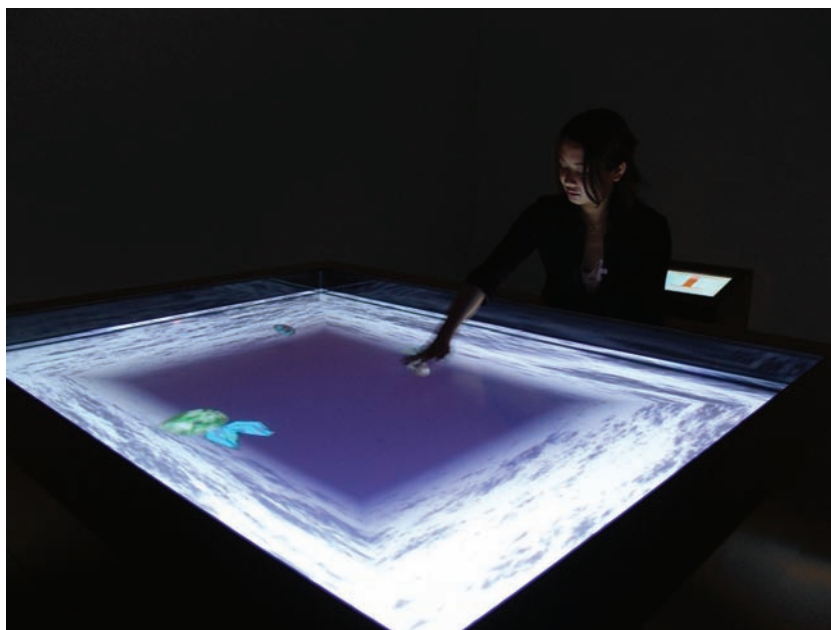


Figure 12. Christa Sommerer, Laurent Mignonneau, *A-Volve*, 1993–1994. Photo courtesy: the artist.

A work *Technosphere*, placed on the Internet in 1995, a joint work of a group including Andrew Kind, Jane Prophet, Julian Saunderson, Gordon Selly, and Tony Taylor-Moran is of pioneering character in the recently analyzed artistic environment; it was constantly refined and functioned on and off with server changes until September 2009. *Technosphere*, a project of an artwork exploring the issue of digital ecology, reminding the Sommerer and Mignonneau's installation *A-Volve*, discussed earlier, is a three-dimensional simulation of ecosystem environment operating in real time, which—similarly to the other installation—offers its participants a possibility to bring into existence artificial creatures that interact with each other. The creatures remain in various relationships with their digital environment, as well as with their creators and interactors, thanks to which each one can develop differently. *Technosphere* is a very early example of possibilities offered to the Strategy of Rhizome by development of net (WWW) environment.

STRATEGY OF SYSTEM

Works of art for which I find space in the context outlined by the Strategy of System and which started to appear since the beginning of the twenty-first century have immediately stirred many theoretical controversies. **It came as a noticeable fact that despite their dynamic processing, digital properties, and immersing in interactive environment of the Internet, they do not create a possibility of real interaction for their users.** They are characterized by eventfulness which does not find many ways out where the viewers are, but **takes place rather in their inner, technological, digital world.** The reasons why I decide—despite all of the above-mentioned doubts—to give them a status of interactive art works are in theoretical reflections of Derrick de Kerckhove and Jean-Louis Boissier. Both of them accept **the possibility of inner interactivity's occurrence, that is the result of digital computer systems' autonomy.** That is why I, assuming their perspective—and this decision will allow to introduce to the discussion issues that undoubtedly are worth noticing in the context of reflection over interactive art—determine a strategy characteristic for such artworks as Strategy of System. In the center of which there is a system—software and

hardware, determining the order of functioning of mechanisms, organizing the inner dialog. The system provides the work with a character of an event that occasionally finds its roots in human communication activity, often used without consent of the people, or it leads to events that already are of autonomic character, taking place solely within the technological order.

An example of the former kind, where the applied form of strategy allows the work to use the sources generated through human activity, is Mark Hansen and Ben Rubin's installation *Listening Post* (2001). This work, in a dimension accessible to the receivers who are on site of its artifact's exposition, takes on a form of an event-taking place in the sound space and on 231 liquid-crystal screens. **The event is a result of a search through Internet chat rooms so as to find and present on all channels, both visual and audio, short text forms whose sound synthesized expression creates sonoric aspect of the installations.** The searched-for text forms have frames that are only drafted, thanks to which each screen is filled with a slightly different text that still belongs to the group determined by selected and common parameters. The holistic and final shape of the work becomes an audiovisual spectacle performed in real-time through a technological system supported by technological products of conditioned human net activity (Figure 13).

In Hansen and Rubin's installation we may observe a division of participants involved in an event—characteristic for the hereby discussed group of works realized around the Strategy of System—into two separate groups. The division is accompanied by parallel distribution of the work's interface system factors between them. The first group, placed *on line*, is used as an unaware of its role of data source, so it is immediately connected to the *input* system. The latter group, that makes the audience of an audiovisual event, is connected with an *output* system. This division justifies controversies around works of such kind because in interactive art input and output systems are usually connected with the same group of users or they are multiplied for both divided groups that are only telematically connected, to have a full range of interactive possibilities at hand. A similar kind of division can be observed in case of Paul De Marinis's installation *The Messenger* (1998/2005), where the input system is powered by electronic

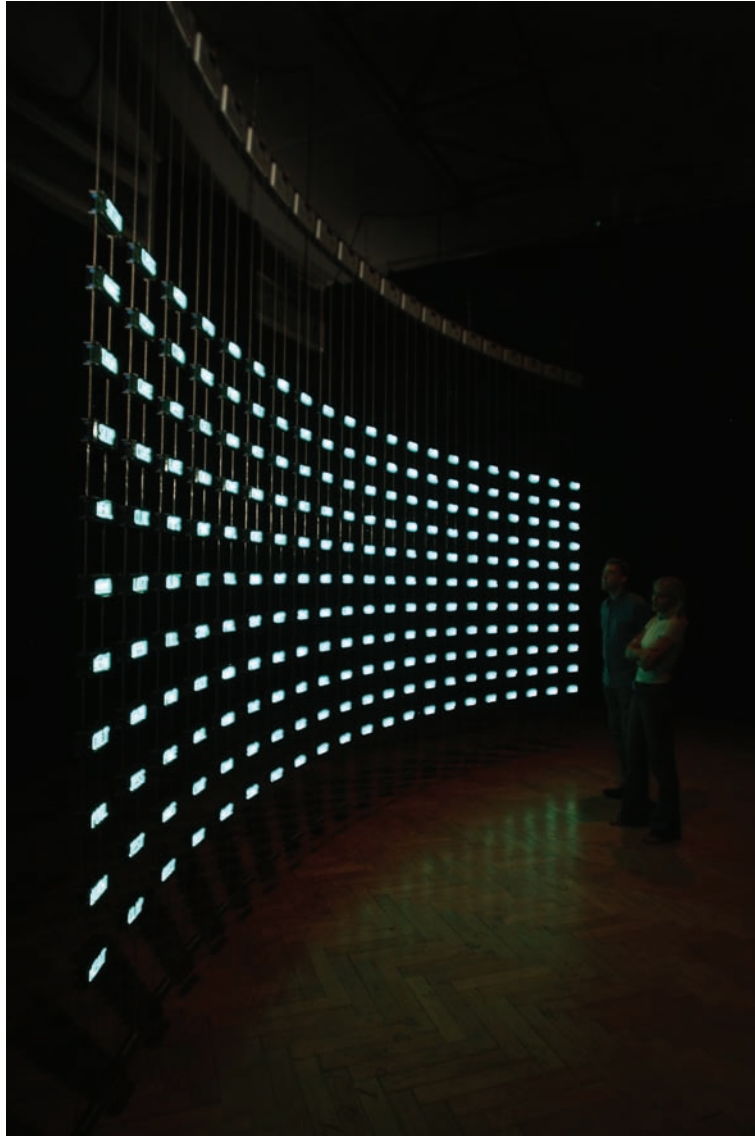


Figure 13. Mark Hansen i Ben Rubin, *Listening Post*, 2001. Photo Otto Saxinger, courtesy: OK Offenes Kulturhaus, Linz/ Austria and Maria Falkinger.

mails, coming to the artist's account and a spectacular output system creates an event that is observed by the gallery audience (Figure 14).

Another group of works created on the basis of the Strategy of System, in which we observe total autonomy of technological order, is very well represented by Steve Heimbecker's installation *Wind Array Cascade Machine* (2004). This time it is not the participants but the work's dispositive that is divided into two parts. The first of them comprises of a set of specifically shaped instruments taking meteorological measures (temperature, pressure, humidity, wind direction, etc.) located on the roof of the building of The Daniel

Langlois Foundation in Montreal. The other part though, is made of an installation correlated visually to the objects taking measurements and placed each time in the gallery space where the work is exhibited. The gallery installation is in interactive relation (through the Internet) with devices that are on the roof of The Foundation. Each change of meteorological parameters results in transformations of the system in the gallery installation attributed to it. Its audience, with no exceptions, comes down to the role of a spectacle's observers. The viewers differ from the traditional ones, only, and even then just slightly, in their conscious awareness of interactive connections



Figure 14. Paul De Marinis, *The Messenger*, 1998/2005. Photo copyright: Steven A. Heller/Art Center College of Design, courtesy: the artist and Stephen Nowlin and Alyce de Roulet Williamson Gallery.

occurring between both parts of Heimbecker's installation. Telematic, imaginative contact with the absent objects. It is not easy though, to resist an impression that technological, interactive system of the work of art takes place without the receivers' interference. Or perhaps even with no audience at all.

As a somewhat metadiscursive preparation of the works described above, we could consider the installation by David Rokeby *n-cha(n)t* (2001). Audience's interventions who cocreate the course of the developed interactive event are possible, indeed desirable in this case from the point of view of strategy of work, as—except of course for sensations related to satisfaction brought by experiencing an artworks that is deeply rooted in the Strategy of Rhizome, it also brings completely different sensations, closer more to those described above. The network of computers that is the basis of Rokeby's installation, demonstrates independence and self-sufficiency, it presents its own perfection that is characterized by balance and harmony. The digital world represents here the values that humans used to take as their own, as belonging to them and inseparable. Whereas the experience of *n-cha(n)t* suggests a different vision of human, as a source of chaos and at the same time being that reveals its uselessness to the world of more and more intelligent and self-sustained technologies.

The analysis of selected works of art realizing the Strategy of System carried out above shares, in my view, some light on the reasons why I decided it appropriate to leave them as part of interactive art, thus making them part of deliberations carried out here. **Bringing very limited perspectives for interactions undertaken by the viewers, Strategy of System gives them a possibility to experience inner interactivity of digital computer orders more deeply, an experience that embraces connections of systemic autonomy with their communicational potential developed in a parallel way so characteristic for them.** This experience brings on an incredibly important insight into the new technological systems shaped within our reality, which are transformed in an unnoticed way into new, digital worlds. Their meaning for the shape of our life turns out to be more and more of a riddle nowadays.

STRATEGY OF NETWORK

Strategy of the Network creates, shapes, and organizes relationships that link the participants of an artistic event. Therefore, it is not interactions, but most of all their result—the created network of relationships—that is in the very center of its activities. That's why I suggest perceiving it in connection with the concept of interactivity to

which Eric Zimmerman¹⁴ attributed a term (not very fortunate) of meta-interactivity. A more successful idea of Zimmerman, and as a result more useful (particularly in the deliberated context) is, to my mind, defining this form of interactivity as cultural participation, bringing it closer to the social environment shaped by it. In this way it is also brought closer to the Strategy of Network. For the latter one also takes place mostly in public space. It is there that artistic enterprises are undertaken, then linked into one complex artistic event with actions of political, social, ecological character, very often also inscribing themselves into scientific projects. The result of this creative attitude is hybrid art, aimed at community and evolving around the Strategy of Network.

This strategy is currently probably the most important mechanism shaping the character and the circles of interests of public artistic practices that blend in the common context historic avant-garde examples of actions belonging to *community art* with the latest projects realized on the platform of locative media.

A successful example of an action that places the above-mentioned political and scientific aspects into an enterprise of artistic network character, is project *Makrolab*, initiated in 1997 by Mark Peljhan, and still going on. As Rachel Greene stresses it, in this case we deal with a network created by artists, scientists, and activists belonging to the media forming circles, conducting research linking the problems of telecommunication and natural phenomena, focused of the properties of digital satellite culture (including radio waves, atmospheric properties, and electromagnetic spectre). In Peljhan's understanding, they are invisible but real materials used by global, social, and political mechanisms.¹⁵

The Strategy of Network watched from that perspective does not always have to be connected with interactive technologies. Just the social net system that has been brought to life creates interactive dimension of art organized around this strategy. The events that make it up are usually of hybrid character, they bind various means of action, including of course, digital communication technologies. In modern times, in actions of this kind, mobile media plays a more and more important role. Art that is created around the Strategy of Network discovers its

platform in tactical and locative media, which use global communication technologies to realize events aimed locally.

As an example of such enterprise, we could point to a project *XReport* (2002), designed by the Mongrel group, cited here earlier. This was the response of artists who were the core of this group, to increasing practices of supervision the public space by CCTV systems, an attempt to build a deeper social awareness of their actual omnipresence. In order to do so, this project combined an Internet platform with actions in city space and gallery exhibition. Information about the project was spread using various channels, including stickers—alternative means of communication. At the entrance of the Institute of Contemporary Art in London there were black and white monitors presenting images typical for surveillance cameras. There was also a website started on the Internet, where information collected by the participants was placed, concerning location of CCTV cameras supervising traffic in London. It was also there that everyone, by entering the address from which he/she was setting off and the one he/she wanted to reach, could obtain information about which route to take so as to come across the lowest possible number of cameras following him or her throughout the way.¹⁶

Another artistic enterprise worth recalling here and applying strategy of net is *MILKproject* (2004–2005), realized by Esther Polak and Ieva Auzina with the help of New Media Culture Centre in Riga. Its space has been outlined on the one hand by the Latvian milk and cheese producers, on the other hand by the Dutch distributors and consumers of it. The frames for this event are based on the transfer of products produced by one environment for another one, where it is consumed. Those who play some role in this process—farmers, dairy workers, drivers, shop assistants—received GPS devices for one day, recording their relocation, creating a virtual map of their working environment, and the whole process indeed. Software prepared especially for this purpose allowed to prepare visualization of the whole event, thus giving the participants a possibility of watching it—with them in it—from the perspective of their own, home surroundings (connection between private and public space). The whole project gave the direct participants a possibility to transform throughout the process

their social status: from an individual into a member of transnational community—that eventually brought an experience of participation in collective, global event to all those engaged in the process.

Numerous very valuable achievements that faced the challenge of the Strategy of Network belong to a Canadian artist Michelle Teran. In a project from 1997, entitled *Friluftskino: experiments in open air surveillance cinema* realized in Oslo, Teran, not for the first time in her career, used visual materials registered by cameras monitoring public space and captured live by scanners (I am writing about other cases of applying this method by Teran in the next section), so as to immediately re-project them onto the walls of buildings, thus creating a variation of an outdoor cinema. Another type of a net enterprise was realized by Teran in 2009 in Murcia. *Buscando Al Sr. Goodbar* project was a trip to a city the many citizens of which placed video they made on the YouTube platform. Since their addresses could

be traced using Google Maps software, Teran undertook a journey in which she led to the meeting of those people. The event gained a name *techperformance* in terminology suggested by the artist (Figure 15).

A very characteristic feature of artistic events that were founded by the Strategy of Network is their complete incompatibility to structural frames and the mechanisms of operations that characterize art exhibition institutions. These institutions may appear in the role of one of the knots of a net event that is being created (such role was taken on for example by the London ICA in the *XReport* project of the Mongrel group), they cannot however, become a place of its genuine, full exhibition. That is why, for instance, the *MILKproject* described above and awarded in Ars Electronica competition in Linz in 2005, contrary to other works of art rewarded there, was only presented in form of documentation. In case of works of this kind there is no form of dispositive that could be placed in the gallery environment as a

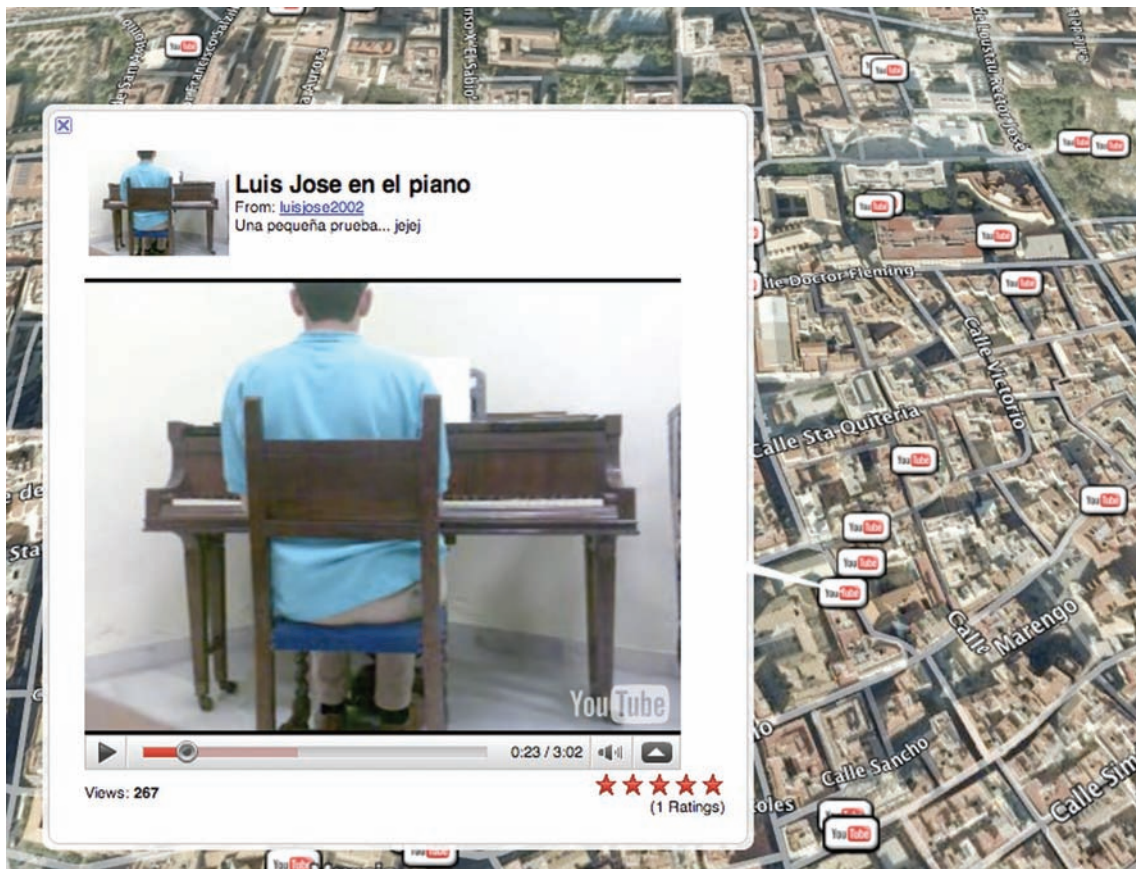


Figure 15. Michelle Teran, *Buscando al Sr. Goodbar*, 2009. Photo courtesy: the artist.

whole and then become a place of existence for an artwork-event. For its complete development, they require public spaces. This also means actual, final for this strategy, doing away with the role of a receiver-observer of the event; participation is here the only form of a genuine, full experience.

STRATEGY OF SPECTACLE

Recent appearance of numerous interactive artistic phenomena which made me outline the last one strategy in this typology—the Strategy of Spectacle, seems paradoxical, spiral return of interactive art to traditional esthetics founded on reserved, contemplative experience, esthetics that was quite firmly rejected in the context of interactive art and defied by its creators in the whole early period of its history (by many of them up to the present moment). In the very center of this strategy is the event itself, which—as a result—takes on a form of a spectacle. In the context of the Strategy of Spectacle comes back the position of an observer contemplating a spectacular event, so firmly declined from the Strategy of Network. This position, however, is significantly redefined here.

Interaction required by spectacles of such sort, various activities undertaken by the participants for the spectacle to actually take place, activity expected from them (even though minimal), makes them eventually a part of such event. This property did not characterize the classic observers of a spectacular event in the slightest, because in this case the distance separating them from the watched spectacle was of basic and non-measurable within space character. This being-part-of-an-event status of a participant with reference to the Strategy of Spectacle is quite particular and this property results from the character of relation occurring between two sides. This participant has very limited possibilities of having any real influence on the course of an event. Or she/he determines just the beginning and the ending of the whole event, either she/he is solely a person to whom it happens, yet—and this should be stressed—the event takes place in his/her own world shared of course with the dispositive of an artwork, and it occurs with a minimal participation on their part. This eventually causes the position taken by the receiver of

the work organized around the Strategy of Spectacle, joining participation with observation, take on a well-known form of participating observation. It is precisely because of that fact that I would not include an otherwise spectacular installation by Rafael Lozano-Hemmer *Vectorial Elevation* (2000) among the works created with the use of the Strategy of Spectacle. An event organized as its part, from majority of participants required only observation, with no possibility to mark their participation in any way. Lozano-Hemmer's work is an example of recent, telematic projects within which the audience is divided into groups and their members are attributed with various possibilities of behavior (I mentioned that before while discussing Strategy of System). Such artworks, from the point of view of their participants, may refer to various strategies at the same time. The installation cited here, *Vectorial Elevation*, for a small but active group of participants who, on the Internet, designed a spectacular event taking place in reality, takes on a form of a work connected with Strategy of Instrument. For majority of the viewers, however, it is more of an indication of starting the Strategy of Network.

What differentiates observation taking place in the context of interactive art from the one that is appropriate for social sciences is the fact that the first one aims at an esthetic experience, whereas the latter one remains within the cognitive one. In both cases the experienced sphere sustains significant autonomy and the experience itself gains its final shape and brings certain results depending on attitude and behavior of a participant-observer. It is also worth recalling here the *(v)user* category, suggested simultaneously by Mirosław Rogala and Bill Seaman, created from a combination of observer/viewer and user (*viewer/user*). Placing more stress on observation aspect transforms the “(v)user” into the participant of an event created around the Strategy of Spectacle.

An example of a work connected with the Strategy of Spectacle, in case of which the participant of an event defines its frames, could be an installation of a Belgian artist Lawrence Malstaf's *Nemo Observatorium* (2002). In this work, the receiver, by taking place in an armchair placed in a cylindrical construction and using a buttons placed there (connected to five fans and polystyrene foam particles) can cause (and finish)



Figure 16. Lawrence Malstaf, *Nemo Observatorium*, 2002. Photo Otto Saxinger, courtesy: OK Offenes Kulturhaus, Linz/ Austria and Maria Falkinger.

an artificial typhoon or a cyclone that he/she safely contemplates from its very center (Figure 16). This work received in Linz's Ars Electronica 2009 competition the main prize of Golden Nica in category of interactive art. This fact forcibly shows the scale of notes received nowadays (the installation dates back to 2002!) by works of art representing the Strategy of Spectacle.

On the other hand, an example of a work representing a difference in which the viewer is faced with participation in the event, is an installation by Yoko Ishii and Hiroshi Homura

It's fire, you can't touch it (2007). In this work which appoints the active environment, onto the hands reached out by the participants, miniature light signs are projected—a Japanese tanka poem is running through, glyphs change form, fuse together, move. Here we deal with a poetic spectacle in which the perspective of cognitive interactivity, set off in contact with poetry, is complemented by tactile sensations and poems themselves are as if extracted from the environment by interactive gestures of receivers-readers (Figure 17).



Figure 17. Yoko Ishii and Hiroshi Homura, *It's fire, you can touch it*, 2007. Photo Otto Saxinger, courtesy: OK Offenes Kulturhaus, Linz/Austria and Maria Falkinger.

PALIMPSESTS AND TRANSFIGURATIONS

I do not perceive of course as the final and definite one the typology of art suggested here. Development of new technologies in this area of artistic activity, but also going through its current achievements with reference to other categories than quoted by me, to other criteria of division, may bring a different picture of the analyzed phenomena. Classification of interactive art presented in this study gains, to my mind, a methodological coherence due to the fact that while characterizing individual strategies, I always remain within the

same set of indicators of interactive art, which play here the role of division criteria. Interface, interaction, the used data and the way in which they are organized (in this case it is the alternative possibilities—database, hypertext, cybertext—they all become factors of systematic), inner technological order, the created social network, and the event itself—they are basically the factors of each interactive work-event. Differences in interactive art variations where identification is the basis for outlining individual strategies lie mostly—as I mentioned already—in organization, each time different, and arrangements in hierarchy of those

factors. These differences lead to the many other differentiations still shaping on the level of general arrangements and not with reference to individual realizations concerning, for example, interactive tactics possible to undertake or recommended within particular strategies, their aims and environments in which they develop, relations between participants of the events, the characteristic array of the issues. And it is only on the basis of these further differentiations that are still a part of differentiation systematic that individual works of art-events appear, developing and interpreting their eventful frames. Among the latter ones, which must be stressed, the merging of strategies is a very significant tendency nowadays—numerous works are created today on the edges of many strategies. This is the result of hybrid character of contemporary interactive art, the progressing virtualization and telematization, and of course the developing individual artistic attitudes that correspond to this tendency.

Changes that take place in the area of interactive art, which is outlined by identified here and singled out strategies, are—to my mind—of triple character.

Firstly, interactivity is no longer explored in a way abstract, only for itself, but is more and more often entangled into various problem contexts: social, political, ecological, etc. It is not the interface constructions then, but the events taking place in the area specified by interactive strategies that begin to be the main field of interest of the artists. Long gone are the times of fascination just with the phenomenon of digital interactivity itself.

Secondly, transformations taking place in this area bring interactive art closer to institutionalized gallery-museum system. This brings certain consequences concerning the character of the work, dispositive's construction, environment in which it is located and its relation with artistic tradition.

Thirdly, higher and higher number of interactive works is located in public space, transforming it and combining in many ways with virtual environments. These transformations are significantly connected with the processes described in point one. Many works realized in public environment takes on a form of locative art. They reach out for network strategies and by pushing interactive digital technologies aside to the background (which does not necessarily have to mean irrelevant), they subdue them to social tasks, or they

analyze the consequences of their presence for the life of individuals and communities.

NOTES

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