poster



audiohyperspace

from hoerspiel to interactive radio art in the digital networks

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Abstract

This poster sketches the current work in progress which SWR/Southwestgerman Radio's "Audiohyperspace" program is developing, to transform radio art of the broadcast age to interactive acoustic media art of the digital networks' age.

Audiohyperspace researches and emphasizes the importance of dramaturgical concepts as a basis for interactive acoustic media art, from which the development of the necessary technology and media architecture have to be derived from for the production: It is aiming to find convincing dramaturgies for interactive audio art, which reflect, in its creative potential as well as in its critical aspects, the new role of its artist, the shift of its recipient's role as well as the fundamental changes in the notion of art itself.

These interactive dramaturgies focus on creating an aestheticcommunicative audio experience through the combined use of radio and digital networks. Not the technological tools themselves, but the overall media architecture and its behaviour is, what forms sense and meaning.

Keywords: Radio art, interactive art, audio art, Hoerspiel, dramaturgy, listening culture.

Project URL:

http://www.swr2.de/hoerspiel/audiohyperspace

Year the Work was created: Ongoing, from 1998

Introduction

Hoerspiel ("radio drama) is an art form, therefore beyond the usual informational categories and its related aesthetic standards, from which the vast majority of radio program formats derived. In fact, Hoerspiel is not a format at all. Based on artistic claims, it is seeking the whole diversity of forms, contents, materials and modes of acoustic expression which transgress standardized media production.

"Radiokunst" or "radio art", Hoerspiel's radical sister, is doing this in most consequent ways. As a genre, which reflects the use and the electroacoustic identity of material, tool, dramaturgy, time and space concepts, it was already described and imagined in the early 1920s by the famous German composer Kurt Weill.

Radio Art is media art, and therefore trying out the technological, conceptual as well as the metaphorical potential of the apparatus. Since the digital networks came up recently, the electroacoustic media space, where radio art is based on, has become different. Its new architecture makes available a shared environment, a distributed space, with — finally - bi-directional communication possibilities.

Southwestgerman's Audiohyperspace-webpage and its on-air programs are tracing and reviewing the newest developments of web-based acoustic media art, investigating the aesthetic potentials of digital networks beyond the utilitarian purposes of Internet & Co.

Aims of Research

Based on SWR's monthly "Audiohyperspace"- webpage, we are aiming

- to develop acoustic media art dramaturgies specifically for the potential of digital networks
- to build up acoustic media architectures which allow an interactive aesthetic dynamic between artist and audience, by combining radio and digital networks
- to explore cultural shifts of acoustic perception modes through the use of participatory strategies and the aesthetic use of the new relationship between acoustic media and its audience
- to identify quality criteria for audience participation and, based on this, encourage the creation of autonomous acoustic media art, in order to sustain and develop a culture of listening adequate to networks and multimedia spaces.

1. Project Description What is Audiohyperspace?

"Audiohyperspace" is a bi-lingual webpage of Southwestgerman Radio's (SWR's) Radio Drama Department. Since 1998 it traces the development of mediaspecific acoustic artforms in the digital networks.

It reviews the latest and most interesting of these productions found on the Internet, presents them on its webpage, links them, and offers background information. Its main focus during the last two years was on the questions of interactivity.

Additionally, to inspire the discourse on the topic, "Audiohyperspace" goes occasionally on air with one-hour long radiophonic essays. They illuminate questions of media or aesthetic theory, related to the topic of acoustic media art in the digital networks. These broadcasts can be also downloaded as texts and audio on demand.

Audiohyperspace understands itself as a guide through the diversity of network audio art and as a filter, which draws the listeners' and users' attention to worthwhile projects. At the same time it wants to serve as a criteria builder for the quality of participatory or interactive radio/audio art.

Quality criteria are for example:

- The media specificy of audio art projects in the digital networks
- The acoustic autonomy of the piece
- The quality of its sound language and its worthiness of listening to it concentratedly
- The degree of creative interactivity and participation for the user/listener
- Based on these criteria Audiohyperspace wants to build up the genre of a future interactive radio art in the digital networks.

2. The origins of Audiohyperspace: October 1924

October 1924: The first German original radio drama (Zauberei auf dem Sender/"Radio Magic" [1] by Hans Flesch), aired by Radio Frankfurt, leads us immediately into today's electroacoustic space of networks and its interactive and participative possibilities.

Created in a time when radio was considered a new medium it tells humourously about a mysterious radio program disturbance: Instead of the scheduled Blue Danube Waltz a strange multilayered audio collage is on air with voices, noises, and music. By a mysterious force the ether had become an auditory multi-user space.

Like this might have sounded the early days of radio in the US before WWI, where the ether was accessible for everybody, and call and answer happened on the same frequency, quite similar to today's chat on the Internet. However, the program director in the piece insists on reestablishing the order of the broadcast principle: one sends — many listen. Therefore the reason for the acoustic on-air-anarchy had to be found and made quiet: a magician, who, by his witchcraft, had put all available live sounds and electromagnetic waves as a wild audio mix on air, something, which the usual radio audience had never heard before.

"Zauberei auf dem Sender"/"Radio Magic" describes the conflict between two radio concepts, which was still virulent at the time of its first broadcast:

- Radio as broadcast (one transmits, many listen)
- Radio as bi-directional multi-user space

The political decision, to identify radio with broadcast, was finalized in Germany and many other states by the beginning of the 1920s. During the following years it was fundamentally critized by artists and theoreticians like for example Bertolt Brecht (1932) and Rudolf Arnheim (1933).

Beyond these critics, which aim at the political, social and communicative limitations of the broadcast principle, the first German Hoerspiel emphasizes, that opening up a participatory media architecture also breaks up aesthetic limitations. It requires different concepts especially

- of material, form, dramaturgy
- to produce sense and meaning
- of art, artist and recipients

Although since the end of the 1960s a number of radio pieces became participatory by using the telephone as an interactive tool it hasn't been since a few years, that the digital networks have made a bi-directional electroacoustic multi-user space available. Therefore SWR's webpage Audiohyperspace and its on-air programs try to take up again the almost lost thread of network based audio art, which had been already spun by the first German Hoerspiel in 1924, developing today appropriate concepts for the new media architecture.

3. How can radio art become interactive?

By monitoring and searching for interactive internet based audio projects, Audiohyperspace found the following typologies for participatory concepts which break up the mono-directional broadcast principle (all examples can be found on

http://www.swr2.de/hoerspiel/audiohyperspace/engl_version/interaktion_e.html):

3.1. Dramaturgies based on navigation

Example 1: "Electrica" by skop (multioptional navigation)

Example 2: BBC's first interactive radio drama "The Wheel of Fortune" by Nick Fisher (multi-channel broadcast; acoustic hypertext-principle; navigatory choice between three options)

3.2. Productions, based on the flexibility of the sender/receiver relation

Example 1: "Via Napster into radio drama", "Siren's Voice" (reconstructing a radio drama by filesharing).

Example 2: the worldwide "Loop"-events of the Webcast artist group "re-lab.net" (webcast audiostreams are picked up by participants, remixed and made available to the next webcast participant etc.; the loop gets closed, when the stream is picked up by the station which sent it out initially).

3.3. Concepts, based on network-architectural principles ("distributed space" and "shared environment")

Example 1: "mp3q" by Atau Tanaka (enables the user to do his own audio mix with selected materials or to contribute his own mp3-files, he can access via the website hundreds of linked mp3-files, stored on hundreds different servers worldwide).

Example 2: WebDrum, a multi-user application (up to eight participants can meet in a virtual space and can create together in realtime a drum session).

In combination with the acoustic broadcast medium all these concepts and strategies can open up radio for the audience's participation.

3.4. What concepts and strategies are still missing?

Speech- and dialogue-based radio art concepts are nearly completely missing within the artistic attempts to create interactive webbased audio works.

The main reasons:

- Difficulties in programming speech-based dialogue data bases.
- Critical realtime conditions of the digital networks.
- Clients' computers often too slow.
- Insufficient bandwidth.

4. Considering paradigm shifts, their creative possibilites and problematics

Audiohyperspace's aim to develop new dramaturgies for acoustic media art in the digital networks has to identify and to consider the cultural shifts of production and perception, caused by the network's new prerequisites: These shifts also imply difficulties and new challenges for the artistic concept and the dramaturgy itself.

4.1. The artist: From concentrator to moderator

Working within the field of the networks' interactive possibilities, the artist sees him- or herself not as the creator of a closed and finished art work. Instead, he offers a frame, in which others can become active. He is less a "concentrator", who distils meaning and defines the exact physisiognomy of the piece, but a moderator, who defines the topic and has formulated a set of exercised rules, by which the form and content of the input is processed. As the framework stays empty without input, the artist needs the recipient, whom he has to inspire to become operative.

Problematic: If the framework and its rules are not enough defined, the aesthetic statement becomes arbitrary. If the rules and the frame are too complicated, the recipient is overwhelmed and might use the artistic offer to participate in a superficial or trivializing way. If the frame is too simple, the value of experience is little and the motivation to participate as well. There is also a risk of loss of editorial and artistic responsibility, if it is the user who is supposed to produce the artwork.

Therefore, the invitations by the artistic framework to the recipients have to be balanced delicately.

4.2. The recipient: From listener to user

Where a framework needs to be filled by the interacting user, the process of appropriating and understanding of the artwork happens less through contemplation (receptive listening), than through operation. Acoustic media art in the interactive networks provokes a perception model similar to what Walter Benjamin, at the beginning of the 1930s, called "tactile reception". He compares it to the perception of buildings, which are "perceived in a double way: through tactile use and through its contemplation. (...) The tactile reception is not based on attentiveness, but on habituation." [2] According to this reception model, appropriating the artist's intention by the audience does not primarily take place by listening, but through searching, trying out, intervening, rejecting and trying out again.

Problematic: The strong operational involve-ment of the user, implies the tendency that listening becomes replaced by zapping and non-stop activity. As contemplation and listening are essential for understanding and using the artist's offer in a qualified way, it is important to develop a concept which encourages the user not only to interact, but also to listen.

4.3. The Concept of art: From semiology to behaviour

The set of rules offered by the artist, alters the users input according to his artistic intentions. This means that processing the input, treating the user's contribution by the "system,, becomes a central characteristic of an artwork itself. Such a process is conceived and programmed as part of the artistic framework, and plays a decisive role to create the intended sense and meaning. Roy Ascott: "Not so much meaning, content, appearance, in brief: semiology will be important for the future of art, but its behaviour toward the

recipient" [3], and therefore its response toward the user's input. The artwork becomes a kind of dynamic environment or even a living entity, with which the recipient can communicate and converse.

Problematic: To identify the borderline where a responsive artwork becomes perpetual animation. This can involve a loss of autonomy for the recipient as it becomes unclear: is it he who appropriates the artwork or is it the art, the system, the digital environment, by which he becomes appropriated?

5. Conclusions for an interactive radio art in the digital networks

5.1. Assigning a role for radio

The combination of broadcast and network media can avoid the mentioned problematics which tend to derive from operational interactivity. Combining can mean for example: an interactive audio art piece can be tried out in its non-linear, multi-optional aesthetic behaviour by the users on the Internet. A radiobroadcast can serve as a meta-channel for the same work: by airing it as a linear program, its artist can demonstrate its aesthetic refinement, which in most cases will probably exceed the users' trials and errors.

By this the audience can also experience, that the artist's claims, which are formulated in the interactive concept and setting, can be fulfilled and don't stay mere intentions. By the linear broadcast, which requires listening, also the possibility of contemplation, which is a prerequisite of understanding, can be made accessible for the audience. Finally, experiencing the artwork on the Internet, it will be an individual experience, whereas broadcast is a shared one. The broadcast program can be understood as a window on the processual and interactive artistic network setting in a certain moment.

5.2. Conceiving the recipient

Interactivity and participation in an artistic context is based on the vision of an exchange between subjects. A recipient, who just executes a set of options would be nothing more than a tool. Therefore, an interactive radio art needs the user, who is taken for serious as a creative one and who is asked to give a qualified aesthetic input.

5.3. Conceiving the experience

The goal: to create an aesthetic-communicative experience within a culture of listening. This can be compared to the satisfaction given by an excellent conversation: A conversation exists within a frame of topic and behaviour, which is filled by the improvisational liberty and the intellectual and emotional qualities of its participants. If they apply constantly the framework, then the conversation is directed and redirected towards sense and meaning. This does not only need the participants' operation and action, but also very essentially their faculty and willingness to listen, in order to understand each other.

5.4. The pilot project: "Frankensteins Netz"

Based on the reflections derived from Audiohyperspace, SWR's radio drama department prepares an interactive network and radio art piece, being aired live on March 23, 2002 on SWR's cultural channel. Its title: "Frankensteins Netz. Prométhée Numérique. Wiretapping the Beast" by Atau Tanaka [4], a co-production between Southwestgerman Radio, ZKM Karlsruhe, Deutschlandradio Berlin, Radio Canada and

the Goethe-Institut Tokyo. Its main performance hub is the ZKM Karlsruhe, connected with two remote performer cities (Montreal, Tokyo).

The work focuses the idea of the Internet being a living organism, which the listener/user feeds, raises and activates through data input. Similar to the Frankenstein-novel and the Prometheus-myth, this living organism gets out of control and has to be tamed and sedated.

Already one month before the performance the "living entity" reaches out for its listeners, communicating with them via SMS and inviting them to participate, even during the performance itself, in uploading texts, sounds, visuals. The user is not asked to simply click a number of options, but to enter the setting with creative and playful input. This input will be contextualized and processed by the "creature"/the system itself as well as by the composer, both before and during the performance.

The piece can be accessed not only by radio but worldwide by a webinterface, which reflects the mysterious and dynamic topic of the piece. It will be also streamed live through the web, in order to provide a "window" on the momentarily state of the living entity.

As we want you to be our participants and creative users, we don't want to reveal too much at them moment, but are hoping to get you in contact with the creature for a thrilling aesthetic-communicative experience.

6. References

- Hans Flesch, Zauberei auf dem Sender, Hoerspiel produced by Radio Frankfurt 1924; Remake: Hessischer Rundfunk 1974.
- [2] Walter Benjamin, Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit, Berlin 1932.
- [3] Roy Ascott in: Sabine Breitsameter, "Unterhaltungen im Internet. Hörspiel als Interaktion", broadcast Dec. 14, 2000, SWR2, script and audiofile: http://www.swr2.de/hoerspiel/audiohyperspace/ sendung/20001214/index.html
- [4] Webdesign by Antoine Schmidt, server programming by Peter Hanappe.