'Jump in and Xplore': The perception of music and space in music CD-ROMs1

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Starting from the thesis, that 'the history of communication technology is the history of the increasing separation of singer, sound and image, their fragmentation into raw materials, and the simultaneous history of their reconstructed unity' (Berland, 1993:28), I am regarding music CD-ROMs as part of a history of technology, that constantly produces new forms of social practice and changes our perception. With music CD-ROMs, different forms of visual, literary and acoustic expression (such as video-clips, computer games, performances, poetry, film and television-commercials) are picked up and woven into a new medium with new possibilities.

Using the example of four CD-ROMs from the 1990s (David Bowie: *Jump*, 1994 / Laurie Anderson:

Puppet Motel, 1995 / Peter Gabriel: Xplora 1, 1993 and Eve, 1996) I will demonstrate how this medium calls the separation of producer and recipient into question, how a specific type of synaesthetic perception and conception of space is being produced and trained, and how the described world moves away from reality, and becomes its own artistic reality, in which pop-music is a tool for the popularisation of art.

Fragmented Senses: a History of Technology

Each innovation in the technically mediated reproduction of sound or image precipitates new forms of social practice, and changes the division of labour between playing, listening, recording, moving or watching. All of these, located in space and time, produce meaning for the music. (Berland, 1993: 36)

To demonstrate how new media form our perception, I am going to start with a short history of communication technology, following the ideas of Jody Berland. In the concert hail, all participants—musicians and recipients—are in the same room and perceive more or less the same, depending on their position in the room, their attention from moment to moment and other individual factors. All senses are involved. Only sound recording allows a separate perception of the pure sound. Recorded music can be perceived in any chosen context of time and space. The live film music of the early cinema represents a first attempt to reunite the moving image with sound. Nowadays within music video the isolated sound is accompanied by new images that are neither illustration nor documentation of the music. Music videos create a virtual space which absorbs the recipient's senses, as in the movies. Recipients are being virtually carried out of the room in which the physical subject is located. Their senses are being extended (McLuhan) through an imitation of the space of pop musicthe social context and the sensory impressions in this virtual space. The new context need no longer relate to an existing reality (Tee, 1994). An artificial dream world is being depicted which is no longer bound by the laws of physics. Through the loss of reference to the existing world, music videos can become a self referential piece of art, as Peter Wicke describes it in his article "Video killed the radio star" (1994). Wicke further describes specific formal principles of the music video, such as the continuously faster succession of visual sequences and strange symbols. They are too fast and isolated to be put into context by our perception. According to Wicke, this results in a field of individual association. The recipients create new contexts, using the offered fragments in very selective and personal ways (ibid.). This immersion through identification can also be found in music CD-ROMs and is being followed by immersion through interaction. The new medium of the music CD-ROM adopts its structures and visual concepts from well known genres such as the video clip and the computer game, but makes more use of the new technological possibilities to create an imaginary space with specific rules.

"Star Tracking": David Bowie: *Jump* (1994)

Nobody in the early part of this century could have imagined what enormous changes the world would embrace after 1950 with television, rock and roll, and now computer technology. We stand at the cusp of a historical moment in which all these arts coalesce in the interactive medium, and for the first time ever the awesome power of the imagination is finally met by technology able to translate its finite expression. Like Daedalus, we are fashioning ourselves with wings, leaving our confines to seek and explore new and unknown lands. (taken from the booklet accompanying *Jump*)

Daedalus wouldn't be able to fly very far in the virtual environment of *Jump*, a limited interior consisting of an elevator and a corridor with several doors, three of them leading into rooms to be explored. There is the professional editing suite, where one can be a music video director and record one's own version of Bowie's video *Jump they say*. In the executive office you can flip through photographs from Bowie's performances and watch video interviews with the star. In the third room there is a telescope allowing you to have a look into the musician's hotel rooms across the street. These rooms can be explored from a camera perspective. The graphic resolution is simple, you are navigating

through *drawn* interiors containing clickable animated objects: lights are flashing, *dogs* are *barking*, pictures on the wall start to move, musical instruments become audible as if by magic. All the rooms have something in common: a screen which *displays videos by or interviews with David Bowie The virtual* space in *Jump* is a depiction of the musician's imaginary private rooms. The telescope is a symbol of voyeurism which characterises the whole CD-ROM. But the view into Bowie's private life is a *constructed and limited one. The limitations are defined by rooms and screens within them. You don't* meet *the* star *himself*, *you only find his* traces. *ft's like he just left* the apartment: *there are shoes lying on* the floor, glasses on the desk, a voice in the telephone calling his name. Bowie is only present as a mediated figure on the screens. The screens become pictures within the picture. Our senses are confronted with several layers: the computer screen showing virtual rooms, which themselves contain screens showing other virtual environments. But the material shown on the screens isn't any different from what we get on TV. The only difference is a certain degree of interactivity. In two ways Bowie cannot break through the screen: he is putting two dimensional screens into three dimensional virtual spaces and he is always locally separated from the players by a screen. The roles are fixed: there's the star, mediated and unreachable, here's the fan on his trail.

World of music: Peter Gabriel *Xplora 1* (1993)

For a number of years I've wanted to become an experience designer rather than just a musician and this new technology is one of the things that is going to allow us to take a first step in that direction. Interactivity is exciting because it helps us not just to be artists but to provide a lot of material for the audience to participate in so that eventually they become the artists themselves and can use what we create, in a sense of a collage material, as stuff to explore and learn about from the inside. It's the opposite of being a passive consumer. (Peter Gabriel, 1993, taken from the booklet of *Xplora 1*)

Xplora I starts with a two dimensional interface with different menus that lead to the various parts of the CD: All about US; World Music; Peter's Personal File and Behind the Scenes.

All about Us shows the video clips from the record Us together with the lyrics. World Music introduces music cultures and artists from all over the world, who have recorded their CDs at Real World Studios. The Real World recording studios were founded in 1989 by Peter Gabriel and WOMAD, the World of Music Art and Dance Festival. They wanted to provide musicians from around the globe with high standard recording technology. This idea led to the Real World recording weeks, and Real World became a pool for multicultural exchange. World Music in Xplora 1 also presents musical instruments from all the continents. Their sound can be experienced with a click of the mouse. The cultural mixing board unites 15 musicians. By clicking certain combinations, one can retrieve videos that show jam sessions with the selected musicians. Peter's Personal File gives us a view into different projects Peter Gabriel is committed to like Amnesty International or Witness. The latter provides activists in crisis areas with video cameras to record injustice and violations of human rights in order to give them an audience. This file also shows Peter's passport and a photo album, both with animated graphics. Behind the scenes allows us to watch jam sessions and early versions of well known songs or to participate in a walk through the Real World grounds from the point of view of a video camera. It also gives an insight into a WOMAD festival and a recording studio, where one can remix a song by Peter Gabriel.

In *Xplora I* we meet the artists themselves, they are not mediated stars, but are unmasked and equal people from all cultures. Peter Gabriel appears as a private person in everyday clothes and not as a media star. The CD-ROM tries to create an awareness to the fact that music is a process, that the record is the frozen version of a complex interaction of several people and the concert a performed climax of this process. *Jump* has no background as to content or politics, *Xplora 1* has a topic, a message, and gives the music a function: music is the tool that unites people with different cultural, social and political backgrounds. Within music everybody has the same rights; music has no boundaries and no frontiers between language or culture.

Peter Gabriel even overcomes the notion of art as understood within a bourgeois context:

There are many ways we can interface with our worlds and express ourselves. Music is one, and it's a very powerful tool for me. I also love many forms of art and really enjoy working with visual things but for a long time I felt unqualified to participate. Our society says you have to be gifted, talented or part of a creative elite to make art, but for many traditional societies that's not true. I was fascinated to discover other cultures where absolutely everyone feels able to be an artist. Now I believe that I can develop ideas in any medium I choose, and I want anyone to believe that of themselves. (Peter Gabriel, taken from the Booklet accompanying *Eve*)

Though Gabriel works together with representatives of high art, he is not trying to unite pop music with a bourgeois notion of art, as art rock or progressive rock does. He seeks to blur the boundary between high and popular art. Not only the quality of a musical product decides whether something is high art or popular, but also the social practices of consumption, the social context. *Xplora I* wants to reach a broad audience, but the question of whether it does or not must stay unanswered.

Changing Sounds: New Directions and Configurations in Popular Music

Xplora 1 depicts the real world. The CD-ROM is an animated documentation of the work and views of Peter Gabriel and the projects he is committed to. Virtual rooms want to give a live impression of reality, they aren't artificial. The pictures are images of an existing reality and document specific views.

World of Thoughts: Laurie Anderson: Puppet Motel (1995)

Laurie Anderson has always blurred the boundaries—between performer and audience, techno and tangible, ephemeral and real. In the dark spaces of her imagination shadows race, nebulae swirl, words turn to smoke, electrical outlets whisper for attention, and time travels both ways. Welcome to *Puppet Motel*, an intimate and completely original performance piece in CD-ROM. (Taken from the booklet of *Puppet Motel*)

Puppet Motel consists of 33 rooms. The starting point and central room is the time room an unlimited corridor without doors. To change rooms one has to click on one of the various symbols projected on the walls: receiver, violin, TV set aeroplane, glasses, ice-skates, keys and so on. They lead to the corresponding rooms. To return to the central time room one has to click on plugs hidden in every room. The electric network becomes a means of transport and a symbolic connection of all the rooms. Not only the colours, but also the sounds of Puppet Motel are dark: Every room has its own sound, spoken words or music. The sounds are an example of Anderson's well known way of experimenting with acoustic material. The spoken words give insight into a introverted and pensive human soul. Small stories often reflect the struggle of life:

You're walking and you don't always realise it but you're always falling. With each step you fall forward slightly, and then catch yourself from falling. Over and over you're falling, and then catching yourself from falling, and this is how you can be walking and falling at the same time.

The meaning isn't clear and there is no common message to be found. Everything is mysterious and ambiguous. But there is a common topic: the problems of mankind, like loneliness and human relationships. The architecture has no logic, no relation to a material reality but a totally associative structure. It can be interpreted as an image of human thoughts or dreams. *Puppet Motel* is a house without a ground plan, more like a mental map. The linking of different images in a non-linear way is known from hypertext: instead of clicking on underlined words here we are clicking on symbols or things to enter unknown rooms. A local orientation has become ephemeral, rooms have no place any more—something we know from the internet, too.

To enter this world of thoughts, we have to penetrate the computer screen. From then on we are in the middle of the performance. Except for a TV set, there are no further screens in the game. From time to time Laurie herself enters the room to say or whisper a few words. *Puppet Motel* is about us. It visualises thoughts that we all have. The lack of connection between the different scenes is reminiscent of music videos. Peter Wicke counts an abundant mass of visual symbols among the visual principles of music videos. According to Wicke, a recycling of media images is taking place, a synthesis of symbols, verbal, musical and visual stereotypes, fragments of past media experience, which can be related to each other in a free way, because their connection is only a formal one (Wicke, 1994).

These observations are also true for *Puppet Motel*, although here the succession of the images is very slow, compared to video clips. But the various visual symbols and sounds are detached from a narrative context and allow individual association and sense. The aim of *Puppet Motel* is neither entertainment as in *Jump*, nor information, but rather a critical reflection of everybody's problems by means of artistic expression. The artist herself cannot be easily categorised: she is both pop and punk artist, 'Diva of the Avantgarde' and 'America's premier performance artist' (booklet of *Puppet Motel*) at the same time. According to Andrew Goodwin her music is being consumed as high art.

It is music for college students and middle class graduates who have the cultural capital to decode the significance of it's heightened use of repetition, it's minimalism, and it's shifting of attention away from the pop star and towards multi-media contextualization. (Goodwin, 1991, 1800

This might also be the case with Puppet Motel.

Synaesthetic artificial worlds: Peter Gabriel: Eve (1996)

Eve is about exploration and understanding; how and why things fit together or in some cases, why they don't. Nothing is ever as it seems. this is especially true in Eve. Upon examination, subtle connections begin to form. Because these connections are formed differently by each individual, they can have completely different meanings. No two people will have the same experience of Eve. (Ralph Derrickson, producer, taken from the booklet of Eve)

Eve is an environment consisting of a landscape with several buildings. This landscape changes during the game. More and more houses are added and one world changes into another: Mud turns into a garden. The Garden becomes the World of Profit. Whether or not an atomic explosion can be avoided, in the end everything turns back into Paradise. Eve is a kind of genesis, it is about the separation of Adam

and Eve and their wish for reunion. Human relationships are a central topic of the CD-ROM. Every world is designed by an artist and is accompanied by a song by Peter Gabriel. Many objects in the landscape are clickable: Some of them lead to other outdoor places. Others, like animals, stones or flowers, hide sounds that can be collected. There are two kinds of buildings in the landscape: art galleries where one can play with interactive pictures on the wall and so called *Interactive Music* Xperiences — buildings where one can play with song material. The latter contain two screens: a *chooser screen* and a *video screen*. In the *chooser screen*, the discovered sounds can be selected and arranged. On the *video screen*, the selected sounds—that is background loops and fill-ins— become visual: every loop belongs to a visual background and every fill-in is represented by an animal or an object that moves over the picture when clicked on. Fill-ins and backgrounds always fit together. The *video screens* allow a synaesthetic experience of sound and visual art.

To proceed from one world to another, one has to play with the works of art in the galleries, the songs in the *Interactive Music Xperiences*, or solve a riddle and always go back to the house of human relationships and listen to the statements of all the different people about their relationships.

Mud is an archaic world with a few animals and plants. There is only one human inhabitant: a little boy. With every new world a few buildings are added: The Garden shows elaborate garden architectures, more houses and even a cemetery: mankind has arrived. Profit is a big construction site and a rubbish dump at the same time. From there one can either get directly to Paradise or go through a nuclear disaster first. Paradise finally is a work by the land artist Nils Udo. It is untouched by man. Innocence seems to be regained through art: A child is drifting down a river in a nest of straw. A new beginning at the end of the CD-ROM.

The landscapes of *Eve* are fictive, although they partly rely on photographs. We can navigate through a part of this landscape by entering buildings through doors. But sometimes different scenes or rooms are linked by objects, as we already know from *Puppet Motel*. Because every room and clickable object has its own sound, local orientation is continually being replaced by an acoustic one: Every image has a sound and every sound has an image. But there is no logical connection between sound and vision: Whereas in *Jump*, guitars sound like guitars, here a stone and a fish produce sounds that have nothing to do with what one would probably expect. As in *Xplora 1*, music has a uniting character. While there it unites cultures, here it brings back the lost unity of sound and vision in a new context, with new rules and forms of perception. Here music is an art which is attainable by everybody. Music is the tool for anybody to express feelings in an artistic way. *Eve* allows you to share an artistic experience without being an artist yourself. Whereas Laurie Anderson leaves us in her dark world without a solution, after having shown us our loneliness, Peter Gabriel takes us to a fictive world, where problems can be solved in an artistic way. The aim itself is art, namely the artistic landscape of *Paradise*.

Fragmented Sounds

Pop music never stands alone. The experience of pop music and its lifestyle has always been a central aspect of this genre, for example the experience of community and liberty at folk and rock festivals, where in the sixties and seventies people also shared their views and ideologies. Nowadays young people socialised by MTV are used to consuming music in connection with pluralised lifestyles. There is no unambiguous meaning included any more. Meaning has to be constructed individually. The techno culture shows a swift from the experience of community to an inner experience of the physical and mental self.

An investigation of techno culture shows certain parallels to the music CD-ROMs in regard to sound being treated as material and how the roles of music producer and recipient must be redefined. As Wicke states, the origin of the sound—the context in which sound is being produced—has lost its importance for the perception of sound within techno culture. (Wicke, 1997:430)

This can also be observed in the CD-ROMs: While in *Jump* and *Xplora 1* there is still a connection between sound and its origin—the musical instrument and a room in which the sound is being produced by a person—in *Puppet Motel*, the origin of the sound has become irrelevant, except for Laurie Anderson's electric violins, which are a tool for her to generate and play with electronic sound effects. *Eve* goes one step further and puts together sounds and objects that don't have any obvious or known connection.

Another principle of techno is that it's free of song structures, so that only sound patterns remain (which can be filled with musical quotations). This tendency can also be observed in rock music. Among the CD-ROMs investigated here, only Laurie Anderson's is free of a song structure. But she comes from a background of avant garde and experimental sound, a genre with a high sensitivity to the quality of the single sounds. The other CD-ROMs are more in a rock or pop tradition, and retain the structural concept of the song. In *Jump* and *Xplora I* whole songs are displayed as sessions or video clips. The players can only interact by remixing the volumes of existing soundtracks. In *Eve* four songs are divided into raw materials—background loops and fill ins—to be rearranged by the players into just another version of the same song. Composition is not given up entirely, but the music is nevertheless fragmented and divided into its 'raw materials'.

There are not only parallels concerning the role of the sound material between techno and the CD-ROMs mentioned here. I want to come back to Peter Wicke again, who says that within techno the order of the sounds is being redefined from a system of representation of meanings into a system of physical participation (Wicke, 1997: 432).

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We can observe tendencies in that direction in the CD-ROMs, too. There exists a rough frame of meaning, which leaves a field for individual interpretation. Within this field, participation—that is individual association and identification—is central.

From all of this I conclude:

The development of communication technologies has changed the perception of music and space. Because music CD-ROMs make use of many of these technologies at the same time, they are a good example for the study of these changes of perception:

Digital recording technology allows us to regard songs as a kind of clay pit, and its sounds as clay to be modelled. Instead of playing music we can now play with music, without necessarily being an expert.

Virtual reality allows us to have sensual experiences independent from a geographic place. What we normally perceive separately in a concert hall, an art gallery or in nature, can now be experienced simultaneously under the new conditions of synaesthetic perception.

Both technologies—sampling and virtual reality—tend to downplay authorship. This in turn is incompatible with one central condition of pop music: the construction of the pop star we worship. Maybe this is the reason why innovative CD-ROMs like *Puppet Motel* or *Eve* are so rare.

Endnote:

1.1 would like to thank my friend Sarah Cooper (Basle) for correcting this paper

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