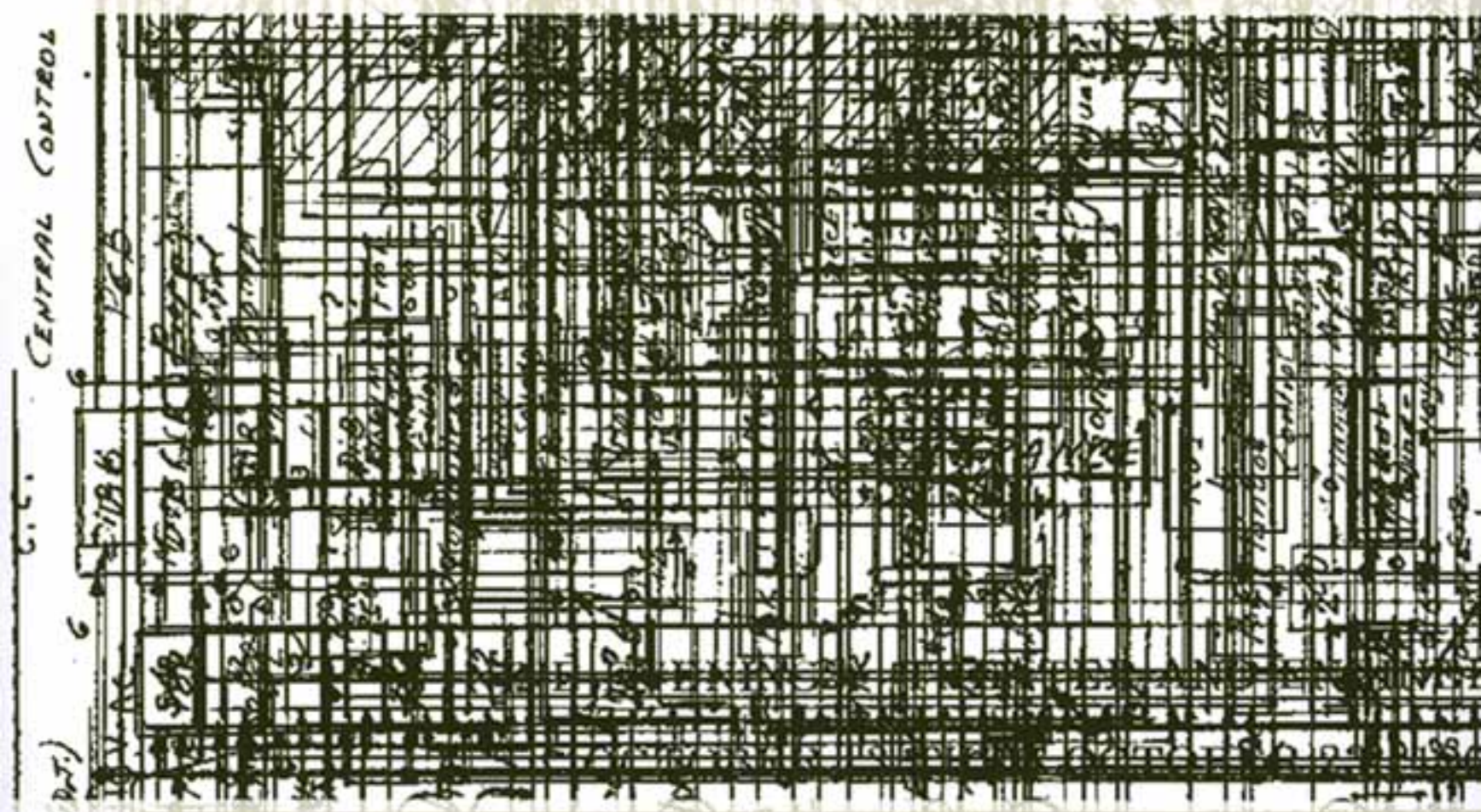




DIETER DANIELS / BARBARA U. SCHMIDT (EDS.)

# ARTISTS AS INVENTORS ASSARTISTS INVENTORS



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Media Art Research

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## Fictive Media Archeology

INTERVIEW WITH GEBHARD SENGMÜLLER, 2007

DOMINIK LANDWEHR

*Gebhard Sengmüller is an artist who works in the field of media technology. He is currently based in Vienna, Austria. Since 1992, he has been developing projects and installations that focus on the history of electronic media, creating alternative ordering systems for media content, and constructing autogenerative networks. His work has been shown in Europe, the United States, and Japan, among others in venues such as the Ars Electronica, Linz; the Institute of Contemporary Arts, London; Postmasters Gallery, New York City; and the ICC Center, Tokyo.*

*His main project for the last few years has been VinylVideo, a fake piece of media archeology, a “forgotten” invention for the storage of television signals on long-play vinyl records. The project, a collaboration between scientists and artists, has been presented at numerous exhibitions, live shows, and talks since 1998. In his major new project, The Parallel Image, Gebhard Sengmüller explores concepts of the non-traditional live transmission of moving images. He currently teaches at the Kunsthochschule Linz, Institute for Interface Cultures, and at the Transart Institute, Donauuniversität Krems.*

**DOMINIK LANDWEHR:** *How did you become a media artist? That's not usually a straightforward path.*

**GEBHARD SENGMÜLLER:** No one has ever actually asked me that before! It certainly has something to do with my father: before he retired, he worked as a communications engineer for the Austrian postal service, and he has a special passion for defective devices. So throughout my childhood, there was always a fresh supply of audiovisual equipment. It was strange: we had a number of cameras, but my father took few pictures. He was more interested in the devices themselves and the technology. I had a rather strained relationship to art—that was already obvious in primary school. When the teacher told us to draw a skyscraper, for example, I couldn't do it. I was just as unsuccessful with a tree, an animal, or a person. Maybe that's why I have a certain predisposition for machines that do the artwork for me.



Figure 1: Gebhard Sengmüller, *VinylVideo*, installation view, April 2000.

**DL:** *I'd like to hear a little more about these machines. What kind of machines did your father bring home apart from cameras?*

**GS:** There were lots of them. For example, I can still remember my first cassette deck, which was actually a device in a wooden case meant for a car. Then there were radios and record players. My father saved them, even if they were broken, and as a result we had a whole basement full of these kinds of audiovisual artifacts waiting to be put to use.





**DL:** *What kinds of ideas did you associate with your father and his apparatuses in your childhood? Did you admire him, or was it a bit embarrassing for you?*

**GS:** I found it quite fascinating. I had an interesting experience when I was about ten years old: my sister had a talking doll, which had a little record about five centimeters in diameter in its stomach. The toy was broken, so for some reason I took it apart and put it back together, and then the doll worked again. For me that was a great feeling of success. I was also fascinated by Lego. I tried to build replicas of existing things with it, like a helicopter, for example. The rotor had an imbalance, which meant that the helicopter started to tip, and I thought, great, now it's going to take off. That was a misunderstanding of course. Another time I tried to build a slide projector with Lego and a magnifying glass my grandfather had given to me. In combination with my flashlight, that even worked. Then I took a Super8 film and pulled it through, and I wondered why no moving image resulted.

**DL:** *Then it wasn't such a big leap from this tinkering, this exploring curiosity, to media art.*

**GS:** I don't know exactly where the wish to become an artist came from. In any case, I was more interested in the devices artists use—I'm thinking of musicians, filmmakers, or photographers—than in actual content.

**DL:** *So your curiosity applies to the material. I mean that in a positive sense: it is a curiosity that wants to look behind things, so to speak.*

**GS:** Yes, that's right.

**DL:** *In your artworks, especially in the descriptions of them, the term "media archaeology" comes up again and again. What do you mean by that?*

**GS:** My point here is a fictive archaeology of media. For example, I want to invent things that might have existed earlier but didn't, because they hadn't been invented then, such as pressing television signals onto records or something like that.

**DL:** *Where do your ideas come from? It would be fascinating to look at this creative process taking some of your works as an example, such as your early work TV Poetry (1992–96).*



Figure 2: Gebhard Sengmüller, *VinylVideo*, video still from an infomercial, 2000

**GS:** The background for *TV Poetry*<sup>1</sup> also has something to do with my childhood and youth: I grew up largely without television. My parents shared the reservations of the educated middle class and thought it was better not to have a device like that in the house. A few years after I moved out, I felt a need to catch up: I got cable television and spent hours every evening staring at the screen. Then I began to have the feeling that I could never take in enough. By that I mean this gigantic amount of information on thirty channels incessantly flowing into me and that I could never really process. *TV Poetry* was about capturing this stream and making something out of it. In 1993, I was able to show my project for the first time during the Ars Electronica in Linz: an entire battery of satellite dishes in front of the Brucknerhaus picked up all the television signals that existed at the time. Using special software—so-called Optical

<sup>1</sup> *TV Poetry*: [http://www.gebseng.com/05\\_tv\\_poetry/](http://www.gebseng.com/05_tv_poetry/).





Character Recognition or OCR software—I searched through stills from these programs for texts. That worked well in part, when there were actually large striking texts with good contrasts in the picture. Often it didn't work well at all though: an image element like a fence, for example, would erroneously be turned into the letter sequence HIIHIIHIIHIIHIIHIIHIIH.

**DL:** *And in what form were the results presented to the audience?*

**GS:** We ran the text through various filters to filter out the non-language portions. What was left over we called—a bit pompously—"TV Poetry" and displayed it on a monitor as running text.

**DL:** *Where did this idea come from? Was it suddenly just there from one moment to the next?*

**GS:** For me, I believe it's usually the case that an idea is there. In this case, it was the OCR software that was decisive. I wanted to invent something that would use this software in an unusual way. I also remember a statement made by the Austrian writer Alfred Polgar in the 1930s about radio. He describes how he listens to radio with headphones. When he takes the headphones off, the radio keeps working, even without him, and the sound trickles into the table top.<sup>2</sup> In other words, the information keeps coming in, but it is no longer being taken in. Here it is also a matter of the question of where information originates—with the sender, or with the receiver. Is it even information if it is no longer being taken in, or does it not become information until someone receives it? This is also based on the idea of radical philosophical Constructivism, for example with Heinz von Foerster, of a world that first originates through the observer.<sup>3</sup>

**DL:** *The projects and devices that you invent are not exactly ordinary—it takes a considerable amount of knowledge and skill. Do you do everything by yourself?*

**GS:** I acquired a basic knowledge of computers at a relatively early stage. That started with playing around on a text-based Wang personal computer that my father gave me, and I wrote my tax statement on it. After that I bought my first computer—it was an Amiga, a device that was also suitable for audiovisual works. I think it was when I was playing around with this Amiga that I had the idea of reading in images and then running software over them.

With *TV Poetry* I still had the basic things under control myself. And I also had solutions for most questions—for example switching back and forth between the numerous stations. Even

<sup>2</sup> Alfred Polgar, *Handbuch des Kritikers* (Zurich, 1938): "When the headphones were removed from the table top, the place they had been lying on and sending sounds into for fourteen days did not show even the slightest tarnish! Not even a tiny trace, as if through a breath, was left behind."

<sup>3</sup> Heinz von Foerster, *Wissen und Gewissen: Versuch einer Brücke* (Frankfurt am Main, 1993).

then, there was a device that could emulate a remote control, so I connected this device to the computer.

To realize the whole thing, mainly scripts were needed to automate certain processes, but I couldn't do that. So I went in search of a computer scientist who could take over these tasks. Then I met two people who responded to a notice I had hung up at the Technical University Vienna: Günter Erhart and Clemens Zauner. Both of them were still very young and had only just started studying computer science. They wrote these scripts for me and worked on network solutions that were not yet really available then as they are today.

**DL:** *That is a situation we frequently encounter in the creation of a media art. There are only very few artists who have all the necessary skills. Most creators have to somehow get organized. This leads to the question: when is a colleague like this a co-creator?*

**GS:** For me, that's actually quite clear: in my projects, from a certain moment onward, every collaborator is also a co-creator, a co-author.

**DL:** *Does that mean that, to a certain extent, they are collaborative works?*

**GS:** In the case of the artworks, my name still comes first as the artist. I'm the one who had the basic idea, who organized what was needed. I hold the whole thing together.

**DL:** *So you want to hold onto the concept of authorship, even if you share it, to some extent, with others.*

**GS:** Yes, that's right.

**DL:** *Are there other processes of creation as well? Where you turn everything over and say, I make the concept, I'm the architect, and you implement it?*

**GS:** No, that wouldn't interest me either. Even if I haven't realized an artwork from A to Z myself, I still have to be thoroughly familiar with it. I need to be able to maintain, operate, and further develop it. I certainly don't want to do anything where I am completely reliant on other people. In my most recent project, *Slide Movie*,<sup>4</sup> which involves the theme of film projection, I built everything myself from A to Z and can also generate the film that is shown in it myself.

<sup>4</sup> *Slide Movie*: [http://www.gebseng.com/04\\_slidemovie/](http://www.gebseng.com/04_slidemovie/).





Figure 3: Gebhard Sengmüller, *VSS7V*, plotter detail, 2006

**DL:** *How does Slide Movie work exactly?*

**GS:** *Slide Movie* is the reconstruction and simultaneously the deconstruction of a media machine that operates in secret: I'm talking about the film projector. My friend, the media theorist Felix Stalder, says it is astonishing that certain things in media history don't change at all, or only very slowly. One of these things is the film projector. Here nearly everything has remained the same for a hundred years: the whole apparatus with lamp and lens, but also the film format and the playing speed of the film. The film projector hardly had to change when sound and color were introduced. And I pull exactly this thing out of its soundproof chamber and place it in the center.

**DL:** *The projector . . .*

**GS:** It is the projector that ties into my childhood experience with the film strip. For *Slide Movie* I cut up a normal 35mm film into its single images. I fix these images in slide frames and distribute the entire scene among twenty-four individual projectors. All of these slide projectors are pointed at the same screen and aligned, and then they are run in the rhythm of a twenty-fourth of a second.

**DL:** *So this results in a film-like succession of images. How long is one sequence?*

**GS:** In this case, it is exactly eighty seconds, because a slide tray only has room for eighty slides. I use the famous Kodak Carousel projectors, which were particularly dominant until the 1980s in the field of education. Because these carousels are round, they return to the beginning after the last image, so it is easy to create loops.

**DL:** *It is a possible, if not very efficient and useful way to show a film . . .*

**GS:** . . . which doesn't work very well either, which is an advantage in this case. The results are naturally very special and relatively limited in terms of technical perfection, because you can never exactly overlap these slides and because you can never precisely time these projectors. The film is very bumpy, the brightness varies, and it takes some time for the eye to be able to recognize a moving image at all. Naturally, one could also say that according to conventional standards, I achieve only meager results with a very elaborate procedure. That is also often typical for my works.

**DL:** *I would like to talk about your project VinylVideo<sup>5</sup> from 1998 now. Here, too, the emphasis is on the invention of a technical medium.*

**GS:** The project is based on the idea of using traditional vinyl records to store television signals. That never existed in exactly this form. I started the project with Günter Erhart and Clemens Zauner. After tinkering for a long time, we realized that we were missing the basics of signal technology. Then I contacted my friend Martin Diamant, a physicist I studied sound engineering with in the late nineteen-eighties. Martin, who is still my main collaborator on this project, developed the technology. We still show the invention in various forms in art contexts,

<sup>5</sup> *VinylVideo*: <http://www.vinylvideo.com/>.







and even sell it. The system consists of a normal record player, a black-and-white television, and a box full of technology, the “VinylVideo Home Kit.” The acoustic signals from the record are transformed back into images in this box. As with all my projects, the results are rather modest. Not because I deliberately try to achieve a retro effect, but simply because it doesn’t work any better with the self-imposed limitations.

**DL:** *So VinylVideo is a platform on which others can show their films.*

**GS:** Exactly. We have created a platform—not only with the technology, but also with the story that we tell around it. We situated the invention in the 1940s and produced ads and infomercials in keeping with that. Of course, the whole thing arose from a kind of necessity again: it took us four years to develop this project, and when it was finished, we were missing content. And then, working together for a long time with the curator duo Best Before, we had the idea of inviting other artists to produce films for this medium, in this case vinyl records.

So inviting other people to produce records for us was quite obvious. We turned the disadvantages of the medium into advantages: we had to find artists who could cope with our very limited quality—little focus and contrast, reduced image rates, sound in telephone quality. On the other hand, however, in our view this medium also has its advantages. For example, the viewer can really access the information on the records haptically and place the needle in any position—quite unlike videotapes or DVDs, where access can only be mediated technically. In our system, the viewer can use the films very intuitively, jumping or even re-cutting and thinking up a new sequence. As a result of this, most of the artists didn’t create narrative contents but instead supplied films with a gentle flow.

**DL:** *I would like to look more closely at the framework narrative, which seems important to me, especially for this project.*

**GS:** Yes, the framework is part of my works. Successful inventors are often good marketing people as well. That was already the case with Edison, although of course I don’t want to compare myself with him. Even during his lifetime, Edison made sure that lots of anecdotes were told about him. It was important to him that his inventions were presented in the right way. There’s an amusing story about John Logie Baird, the inventor of the electromechanical television. He attempted to record his thirty-line television on shellac records—which had a quality even worse than *VinylVideo*. Although he was able to record the signals, he wasn’t able

to convert them back into moving images. As a good marketing person, however, that didn’t prevent him from selling the product. He organized screenings where he played these image records. People could hear a strange beeping noise, and he supplied the appropriate explanation: those are the sounds that pictures are made of . . .

**DL:** *There is one last project I’d like to talk about that is also quite typical for you: VSSTV—Very Slow Scan Television.*<sup>6</sup>

**GS:** In the beginning—around 1998 or 1999—I had the idea of doing something with bubble wrap, this omnipresent packaging material. The structure of this material resembles that of a television’s cathode ray picture tube under a microscope. It has the same honeycomb pattern and round, pixel-shaped dots. I wanted to construct a machine that would fill these individual bubbles with colored ink and thus turn the sheet of bubble wrap into a kind of large television



Figure 4: Gebhard Sengmüller, *VSSTV*, printout detail, 2006

<sup>6</sup> *VSSTV-Very Slow Scan Television*: [http://www.gebseng.com/02\\_vsstv/](http://www.gebseng.com/02_vsstv/).





screen. But where were the pictures to come from?—I didn't want to make them myself. And then I remembered this strange television format that has existed since the 1950s. It's called Slow Scan Television and was invented by amateur radio operators. The image transmission rate is very slow here: only one picture every ten seconds. This method still exists today, it is freely accessible to anyone via shortwave, and it was this image source that I tapped into for my project. The transfer of a single image to the sheet of bubble wrap takes twenty hours! The ink fades over the course of time, thus also imitating the phosphorous layer of a picture tube. The pixel has to fade here too after it has been touched by the electron beam, but of course that happens much more quickly . . .

**DL:** *Do you have any other affinity to these amateur radio operators?*

**GS:** There is this test character in the amateur radio operator field, this "Hello World" phenomenon. It's not about the subject matter, it's about testing and familiarizing oneself with the technology; the technology becomes an end in itself. In their conversations about radio, ham radio operators often have no other subject matter than the transmission, the equipment, the antennas. In the case of Slow Scan Television, they often transfer images of their own equipment.

**DL:** *Could one say that Gebhard Sengmüller's media art makes media the topic?*

**GS:** That is a topic I'm very interested in. When I was teaching this summer at the Transart Institute, I had very interesting conversations with David Dunn, who lives in Santa Fe. As early as 1990, Dunn organized the exhibition *Eigenwelt der Apparatewelt* at the Ars Electronica together with the Vasulkas and Peter Weibel. This exhibition mainly involved old video devices and synthesizers that artists had built in the 1940s, 1950s, 1960s, and 1970s to make electronic music and electronic image and video manipulations for the first time. What was interesting about this exhibition was that the devices attracted far more attention than the content that could be seen or heard on them.

**DL:** *In conclusion, I'd like to talk a bit more about the aspect of media art. You come from Austria, a country in which media art wasn't invented, but where it did get a lot of attention at a very early point in time and where there's obviously an audience for this kind of thing today. It seems to me that media art doesn't have an easy time of it, and the audience doesn't have an easy time of it with media art. Is that an observation we share?*

**GS:** Media art has already become something of a negative buzzword. The term can almost no longer be used, because every kind of art is actually media art. It has to be more precisely defined to refer to art with electronic media, or in my case with electromechanical media. You could call me a media artist, because I play with the medium and because I'm more concerned with the medium than the content. However, I'm also at a loss for words in this debate. I simply move in a world of media inventions. Yet I am specifically not interested in the so-called high-tech world, in which emphasis is placed on even more powerful computers, even more fantastic software. I'm interested in machines, but not in a way that means I'm concerned with newer, better machines or software that are even better tools for generating something even more spectacular. You could say that I prefer to manufacture tools other artists can use, or to create processes that are then capable of producing content independently.

Translated from the German by Aileen Derieg

