FOUR MEDIA ARCHEOLOGICAL ARTWORKS
GEBHARD SENGMÜLLER

I am an artist working in the field of media technology. For the last 15 years, I have been developing projects and installations focussing on the history of electronic media; creating alternative ordering systems for media content; and constructing autogenerative networks. My work reflects critically the historic and social context of current media art. Its focus is on the tools through which art is generated, be it my myself, in collaboration with others, or »autonomously« by the tools themselves. My work often has a didactic component in the sense that a critical engagement of the audience – not only with the work itself, but with the wider context in which it is placed – plays a central role in it. The following chapters comprise four projects that I worked on since 1992. These works are about television, film and telecommunication. In some sense, they also deal with putting things into order and trying to preserve them for posterity. They represent attempts to create systems /environments/tools that produce art instead of me actually having to create that content myself. With this, they examine the interrelation between the specifics of the tools/platforms and the content created with them.

Media Archeology

The four artworks can also be described as media archeological explorations of forgotten aspects of our media technology past. Unlike conventional media history, the field of media archeological art and research tries to reveal a hidden history of media. This »secret« or »forgotten« media history deals with parallel, presumably lost, little regarded, perhaps even merely fictive strands in the development of today’s media apparatuses. Artists interested in media archeology (these include, for instance, Paul DeMarinis1, Perry Hobermann2, or Vuk Cosic3) purposely use artefacts

from media machines and media technologies »the wrong way« in their practice, developing them into previously unplanned hybrids, opening unknown back doors and thus often turning what were originally defects into strengths.

Erkki Huhtamo, who has undertaken media archeological investigations of archetypes such as the screen, the traveling panorama of the 19th century or the arcade game in his essays, writes in »Resurrecting the Technological Past – An Introduction to the Archeology of Media Art«, »The gaze of the media artist, earlier directed primarily towards the future, has now been supplanted, or rather supported, by another one which faces the past. This gaze is not motivated by the nostalgia of a techno-buff, or the postmodern transfiguration of the banal apparent in Jeff Koons’s »prepared« found appliances.«

Huhtamo sees this astonished gaze of the artist as an attempt to go beyond postmodernism and tie into a dialogue with the past. The aim of this dialogue is to counter the constant blurring of boundaries and definitions, which he regards as being typical of the »postmodern condition« and as a result of the dissemination of a largely audiovisually oriented media culture. At the same time, he emphasizes that this view of the media archeologist is not rigidly directed towards the past, but is extremely flexible and continuously searching through the historical panorama of technocultural forms, moving backwards and forwards in time, for correspondences and breaks, turning in the end to the present and then possibly to the future, »Archeological artworks are time-machines, yet their way of functioning is closer to Bergson or Proust than H. G. Wells. The user is invited to travel, but not simply up and down the shaft of time, as if encapsulated in a chronographic elevator. Instead, the traveler navigates in a much more complex realm of past-present and present-past, in which layers of time overlap and associate with each other; the conception of time is cyclical rather than simply linear. These time-machines are not automatic or remote-controlled means of (mass) transportation (like the cinema), but individual »hand-driven« vehicles. The realm they traverse only opens up for the active participant, who is ready to leave one’s customary chronological ordering of things, and the safety of his/her own socially and cultural defined observation post, heading out to explore potential dimensions in a conversational relationship with the work.«

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3 Cosic, Vuk: http://www.ljudmila.org/~vuk/ (August 1, 2007).
5 Ibid.
There is a correspondence here with the themes that Huhtamo addresses, when my artworks conjoin technologies from various eras to form a new whole without taking into consideration the originally intended purposes of the individual elements.

**TV Poetry**

This early installation is a self-constructed and invented network of satellite dishes, tv-sets and computers that all have one goal: to create poems from television. I remember a statement from the Austrian writer Alfred Polgar from 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. In this sense, *TV Poetry* deals with the impossibility of absorbing all the available information on television myself, and instead trying to create a system that will put this information to use in an unexpected way.

*TV Poetry* is an experimental set-up which can be put together at any location. Combined with precisely adjusted receiving equipment, it rapidly scans the various television transmissions it receives (commercials, news, quiz shows, etc.) for text passages visible on the screen.

*Figure 1: TV Poetry - field agency V2 Rotterdam.*

*Photo: Gebhard Sengmüller.*

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6 Polgar, Alfred (1938): »Handbuch des Kritikers«. (Vienna, 2004), (»When the headphones were removed from the table top, the place where they had been lying and sending sounds into it for fourteen days showed not the slightest tarnish! Not even the slightest trace as though from a breath was left behind.«).
In an ongoing, realtime process, the text is recognised, filtered out, processed, and output as an endless stream of text, generated by TV programs and CPU programming. Through imponderability, inaccuracy, video noise and misinterpretation within the system, the source text is radically transformed, giving rise to new meanings. Very powerful content (headlines, slogans, ...) »shines through« and tends to remain intact.

Signal processing takes place in parallel process on separate machines and only comes together in the final stage. The quality of the results in terms of density, continuity and recognisable content is in a direct proportional relationship to the available power and capacity of the equipment (number of TV channels, number and operating frequency of the CPUs, bus width of the connections).

TV Poetry 2/94, which I produced for the Medienbiennale Leipzig, worked entirely decentralised. An arbitrary number of field agencies located all over Europe (in this case: artists apartments and studios in Rotterdam (Figure 1), Lüneburg and Vienna) gathered TV signals via cable television or satellite receivers, processed this raw information automatically and sent resulting poetry to the central computer placed in Leipzig. This unique design (externalisation and compression to only one CPU per field agency) relied heavily on the existing telecommunications infrastructure offered the opportunity of cheaply incorporating even distant locations into an open network. Compared to the previous set-up (TV Poetry 1/93 at Ars Electronica) this decentralized version resulted in an increase of channels and available raw information. The gathered information was send to the Leipzig central station at scheduled times via telephone. In the Leipzig exhibition hall a monitor continuously displays the gathered text. Except from three photographs that represented the field agencies, the observer was not aware of the poems distant origin.7

VinylVideo™

VinylVideo™ is a new development in the history of audio-visual media. It allows the storage of video on analog long-play records. Playback from the VinylVideo™ Picture Disk is made possible with the VinylVideo™ Unit, which consists of a normal turntable, a special conversion box (the VinylVideo™ Home Kit) and a television (Figure 2).

At the same time, VinylVideo™ is a vision of new live video mixing possibilities. By simply placing the tone arm at different points on the record, VinylVideo™ makes a random access manipulation of the time axis possible. With the extremely reduced picture and sound quality, a new mode of audio-visual perception evolves. In this way, VinylVideo™ reconstructs a home movie medium as a missing link in the history of recorded moving images while simultaneously encompassing contemporary forms of DJ-ing and VJ-ing.

I describe VinylVideo™ as a fake archeology of media. We designed a device that retrieves videosignals (moving image and sound) stored on a conventional Vinyl (LP) record. The discontinuity in the development of electronic film technology constitutes the historical background for this fictitious video disc technology: Even though television, the electronic transmission of moving images, had been feasible since the late 1920s, storage of these images became possible only after development of the video recorder in 1958. Recording images for private use did not become available until the mass introduction of the VCR in the early 1980s (!). Before, the average consumer was confined to use 8mm film, technology dating back to 1900, usually worked without sound. Recording of television was not possible at all.

VinylVideo™ reconstructs a homemovie technology of the late 40’s/early 50’s and thus bridges a gap in the history of consumer technology. The images are stored on a conventional analog record, with a running time of approximately 12 min/side. These records are played on a standard turntable with an ordinary diamond needle, the signals are
then processed by the VinylVideo Home Kit into a videosignal that is displayed on a black and white TV-set.\textsuperscript{8}

Timothy Druckrey writes, »Part subversion, part retrieval, VinylVideo™ stands on the border between the current frenzy for cut-and-paste home production and the nostalgia for pseudo-retro emerging in the reissue of the VW Beetle and its computational cousin the iMac. Posed as a >fake archeological relic of media technology,« VinylVideo™ provokes a range of questions around the expectations of >a fictitious technological past< (as Charles Gute suggested), the faux-status of innovation, the ploys (and plots) of advertising, the quotidian benefits of aesthetics, the esteem of media theory, the vacuous virtual venture of investment, and the participation of artist collaborators producing editions of >records<. In refusing virtualization, VinylVideo™ avoids the dead-end of another web project destined for obsolescence by coyly integrating itself into the materialized and mechanical system of objects and the semiotics of the tele-visual. Often omitted from the discourses of state-of-the-art media theory, the flickering black and white images are both deeply coded by their intimations of authenticity and historically destabilized by the collapse of the broadcast ideology that sustained their so-called authority. This oscillation, between credibility and disavowal, surely characterizes an approach to media that straddles the line between the parodic and the farcical while proposing to reflect on the status of the image and the technologies that empower them.«\textsuperscript{9}

\textbf{VSSTV - Very Slow Scan Television}

This project is in many ways a successor to both \textit{TV Poetry} and VinylVideo. It shows us a parallel TV universe, dating back to an era of television monopolies. It also shows a historic predecessor to current streaming and netcasting technologies. And, once again, it tries to construct a machine that makes use of content which would be lost otherwise.

\textit{Very Slow Scan Television (VSSTV)} is a new television format that we have developed building upon \textit{Slow Scan Television (SSTV)}, an almost 50-year-old image transmission system used by Ham Radio amateurs. In contrast to regular TV, SSTV runs at a dramatically reduced frame rate. VSSTV uses broadcasts from this historic public domain television system – available anytime over freely accessible frequencies

\textsuperscript{8} Druckrey, Timothy (1999): »Missing Links«. Eikon 29, p.4.

to construct an analogy: it recreates a cathode ray tube (CRT) with regular bubble wrap taking the role of the aperture mask (Figure 3). Just as a CRT mixes the three primary colors to create various hues, VSSTV will use the surprisingly similar yet magnified structure of bubble wrap, commonly used as a packing material. We developed a device to receive images and output those images onto a new visual medium. A plotter-like machine fills the individual bubbles with one of the three primary CRT colors (red, green, and blue), turning them into pixels on the VSSTV screen in a continuous process. Observed from a distance, the clusters of pixels/bubbles merge into the original image. Large and permanent television images are the result, images that take the idea of slow scan to the extreme: due to our process, the frame rate decreases to only one frame per day, down from one frame in 8 seconds possible with the underlying SSTV format!

The combination of Ham Radio SSTV television and the new output medium’s extremely reduced frame rate suggests the name for this system: VSSTV – Very Slow Scan Television. VSSTV thus devises a process that incorporates analogies on many levels: the transmission of images vs. the transmission of sound; digital vs. analog technology; CRT screen vs. bubble wrap. VSSTV makes us recall the elements present in every television image, it also reveals a hidden universe of amateur television broadcasting (going back to 1957). A world of public domain television, accessible even with simple technology, independent of the commercial or monopolized television networks prevalent in Europe and the US. At the same time, VSSTV adds an ironic twist to the use of a material familiar to every artist. Bubble wrap, normally used to wrap and protect art, becomes a medium and an artwork in itself.  

Figure 3: VSSTV - printout detail.

by Gebhard Sengmüller.

The imprecision and slowness of the VSSTV process stands for a kind of media archeological reinterpretation of features unintended in the conventional context into a new experience for the viewer, who is thus able to experience the transmission and determination of an electronic image in a new way. VSSTV emphasizes and exaggerates the slowness, the awkwardness, the technical limitations and the media transitions of the historical SSTV medium.

**Slide Movie**

This recent work is the de- and at the same time reconstruction of a common media apparatus.

*Slide Movie* appears as a black cube installation (Figure 4): a film sequence (35mm motion picture, 24 frames/sec.) is cut up and the individual frames are mounted as slides. They are then distributed among 24 slide projectors that are all focused on the same screen (the exact same point). Via electronic control of the projectors, these individual images are then reassembled-in an extremely cumbersome way-into a chronological sequence. The formula »one projector per frame« thus gives rise to something that at least rudimentarily (and inevitably very inaccurately, due to the lack of precision of the mechanical devices) suggests a motion picture. The film soundtrack emerges as a byproduct – the mechanical clattering of the projectors changing slides.11

*Figure 4: Slide Movie - installation view.*

*Photo: Gebhard Sengmüller.*

Felix Stalder on Slide Movie:

»Tapping into the wealth of overlooked, forgotten or even repressed experiences in dealing with media is one of the most important aims of media archeology. This is also the approach that Gebhard Sengmüller takes, allowing himself not only the freedom to recall alternative approaches to media development, but also to propose some of his own. As fictive archeology, apparatuses are set back in time, so that the scope of action is radically expanded. If we can allow ourselves the freedom to reinvent the past, would it not then also be possible to imagine a future beyond the high-gloss technofetishism that the industry overwhelms us with? Slide Movie, the most recent of Sengmüller’s apparatuses, is located not only in the field of media archeology, though, but also in the field of media theory. With the infernal noise produced by twenty-four slide projectors changing pictures, the ›film projector‹ is liberated from the sound-proof projection room and opened up. With the inside out, we find ourselves no longer in the audience space, but in the middle of the projector. The film, whose content is conventionally the focal point, moves into the background. What becomes visible, as though under a magnifying glass, is the medium, the illusion, the way still images are turned into moving pictures. In the terms of cognitive psychology, from which Heideggerian phenomenology also draws, this can be understood as a displacement of ›figure‹ and ›ground‹. The figure is that, to which attention is directed; the ground is everything that first makes the figure possible, but which is omitted by perception, so that we can concentrate on the figure.

The ground of the figure ›film‹ is the cinema, the box office cashier selling tickets, the darkened projection room, the muted projector, the electrical currents that provide the projector with energy, and so forth. All of this must be present, in order for us to see the film. At the same time, however, we must also fade it out, so that we can concentrate on the content of the film, the ›figure‹. Although – or perhaps specifically because – they are faded out, all these things have a much more lasting influence on our culture than any single film, which often disappears again after a few weeks, only to be replaced by the next film.

Slide Movie succeeds in shifting perception in the direction of the medium. The figure of this work is not the film that is projected, but rather the apparatus that carries out the projection with such great effort. This figure has actually always been there, but it is due to the intervention in the structure of our attention that we first really become aware of it. The essence of the projector, the transformation from still images to moving pictures becomes manifest.«12

**Acknowledgements**

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**Literature**