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VAN GOGH TV'S "PIAZZA VIRTUALE" – REPORT-IN-PROGRESS AND PRELIMINARY CASE STUDY

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ABSTRACT | This article outlines the organizational structure, working goals and theoretical framework of the artists' group Van Gogh TV. It also presents an overview of "Piazza virtuale", a temporary "virtual community" that can be regarded as the predecessor of many contemporary net communities presented at *documenta* IX in Kassel in 1992. This will be followed by an introduction into the theoretical framework of thr group's research and a description of the archival approach and research methods that they have employed to date.

KEYWORDS | digital media, digital art, media art, net culture, virtual communities, internet art

Introduction

The television projects carried out by the artists' group Van Gogh TV around 1990 were important harbingers of our current era of widespread interactive digital media. Prior to the widespread adoption of the internet, (in projects such as "Piazza Virtuale", organized in 1992 during documenta *7*, regularly broadcast by public cable television station 3Sat, and seen by millions) they tested models of audiovisual media structured by public engagement– a utopian concept that seemed partly realized with the advent of the WorldWideWeb from 1994 onwards.

From today's perspective, the importance of the projects that Van Gogh TV conducted can hardly be overestimated. In Germany, the group, which consisted of the artists Karel Dudesek, Benjamin Heidersberger, Mike Hentz, and Salvatore Vanasco (as well as a large team of hackers, visual artists, and musicians) designed one of the first platforms to test the production of "user-generated content" and interaction in virtual communities - as has become commonplace today through social media firms. In doing so, they envisioned an emancipatory role for media that had already been formulated by Bertolt Brecht in the early 1930s: that the media consumer should become a media producer.

The climax of their activities was the project "Piazza virtuale", which they carried out at the documenta in Kassel in 1992. In addition to media artists and activists from all over Europe and Japan, the public was also able to participate in the program online, by telephone and fax. The result was a temporary "virtual community" that can be regarded as the predecessor of many contemporary net communities. A number of the phenomena that shape net culture today could already be observed *in nuce* at "Piazza virtuale": from chats to shitstorms, from smart mobs to cybersex, from collective creation to live video streaming.

After a long hiatus, the group started to work on its archive in the mid-2010s. They used the occasion of an exhibition at a gallery in Berlin to view and label the video recordings of the shows they broadcast daily on 3Sat in order to make these records available for research. From an archival perspective, the amount of material that emerged

from this activity was intimidating: more than 800 hours of broadcast recordings, two dozen files of correspondence, and parts of the technical equipment, some of which was specially developed by the group.

The group offered the material for research to the Institut für Mediengestaltung (Institute for Media Design) at Hochschule Mainz, which partnered with the Abteilung für Medienwissenschaft (Department of Media Studies) at Rheinische Friedrichs-Wilhelms-Universität Bonn in order to apply for a research grant of Deutsche Forschungsgemeinschaft to work on the estate of Van Gogh TV. Funding was granted from April 2017 to March 2021. In this article, we will outline the organizational structure of the research group, define its working goals and theoretical framework and most importantly focus on the ongoing challenges presented by the archival material

In what follows we will give an overview over the project and outline the division of labor between the two project partners. This will be followed by an introduction into the theoretical framework of our research, before we describe the archival approach and research methods that we have employed to date.

Van Gogh-TV: Overview and Organizational Structure of the Project

Van Gogh TV occupy a special place in the genealogy of media: The project took place shortly before the internet started to make inroads in culture and the arts. Recently a whole new academic field, Web History, has started to look at the history and development of the Web (see Brügger/Milligan 2020), while the preservation and recovery of lost web content is currently conceptualized by the new discipline Web Archaeology (Aasman/de Haan/Teszelszk 2019). However there are still few academic projects dedicated to recovery and documentation (for example, the systematic preservation of the early internet project De Digitale Stad by a group of historians of the Amsterdam Museum [de Haan 2016]) and much of the actual preservation work is done by ragtag groups of hackers and volunteers like Archive Team (https://www.archiveteam.org) or private initiatives such as Brewster Kahle´s Archive.org (www.archive.org) or Gil Elbaz´ Common Crawl (commoncrawl.org).

Van Gogh TV´s "Piazza Virtuale" inhabits its own unique space in the prehistory of net culture, virtual communities and internet art. But unlike later projects of net.art that have been archived or made accessible again in the last couple of years by initiatives such as Rhizome.org (https://anthology.rhizome.org/) (see Connor/Dean/Espenschied 2019), the legacy of Van Gogh TV is mostly not digital, a factor that turned out to be a blessing in disguise. Whereas we first lamented about the large volume of material that we had to digitize in order to process it with contemporary methodologies and technologies, we gradually began to understand that we could only access such a rich trove of material because it was mostly analogue. Whatever was digital in the Van Gogh TV had practically become inaccessible in the more than two decades since "Piazza virtuale."

The VHS and Betamax tapes that were delivered to us in stacks of moving boxes might not have been as easily handled as a collection of digital files on a hard disk or in the "cloud" on some server. The recordings on obscure, long-obsolete video formats such as MII, Hi8, U-matic or S-VHS required players that are not manufactured anymore and are only available at specialized labs. The three dozen files with photos and paper correspondences with collaborators were not conveniently searchable for keywords or could easily be filed and analyzed with contemporary computer programs. And the many faxes on thermal paper that were found in these files were often faded and hard to read.

However, as cumbersome as the work with this material seemed at first, we eventually understood that the analogue material that we had received survived for a period of time that most digital formats do not – especially those file types that were used on the early World Wide Web. Data that was saved in early multimedia formats in the 1990s such as Small Web Format (.swf) for the Shockwave app or RealAudio Lossless (.real) for Real Player are difficult (if not impossible) to access today, just as Flash Video files (FLV) are currently drifting toward technological obsolescence.

The magnetic videotapes and the stacks of yellowing paper that we inherited might have been unwieldy, but they were nonetheless durable. If "Pizza Virtuale" would have taken place only a few years later, most of the correspondence would have taken place via email and would most likely not be accessible anymore. Digital video recordings from the mid-nineties onward were typically saved on a data storage media like the notoriously unreliable Zip and Jaz drives by Iomega (that were even subject to a class-action lawsuit in the US because of the data loss that they caused) and that are even less accessible than the old analogue tapes. The average lifespan of USB drives and hard disks is five years, so any video that would have been transferred to these media when they became available might also not have survived until the present.

But it is not just the obsolesence of both data formats and hardware that are about to render the nineties a dark age, for which much of the digital content that was created on computers and on early websites has to be considered forever lost. The lack of experience and best-practice protocols that

compromises the long-term storage of digital data. Among all the material from Piazza virtuale that we got, a broken Apple II computer is by far the most challenging item. It might contain emails that were written during the project, as Van Gogh TV had access to the internet in Kassel, even though they did not use it for the show. The only way to find out what is on the hard disk of the computer would be to have a data recovery specialist try to access it. This attempt – which might very well lead to the conclusion that there is no readable data on the hard disk, or that the data cannot be deciphered with any available software – is so prohibitively expensive that up until now we have refrained from doing so.

The programs and the technology that were developed by the group that enabled viewers to draw or make music together live (with help of their touch-tone phones) for the segments of the show "Atelier" (studio), "Disco", "Rap ´em higher" and "Classical Orchestra" have not survived. Some of the machines – such as the picture phones that transmitted images from external studios – are still in the collection of the members of the group and still work today. The Robocam by artist Nicolas Anatol Baginsky, which the viewers could steer with their touch-tone telephones through the studio in Kassel, is still in existence; however, it would require major technical effort to even find out if it is still in working order.

Others self-built devices – like the "Entry Point", a camera in a specially built cubicle, have not survived, but their plans were among the documents that we received. The devices that the members of the group constructed and programmed themselves, because such technology did not exist, would be important relics of the project, since they are physical manifestations of the hands-on approach and the hacker spirit that was crucial to the approach of the group.

All the material that we received from Van Gogh TV has been digitized. Videos, letters, photos, slides, sketches, notes, faxes are stored on hard disks and in the cloud in formats that we have reason to believe will not be outdated in a couple of years. We took care to ensure their long-term accessibility to the best of our knowledge, but given the rapid development of digital technology there is no certain way of knowing that the files will be accessible for future researchers. While the PDFs, TIFFs, and AVIs produced by our project might or might not be readable in a couple of decades, the analogue heritage of Van Gogh TV will most likely still be there, together with the equipment to play it. In the report that follows we will outline what we did in our research project to ensure the longevity of the material that was entrusted to us.

In order to make this material accessible, we plan to eventually deposit it in an archive. There is the possibility that the documenta Archiv (https://www.documenta-archiv de/de/) in Kassel will host this material, but that requires an agreement with the artists that has not been reached. Other results from our project are one forthcoming publication by the researchers in Mainz and three the researchers in Bonn. The Mainz group has also put up a website for some of the audiovisual material that is still in progress (http://vangoghtv.hs-mainz.de/). The Mainz group is also working on a documentary film on the group that will contain archival material and interviews with two dozen of the members and collaborators of Van Gogh TV. Both the Universität Bonn and the Hochschule Mainz conducted workshops in their respective research areas (Online-documentation of the workshop in Mainz here: http://vangoghtv.hs-mainz.de/?page_id=589, Bonn?(https://www.medienwissenschaft.uni-bonn.de/re-imagining-new-media-in-art-popular-culture-at-the-end-of-the-20th-century). We are currently negotiating with different arts institutions about an exhibition about "Piazza virtuale."

A special feature of the project is that it supplements academic research into Van Gogh TVs "Pizza virtuale" with the presentation of the research outside the academic and university context, in the form of a documentary film, an exhibition and a website. The Institute for Media Design (img) of the Media Design Department at the University of Applied Sciences Mainz, represented by its current director Prof. Anja Stöffler, conducts applied research in the field of media design and culture and has conducted a research project on digital typography and other media cultural topics, which resulted in exhibitions, publications and web presentations. As a research institution of a University of Applied Sciences, Hochschule Mainz has the necessary equipment (cameras, editing rooms, presentation technology etc) for the practical applications of the project, as well as specialists in a number of media technology fields who will be involved in the practical implementation of the project.

The project component at the Rheinische Friedrich Wilhelms-University of Bonn, which is led by Prof. Dr. Jens Schröter (Chair of Media Culture) from the Institute for Linguistics, Media and Musicology, deals with the development of a theory of the imagination of new media, using Van Gogh TV and "Piazza virtuale" as examples. New media technologies are traditionally embedded in a complex web of collective imagination processes. Describing these processes is a difficult challenge, especially in a historical perspective. The Bonn component of the project therefore examines existing theories from different fields and relates them to the material documented by the team at the Mainz University of Applied Sciences. The goal is to develop theoretical perspectives for the analysis of the imagination of new media and to analyze how the imagination of new media was put into practice in the case of a media art project like "Piazza virtuale."

Reimagining *Piazza virtuale*: On New Media around 1989

The documentation of "Piazza virtuale" is based on the research hypothesis that this project is a 'social' medium. On the one hand, this interpretation relies on analogy to a media culture shaped by social media like Twitter, Facebook or Instagram. On the other hand, the analogy is problematic given its historical context, as well as the documented processes of media change. How can this analogy be classified in terms of media theory in order to gain a clear historical perspective on the relationship between a project from the early phase of net culture like "Piazza virtuale" and its relevance in the context of debates regarding contemporary media culture?

The initial consideration for the theoretical reflection of the documented material was to develop a theory of "media imagination". This somewhat unwieldy term describes the fact that new media in particular are always embedded in a discursive environment in which the possibilities of a new technology are reflected and made compatible with a given socio-cultural context. While it was the primary intention of the media-theoretical part of the project to bring this approach together in a monograph, it was decided, after reviewing the existing literature, to publish the theoretical approach separately in a small monograph entitled *Zukünftige Medien. Eine Einführung* (Ernst/Schröter 2020). This monograph provides the theoretical and methodological framework for the analysis of documented material, which was tackled as a second monograph under the working title *Mapping Piazza virtuale* (Ernst/Schröter 2021).

The basic idea of analyzing a media art project such as "Piazza virtuale" by theorizing the link between media and imagination has proven its worth. In order to test the research hypothesis of the project, the fact that "Piazza virtuale" is, from today's perspective, a "bygone future" which must be understood and reconstructed as such, came into focus. This line of argumentation serves primarily a methodological purpose. In dealing with older media, there is a tendency to project the contemporary situation of the media into the past and thus to assess a project like "Piazza virtuale" as a possible precursor for later technological developments. From a media-historical standpoint, this view is problematic. To reconstruct the documented material on "Pizza virtuale" with regard to the imagination of a possible future of media, as it appeared to the actors in 1992, opens up a more differentiated view of the open question, whether "Pizza virtuale" was an early form of social media or not.

During the discussion of a possible theoretical framework, it quickly became clear that the research field of Science & Technology Studies (STS) in particular provides central concepts for the media-historical examination of the project. STS look at the social and cultural prerequisites of scientific and technological developments (Sismondo 2010). In recent years, STS have become very influential, especially in the context of the discussion of digital media within media studies. Important points of contact between media theory and STS arise especially in the critical reflection on the category of 'new media'.

In media studies research, it is common to criticize the term new media in order to contextualize it as a contingent transitional phase in processes of media change (Gitelman 2006; Hansen 2010). In this context, the influence of imagination has also been demonstrated (Natale/Balbi 2014). New media are always characterized by a phase of "interpretative flexibility" (Natale/Balbi 2014: 207). As technologies that have not yet found their primary use cases and thus been institutionalized, they are often exposed to antagonistic and conflicting influences (Natale/Balbi 2014: 208). The decisive factor here is that a new media technology succeeds in uniting heterogeneous social interests and thus balancing them.

As STS-approaches show, this requires the development of functional prototypes that can ideally link these interests with a clear demonstration of possible use. This raises the problem of mediating between different ideas. In STS this is the task of so-called "sociotechnical imaginaries" (Jasanoff 2015). These imaginaries determine the possibilities of a specific medium by committing it to a social utopia which also has ideological aspects (Flichy 2007: 7-12). Particularly important is the creation of a horizon of expectation which connects with a 'new' medium the expectation of also being a 'future' medium. The projection into the future of the medium is an 'imaginative' operation insofar as the moment of the 'new' profits significantly from being the fulfilment of older "media prophecies" which have now come into effect, i.e. the fulfilment of a "coming new medium" which has been predicted for a long time (Natale/Balbi 2014: 205-207). Discourses about new media are thus always also discourses about future media and in this respect a part of practices of future making which date back to the 19th century (Montfort 2017).

Futures Studies has described the fact that since the 19th century, imaginations of the social future have been closely linked to the rhetoric of innovation in science and technology. Science and technology, in turn, are variables that do not exist outside society, but are determined by specific cultural and social contexts. Public presentations such as the World Exhibitions held from 1851 onwards served as 'stagings' where the possibilities of new discoveries and innovative technologies were exhibited. Detached from their scientific contexts or technological applications, these public presentations focus public attention and performatively demonstrate a vision of

a possible future for science and technology. "Sociotechnical imaginaries" around new media are therefore more than just narrative stories, e.g. science fiction. Rather, they are "performative scripts" (Jasanoff 2015: 12) that instruct a concrete "doing" with a new technology.

In the Science & Technology studies, Wally Smith has coined the term "theatre of use" (Smith 2009) in order to describe these practices. Smith's concept opens up valuable perspectives for the analysis of public stagings of media-technology, especially for the analysis of projects from the field of media art such as "Piazza virtuale". "Piazza virtuale" even appears *ex post* as a paradigmatic case of such a "theatre of use", since the project was part of *documenta IX*, but not of the official "artistic" program of this exhibition. "Piazza virtuale" thus stands on the borderline between a demonstration of a new medium geared towards commercial purposes and an artistic exhibition – a discursive situation that can be very well grasped by terminologies from STS. The insights that can be gained from this approach can be further illustrated by a short case study.[1]

"Piazza virtuale" belongs to a series of concepts that were used in the 1980s and 1990s to design an interactive "Cyber-TV" (Todtenhaupt 2000: 77-84) that sought to distance itself from this traditional form of television. Traditional television broadcasts were replaced by "broadcasting blocks" that are reminiscent of contemporary applications. For example, there was a "coffee house" where viewers could entertain themselves, and a "Marketplace" where things could be sold. The possibility of making electronic music in the "Virtual Studio" was another multimedia application. The usage design was based on the world of digital media, the television screen became the interface where the various dial-up options converged, in this case the "Coffeehouse" (Fig 1).

Pizza virtuale made consistent use of the digital infrastructures of its time. The diagram shows the structure of the system (although not completely). The methods of access were either familiar (telephone, fax), partly rather new (touch tone), partly very advanced (modem, video telephony) (Fig 2).

It was clear to everyone involved that they were about to experience a dramatic media change in real time. An article in the *Wired* magazine from March 1993 (only two months after the founding of this influential magazine)notes: "The idea for Piazza came together in 1988, and grew from the assumption that the human-machine-human relationship was the central relationship in Western culture – and that it was changing" (Marshall 1993). According to this, nothing less than the "human-machine-human" relationship in Western culture was at stake. But the quote is remarkable above all because there is no talk of "human-computer interaction" as a limited interaction of the individual with a computer. Instead, it speaks of a "human-machine-human" relationship. "Interactivity" in the sense of interaction with a computer-based technical medium becomes the basis of a classical social concept of "interaction" (Jensen 1999: 32-38). Consequently, the ideal medium is one that makes (technical) interactivity tangible as (social) interaction. This is precisely the problem for which "Piazza virtuale" should be a solution, and this is what the leading metaphor of the "virtual piazza" referred to.

This old Western idea is intertwined with a buzzword of this era: virtual reality. Networked computer-generated communication is seen as a correction of a deficiency of television: the "one-to-many" communication of television is to be transformed into a global "many-to-many" communication, from a "unidirectional" to a "participatory" medium. The *Wired* article therefore articulates the idea of a possible alternative form of mass communication. Around 1989, Computers were not networked, at least not in the general public. "Piazza virtuale" responded to the desire for a new computer-based mass medium.

Yet, the basic dilemma that television is not a networked "many-to-many" medium remained. Bundling mass communication in a television broadcast so that people could talk live and in public on one channel was only possible by restricting free telephone lines. It is not possible to have 100.000 viewers tuned in to a TV show live at the same time, but only a maximum of five or six. "Piazza virtuale" collapsed under the sheer numbers of callers. The intended participation medium did not offer mass communication, but a form of live video conference with an extremely limited number of viewers. In addition, the infrastructural effort in the backend was very high. An MS-DOS computer organized the incoming communication and then passed it on to specialized systems such as Apple Macintoshs, Commodore Amigas, NEXT computers and Atari STs. Today such tasks are solved on the software side in one platform. Multimedia, as structured in"Piazza virtuale", was still relatively difficult to implement and prone to error (Fig 3).

The kind of participation by the spectators varied in success. The interest in the multimedia gimmicks was certainly there, but technically not very successful; the collaborative music, for example, produced questionable results. Getting multimedia applications to work, especially synchronizing the different streams of characters (voice, images, writing) was a challenge; using the keys on the phone to send signals and sounds and to give control commands was unusual and restrictive. But for all its problems, the project has most harshly been criticized for the fact that the people who made it to the "Piazza" did not talk, but only sent "Hello, Hello?!" over the airwaves. Yet, this behavior was the normal confusion when one has no practical routine in dealing with

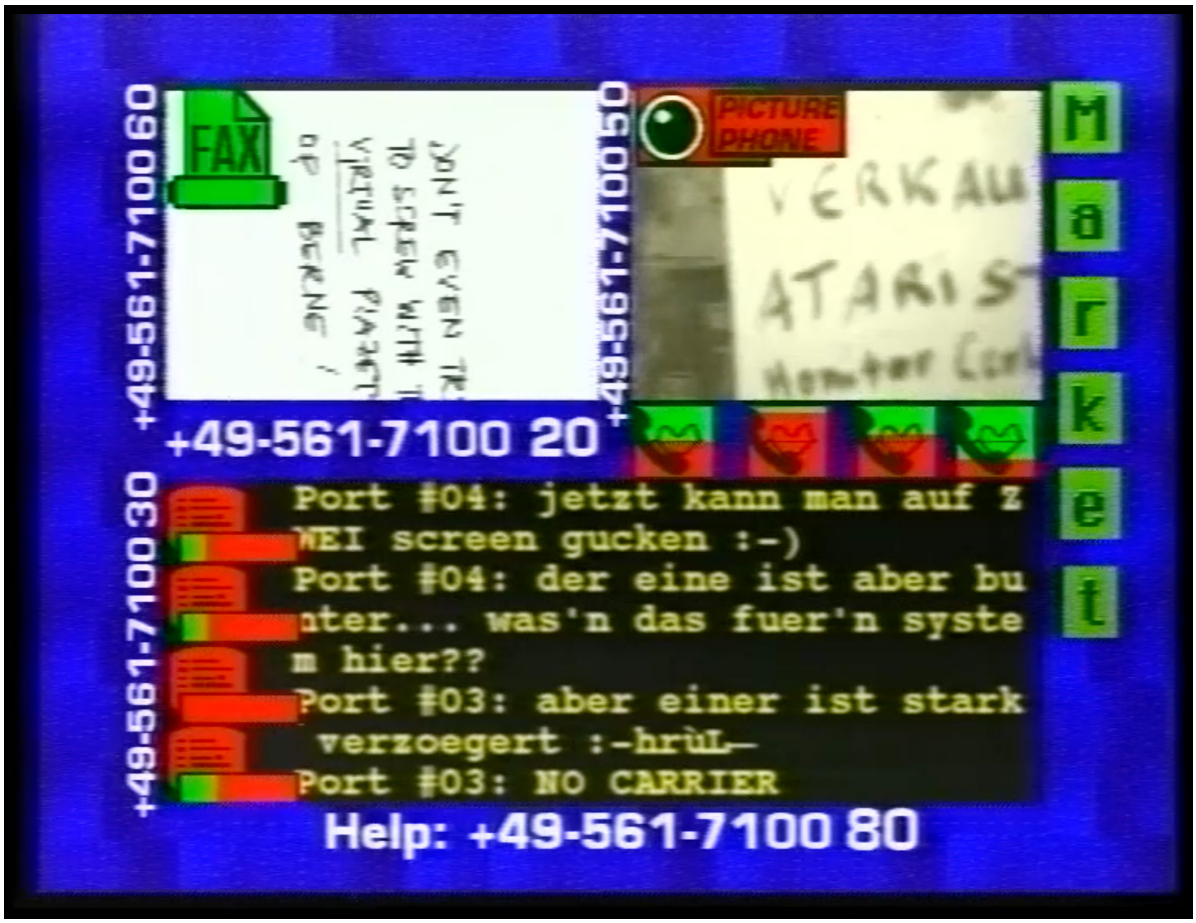

Fig. 1 Piazza virtuale "Marketplace". Source: Screenshot from Van Gogh TV, Piazza Virtuale, 'The Documentation' (1992) (material from the DFG project "Van Gogh TV. Indexing, Multimedia-Documentation and Analysis of her Estate", Prof. Dr. Jens Schröter/Prof. Anja Stöffler, Tape 461, Box 37, Date 01. March 1993)

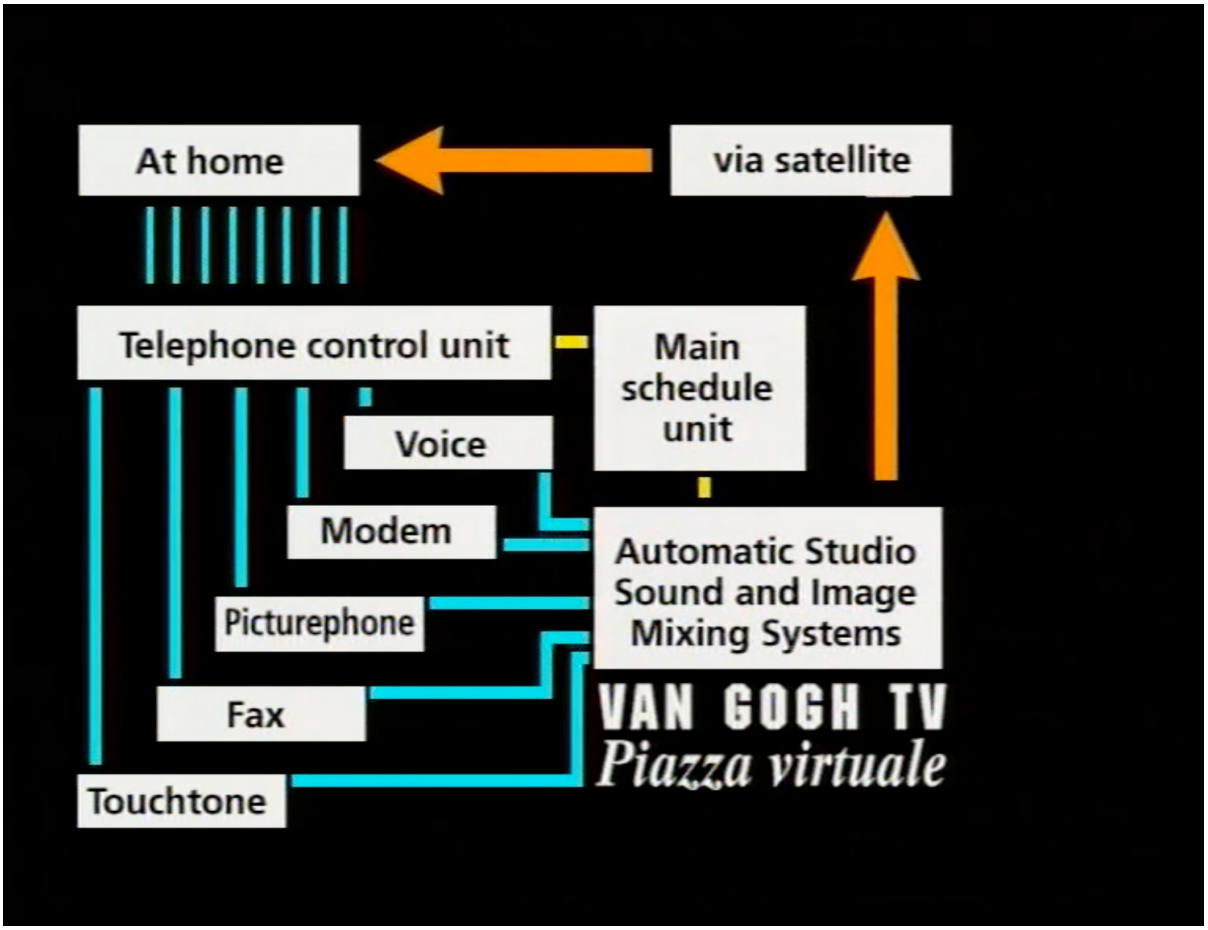

Fig. 2 Representation of the access possibilities to the Piazza virtuale. Source: Screenshot from Van Gogh TV, Piazza Virtuale, 'The Documentation' (1992) (material from the DFG project "Van Gogh TV. Indexing, Multimedia Documentation and Analysis of Her Estate", Prof. Dr. Jens Schröter/Prof. Anja Stöffler, Tape 461, Box 37, Date 01. March 1993).

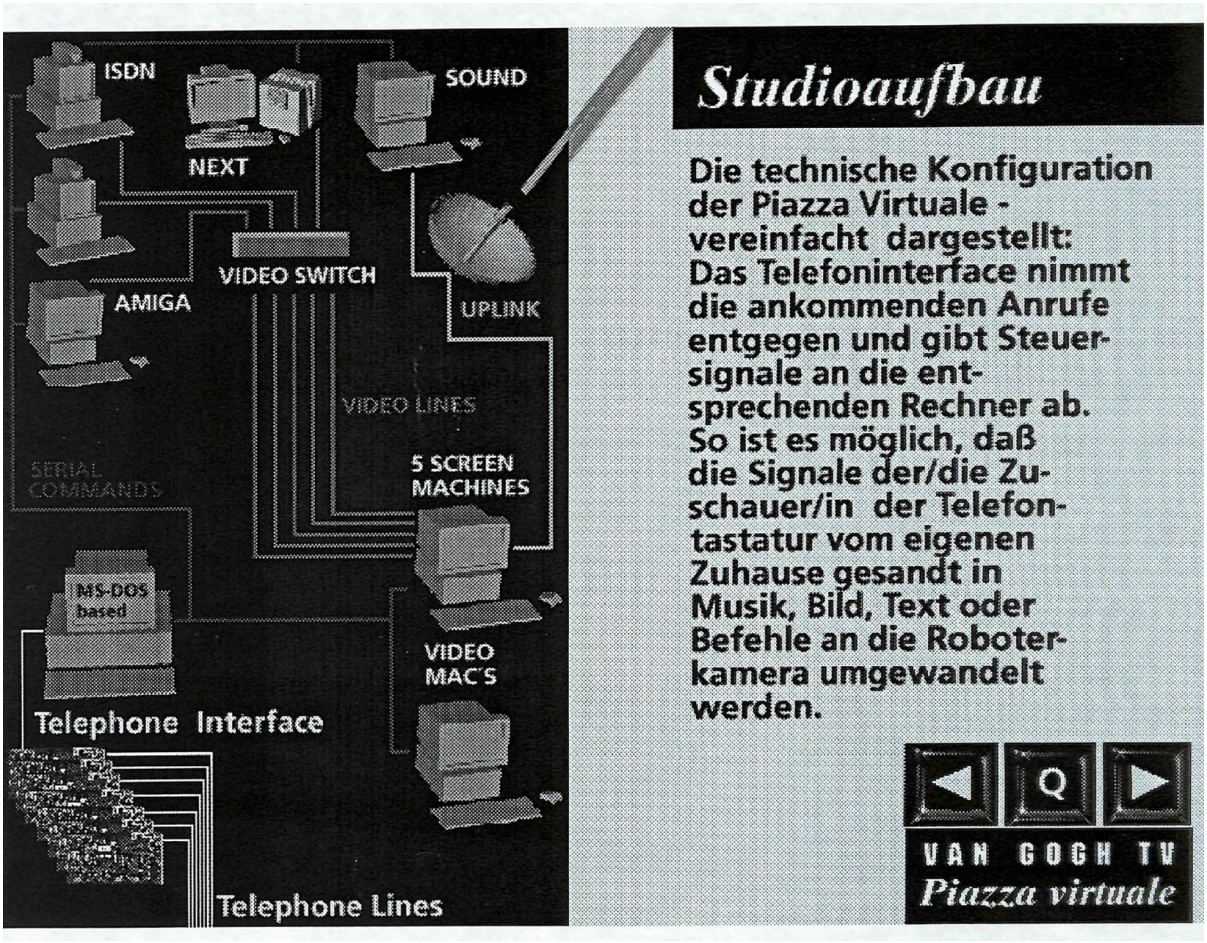

Fig. 3 Van Gogh TV advertising material (1992). (Material from the DFG project "Van Gogh TV. Erschließung, Multimedia-Dokumentation und Analyse ihres Nachlasses", Prof. Dr. Jens Schröter/Prof. Anja Stöffler, Folder 6, sheet 307).

a new medium. The possibility to talk to other people live on air without a moderator structuring the communication was very unfamiliar. The "hello, hello" is due to the same confusion that can be observed for the "first contact" with the medium of telephone or film (Kittler 1986: 37).

In hindsight, "Piazza virtuale" couldn't work as a valid blueprint for the invention of a new medium of more "interactive" mass communication. The difference to today's social media is obvious and striking. Social media have developed significantly since the early 2000s. Thus, they do not find their origin in the transformation of existing network structures, whose possibilities they consistently use. Even the basic discussion of their characteristic features reveals great differences to the "Piazza virtuale" project, which was realized in 1992 and thus, in terms of media history, is to be located virtually at the same time as the development of the World Wide Web (WWW). Social media – at least, if they are defined as current social networks such as *Facebook* – are based on the modelling of social relationships and the storage of this information in large databases. By evaluating the information about the use of the network by users, personalized profiles are created with the help of feedback loops, which lead to self-reinforcing effects. Communities thus form with the participation of algorithmic processes – all this is missing in an interactive live-medium like "Piazza virtuale."

From this point of view, it is problematic to prove the research hypothesis and to see "Piazza virtuale" as a precursor of today's social media. Nevertheless, what a media-theoretical analysis clearly shows is that "Piazza virtuale" articulates the desire for a new form of "sociality" in the field of technological communication media around 1989. Furthermore, "Piazza virtuale" is an expression of the fact that in situations of media change, different solutions – and consequently different imaginations – of possible media-technological futures exist simultaneously. Media art thus proves to be an elementary resonating space for media technological innovations, even these innovations are not stabilized as a 'new medium' and remain bygone futures.

Archival Approach and Research Methods

In order to be able to access all the video and paper material on computers, we first had to digitize the corpus that was given to us. A laboratory in Berlin transferred all of the 569 tapes that we had received from Van Gogh TV into MPEG format with a data rate of 8000 kBits/s, a frame rate of 25 pictures per second and a resolution of 720 x 576. While today much higher standards are possible, that is akin to the resolution of the Full D1 PAL standard that was in use when "Piazza Virtuale" was broadcast. We ended up with a collec-

tion of files 2.65 Terabyte in size. Since this file size was unmanageable, the video files were converted into MP4s with a data rate of 2000 kBits/s and an average size between 2 or 3 Gigabyte per video files. Hence, all the data from the project – the result of over a year concentrated work of two dozen people, preserved on various data storage media that were delivered to us in more than two dozen moving boxes – has the size of 873 GB today and fits onto a contemporary hard drive the size of a cigarette pack.

The paper documents were scanned – most of them manually, some with the help of an automated paper feed – and stored in TIFF format, that was later converted into PDF files with optical character recognition (OCR). The OCR conversion did not register all of the text in the documents. In some cases, the visual quality of printed texts was just not good enough for machine reading, and the files also contained a lot of hand-written material that the OCR was only occasionally able to identify. Nevertheless, the percentage of the written material that was machine-readable allows for quick overview and keyword searches for large parts of the documents. However, in order to be able to review the entire written material comfortably, we printed out all the files for our perusal.

As part of our agreement with the artists, all the four members of the groups received hard disks with all the digitized material for their personal archives and future projects. We also stored the material on several hard drives, some of which are kept outside of our offices in Mainz for safekeeping. All the videos were also uploaded to the Panopto online video platform (https://www.panopto.com/) that the Hochschule Mainz uses for video hosting. The system is designed for the recording and streaming of lecture videos within an E-Learning-Environment and the sheer volume of video files that we had to upload turned out to be a challenge for the system. However, we were eventually able to store all of our material on the Panopto server.

We decided to use Panopto rather than commercial services such as YouTube or Vimeo for a number of reasons: First of all, YouTube automatically codes videos into a lower resolution and also limits the number of videos that users can host for free. Using Vimeo, a streaming service for professional filmmakers, would have been expensive and would have required yearly payments that we might not be able to cover once the DFG project is over. We also felt more comfortable using a server that was in the possession of the Hochschule rather than an internet company from the US. Concerns about copyright and privacy were other reasons to use Panopto.

The paper scans and other shared documents such as notes, essays or spreadsheets are hosted on Seafile (https://www.seafile.com/), an open-source, cross-platform file-hosting software system that the universities in Rhineland-Palatinate have access to. This platform turned out to be convenient for sharing edited videos and other files between researchers that do not always work in the same physical space together. Seafile makes it difficult to navigate from one folder to the other as it does not have a DOS-style coherent filing system, but rather assigns uploaded files randomly. One major disadvantage for research projects that are undertaken in different federal states of both Panopto and Seafile, is that only staff from universities in the federal state of Rhineland-Palatinate has access to these services. In order to send documents from Mainz to Bonn and vice versa and to work on shared documents we used Dropbox and Email.

While OCR allows searches in paper documents, the access to specific, topical segments in the videos was much more difficult, and it became necessary to come up with a method to annotate the video files that we had watched. After looking at different annotation software, we eventually settled for Motion Bank (www.motionbank.org), a video annotation system that is currently enabled at Hochschule Mainz. The system was originally designed to annotate dance performances; its first version was programmed for The Forsythe Company of choreographer William Forsythe in Frankfurt/Main. Using the Piecemaker web application that is part of the software, users of the application can record and annotate dance performances in real time.

The system allows for much more sophisticated uses than what we need, namely adding keywords such as #Hacker or #Religion to videos that we use to annotate the conversations in "Piazza Virtuale." However, it will eventually allow us to search for our keywords in an index that will provide direct links to video segments that have been annotated with such keywords. The most recent version of Piecemaker has been adapted to the data structure of the Web Annotation Model of the World Wide Web Consortium (W3C) (www.w3.org/TR/annotation-model) and the keywords will be stored in an XML file that other video annotation program that software such as ELAN can read.

Conclusion

On the basis of the material that has been made accessible again, our research project will locate Van Gogh TV in the genealogy of media and media art history. From the perspective of the electronic mass media, the projects of Van Gogh TV occupy a unique place in the historical trajectory of television in the Federal Republic of Germany, in which pluralism and participation played an important role from the 1970s onwards. From the perspective of the new online media, "Piazza virtuale" was a first step into the newly discovered "cyberspace". Seen in the context of contemporary art, there

are points of comparison between the activities of the group and the concept of "social sculpture" (Joseph Beuys), an artistic utopia of participation and collective creativity. And in the context of media art, their promises of direct involvement of the viewer are realized in a way that goes far beyond the interactive installations common in this art genre at that time.

The reappraisal, historical classification and theoretical reflection of this project must be regarded as an absolute desideratum. It not only revives a media experiment of the recent past that is relatively unknown today, but also provides important insights into the development of a global net culture that has by now become almost inescapable.

NOTES

[1] The following case study is included in the book Zukünftige Medien (Ernst/Schröter 2020) and is presented here as an excerpt of this work in a translated and slightly modified form.

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Cover image: Detail of the screen design of the "Schule" (School) segment of "Piazza Virtuale" (1992) by Van Gogh TV. © Van Gogh TV.

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