

를 제공하는 차원에서 그들을 방송에 참여시키는 일은 비용이 많이 든다. TV 방송에 남아있는 유일한 대중 참여 모델은 리얼리티 TV나 오디션 프로그램, 퀴즈 쇼 등이 제공하는 가짜 참여인데, 엔데몰Endemol사는 이러한 “브랜드화된 오락프로그램”을 개발하여 “참여 TV”라 이름 붙이고 전 세계적으로 마케팅 했다. “시청률을 높이고 새로운 수익을 창출하면서 우리 프로그램은 수천 명의 행운의 당첨자를 생산하고, 수백만 시청자에게 즐거움을 선사하며, 많은 방송 관계자들을 만족시킨다.”³⁴

텔레비전의 “불가능한 삼각구조”에 관해 처음에 제기했던 질문으로 돌아가서, 열정passion, 참여participation, 그리고 이익profit은 하나의 포맷 안에서 어울리지 못하는 것 같다. 그러나 매클루언이 말했듯이, 기존 매체는 새로운 매체의 내용이 된다. 그리고 참여 TV의 많은 이상향들이 인터넷과 월드와이드웹이라는 새로운 매체에서 일어나고 있다. 백남준은 웹의 초창기, 비디오 아트가 앞으로 더 발전할 수 있겠는가라는 질문에 이렇게 답했다. “그렇다, 인터넷으로라면, 아주 많이.”³⁵ 아티스트, 큐레이터, 비평가들은 이런 기대에 부응하기 위해 오늘도 여전히 고군분투하고 있다.³⁶

34 <http://www.endemol.com/what/participation-tv>. 다음 홍보영상도 참고: <http://www.youtube.com/watch?v=haCvSu0C7Lc>.

35 Interview with Nam June Paik in 1995 by Susanne Rennert and Stephan von Wiese, in *Mixed pixels: Students of Paik*, Düsseldorf: Kunstmuseum Düsseldorf, 1996, p.18.

36 현대의 온라인 비디오 아트 프로젝트에 대한 비평적 리뷰로는 다음을 참고: Dieter Daniels, “Video art – yesterday ... today ... tomorrow?,” in Marius Babias, Kathrin Becker, Sophie Goltz, eds., *Time Pieces. Videokunst 1963 bis heute*, Köln: Walther König, 2012.

Touching television: Participation media with Marshall McLuhan, John Cage and Nam June Paik

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The title “Touching Television” is a double entendre: touching can mean palpable, haptic, if the viewer is touching the screen for physical interaction, or it can mean emotional, engaging, if the content is touching the viewer’s mind. The first meaning is based on active participation of the viewer, and the second meaning is based on the silent fascination and passionate self-identification with the ongoing plot. The unresolved question is, if these two modes of “getting in touch” with an audience – passion and participation – are compatible or mutually exclusive. Or to put it in the form of a paradox: can I be touched by something I am touching? For example, if I watch violence or romance on a tablet PC while touching it on the screen, does that change my affection with the content I am watching?

I. Walter Benjamin and Marshall McLuhan: the tactility of visual media

These questions are all the more urgent through the development of touch-interface, but they can be traced way back in the history of media theory of the 20th century. This shows a comparison of Walter Benjamin and Marshall McLuhan. Their media theories are much less a theory of machines, of communication or of information, but rather a theory of the senses and the multi-modal relationships of media to the body. This is what makes them so inspiring also for non-academic readers and, even more importantly, makes them inspiring for artists. Just to give a ‘probe’ (as McLuhan would have called it) of the astonishing closeness of some ideas in McLuhan and Benjamin, despite their very different political and philosophical background, I will focus on the tactility of visual media.

In his famous essay *The Work of Art in the Age of Mechanical Reproduction* (1936) Walter Benjamin writes: “... the work of art of the Dadaists became an instrument of ballistics. It hit the spectator like a bullet, it happened to him, thus acquiring a tactile quality. It promoted a demand for the film, the distracting element of which is also primarily tactile, being based on changes

of place and focus which periodically assail the spectator.”¹ It sounds as if McLuhan is directly responding to Benjamin in his contentious notion that the television image is an “expansion of the tactile sense ... a medium, which includes all of our senses in an in-depth interaction.”²

A more elaborate version of the same argument can be found in McLuhan’s 1969 Playboy interview: “Unlike film or photograph, television is primarily an extension of the sense of touch rather than of sight, and it is the tactile sense that demands the greatest interplay of all the senses. The secret of TV’s tactile power is that the video image is one of low intensity or definition and thus, unlike either photograph or film, offers no detailed information about specific objects but instead involves the active participation of the viewer. ... the viewer, in fact, becomes the screen, whereas in film he becomes the camera. ... the immediate interface between audile-tactile and visual perception is taking place everywhere around us.”³ In the mid-1960s McLuhan’s insistence on the tactile sense of TV seemed to be one of his many crazy ideas. His colleagues joked that the McLuhan’s must have a very bad TV set at home!⁴ From today’s point of view it becomes evident that the tactile-as-total and the medium-space-body metaphor of Benjamin and McLuhan are very close: both are anticipating today’s concepts of embodiment and multimodal perception and the touch-interfaces of digital technology.

Why do the theories of Walter Benjamin and Marshall McLuhan have such astonishing parallels? It seems that McLuhan did not read Benjamin, he never mentions him in his writing and correspondence and no trace can be found in his comprehensive library.⁵ The relation of Benjamin and McLuhan is rather a question of a similarity in their methodologies than of a direct ‘influence.’ This is also an important point for the methodology of my text: it is not so much about influence as about similarities and differences, in sometimes independent, sometimes parallel, and sometimes overlapping and interfering concepts. I will come back to this question in the following paragraphs, looking at how artists contemporary to McLuhan relate to his theory of media-multimodality.

II. Marshall McLuhan and John Cage: (mass) media as expansion of perception

- 1 Walter Benjamin, “The work of art in the age of mechanical reproduction,” 1936, in Charles Harrison and Paul Wood, eds., *Art in theory, 1900–2000: an anthology of changing ideas*, Oxford: Blackwell, 1992, p. 517.
- 2 Marshall McLuhan, *Understanding media: the extensions of man*, Cambridge, MA: MIT Press, 1995, pp. 504, 507 (first edition, 1964).
- 3 “A candid conversation with the high priest of popcult and metaphysician of media,” *Playboy Magazine*, March 1969, reprinted in Eric McLuhan and Frank Zingrone, eds., *Essential McLuhan*, Concord, Ontario: House of Anansi Press, 1995, <http://www.nextnature.net/2009/12/the-playboy-interview-marshall-mcluhan/>.
- 4 Philip Marchand, in Martin Baltes and Rainer Höltzschl, eds., *Absolute Marshall McLuhan*, Freiburg: Orange-Press, 2002, p. 90.
- 5 The relation of Benjamin and McLuhan was discussed with McLuhan scholars at the conference «Re-touching McLuhan» in Berlin 2011.

The only contemporary artist featured in McLuhan’s bestseller book *The Medium is the Massage* (1967) with a full page is John Cage. In the same year 1967, John Cage in turn wrote an astonishing text about ‘the influence of McLuhan’ for *Toronto Daily Star*. Cage did not so often talk about ‘influence’ at all; but it is he that was an important influence in his own right for the 1960s multimedia artists. In this text, Cage tells the following story: McLuhan suggested to him that he should write some music on the Ten Thunderclaps from James Joyce’s *Finnegans Wake*, which contains a history of technology, as his son Eric McLuhan was explaining in a book he was about to write. After receiving Eric’s typescript, Cage developed a concept for the piece – but finally never got to write it.⁶ This anecdote is just a ‘probe’ for the complex relationship of Cage and McLuhan – it would make a topic for a text in its own.

Cage’s extraordinary significance rests on the fact that he, in contrast to the otherwise heavily stylized and exclusively art-oriented New Music of the 1950s, made the ordinariness of the media environment into the object of critical analysis and experimental reconfiguration. In his 1951 piece *Imaginary Landscape No. 4* – for twelve radios, twenty-four performers and the conductor – twelve pairs of performers each operate one radio, changing the station, the volume and the pitch. The piece is thus always realized in real time. It is ‘live’ as well as ‘site-specific,’ dependent on the locally available radio stations. Because the score is based on chance factors from the I Ching, Cage, in two respects, is not the author of a concrete tonal structure, but only of a specific configuration for the reception of sounds. According to Cage, the composition is “free of individual taste and memory.”⁷

Imaginary Landscape No. 4 represents a new beginning in Cage’s work in three regards: it was the first performance of a piece for which he made use of the I Ching, and it was the first to additionally use media information that was not determined in advance.⁸ Third, as is the case in his silent piece *‘4’ 33’’*, the audience of *Imaginary Landscape No. 4* experiences four minutes of heightened sensibility; listening replaces the musical content, which is nonetheless still conveyed by the twelve radios employed like instruments. The radios make the mass-media omnipresence of the broadcast signals tangible as raw aesthetic material at the moment of the performance. Put in present-day terms, *‘4’ 33’’* could even be described as an unplugged version of the earlier piece for radio.

Coming back to the relation of Cage and McLuhan a first resume is: more

- 6 See John Cage, “McLuhan’s influence,” 1967, in Richard Kostelanetz, ed., *John Cage: an anthology*, p. 170, and George Sanderson and Frank Macdonald, eds., *Marshall McLuhan: the man and his message*, Golden, CO: Fulcrum, 1989, Introduction by John Cage, unpagged.
- 7 John Cage, *Silence*, Cambridge, Mass.: MIT, 1966, p. 59. Here Cage also describes in detail the compositional principles he employed.
- 8 According to the Edition Peters’ catalogue of Cage’s works (New York, 1962, pp. 8, 36), the premiere of *Imaginary Landscape No. 4* took place on 2 May 1951, before *Music of Changes* on 19 August 1951, although the latter, according to Cage, was written first. See Richard Kostelanetz, *Conversing with Cage*, London, New York: Routledge, 2003, p. 62.

than a decade before McLuhan's *Understanding Media* was published, John Cage's first composition for radios from 1951 already put into practice several of McLuhan's concepts: firstly, radios are used as 'extensions of man' for an expansion of perception through media; secondly, in the most literal sense the medium is the message.

A third aspect is audience participation, which develops in John Cage's work during the 1960s, extending indeterminacy from the composition process and the performers to the perception and possible active participation of the public. Cage was not interested in radical participation, like many other artists in the 1960s which did away with authorship. He always maintained a clear concept of his compositions which could involve several degrees of involvement, but never stopped being a work of art. This is similar to McLuhan's concept of the active media perception, which does not include media interaction as in later digital media. Nam June Paik considered this closeness of McLuhan and Cage in 1967: "This (audience participation) might have been the first bait, taken up by Cage [from McLuhan]."⁹

III. John Cage and Nam June Paik: (re-)production media as creative instruments

The relation of John Cage and Nam June Paik is too complex for the scope of this essay.¹⁰ Both are artists-musicians and both are pioneers of media art. For his radio composition *Imaginary Landscape No. 4*, Paik in a conversation with Cage gives him the credit to be the first media artist: "I thought today about the history of media art, you know. The first big media art break was your *Imaginary Landscape* ... John did many things, but he also discovered the beauty of short wave ... that is the beauty of destruction of technology, because it is unwanted noise. ... Until the *Imaginary Landscape*, there was electronic music, like Pierre Schaeffer, Karlheinz Stockhausen or even Paul Hindemith. They made electronic art music by turning turntable records fast and slow. Still that is not media art, whereas your radio piece *Imaginary Landscape* is some kind of quantum leap. You could call this media art from then. ... You recognized the existence of radio waves, which existed anyway, and of the hardware called radios ... and those ephemeral things like software, not just splicing tapes. ... The meaning of that piece has not been properly appreciated."¹¹ Cage's pieces for radio and magnetic tape seem to have been an inspiration for Paik's work with TV and sound. Again

9 Nam June Paik, "Norbert Wiener and Marshall McLuhan," 1967, in Judson Rosebush, ed., *Nam June Paik: Video 'n' Videology 1959-1973*, exh. cat., Syracuse: Everson Museum of Art, 1974, unpaginated.

10 See Dieter Daniels, "John Cage und Nam June Paik: change your mind or change your receiver (your receiver is your mind)," in Sook-Kyung Lee and Susanne Rennert, ed., *Nam June Paik*, exh. cat., Tate Liverpool and Museum Kunst Palast, Düsseldorf, London: Tate, 2010, pp.107-125.

11 Quoted from the documentation of a public conversation between Nam June Paik and John Cage at the University of California, Davis, where Paik realized his first open-air installation *Something Pacific* in 1986. Thanks to Stephen Vitiello for the audio file.

there is not a straight line of influence, but instead there are similarities and differences in sometimes independent, sometimes parallel, and sometimes overlapping and interfering concepts. This difference is already visible in how they both modified the piano. While Cage's prepared piano was a temporary, reversible intervention to alter the sound, Paik rigged up the piano to create a multi-sensory interactive instrument that triggers various surprises when the keys are operated: a squeezebox makes a sound, a transistor radio begins to play, a hair dryer blows hot air on the visitor's legs and a key shuts off all the lights in the room.

To turn mechanical reproduction into creative production is a utopia of the avant-garde even before Walter Benjamin's well-known essay. As early as 1927, László Moholy-Nagy demanded that "instruments (means) previously used solely for reproductive purposes [be expanded] for productive purposes," and explicitly named television alongside photography and the gramophone.¹² Following this line, Cage's and Paik's use of audiotape invites direct comparison: *Williams Mix* (1952) is Cage's first composition for audiotape, based on a score of 192 pages. In spite of the assistance of Earle Brown, David Tudor, and Louis and Bebe Barron, with editing and splicing the recorded tapes, completing this four-minute-long sound montage took approximately a year. Cage makes a production tool out of a reproductive medium by directly editing and assembling the tape material. The tape recorder as such, however, remains unchanged in its linear reproductive function. In his *Exposition of Music: Electronic Television* Paik went a step further in *Random Access* (1963), by pasting the tape material to the wall and removing the audio head from the machine, so that the visitor could then pass along the soundtracks, exploring various sounds like on an audible city map.¹³ Cage only altered the software, while Paik deconstructed the hardware of the media devices, thus combining visual, haptic and aural experiences.

The same difference is evident in comparing Cage's compositions for radio and Paik's work with television. Cage's radio pieces are the interplay between production and reception or potential participation – but he does not modify the functionality or technology of the media apparatus. Paik deconstructs the hardware of the TV sets and turns it from a consumer apparatus into a creative, hands-on, do-it-yourself experience. The audience is now the principal performer; the instruments have been modified by the artist to such an extent that they have lost their original function and now challenge the visitor's instinct for play in order to elicit from them new, never-seen-before images.

Because of a lack of video technology, the source material had to be taken from daily television programs running at the time; so, similarly to Cage's radio pieces, the work dealt with live media. In 1963, there was only one TV

12 László Moholy-Nagy, "Produktion Reproduktion," in *Malerei Fotografie Film*, 1927, reprinted in Berlin, 2000, p.28.

13 In a conversation with the author (New York, 28 October 1999), Paik described the installation as a "city map and abstract painting, sight, sound and action."

channel in Germany – which was broadcast only in the evening hours.¹⁴ I once asked Nam June Paik, if this was the reason why his 1963 exhibition was opened only in the evening from 7:30pm to 9:30pm. His answer was “Yes, I confess.”¹⁵

The television images were each manipulated differently and Paik explored the range of variations with culinary abandon: “There are as many sorts of TV circuits as French cheese sorts. F.i. some old models of 1952 do certain kind of variation [sic], which new models with automatic frequency control cannot do.”¹⁶

None of the original modified TV sets has survived and there are no film documents of «Exposition of Music – Electronic Television», only black-and-white photographs and a very accurate description by Paik’s collaborator Tomas Schmit. There are only later re-creations of modified TV sets by Paik and his collaborators.¹⁷ But it is clear that the technology changes over time – as does the taste of French cheese sorts. None of the reconstructions can replace the lost originals – and also the TV program today is completely different, so that the initial experience of the visitors to the exhibition in 1963 seems to be lost forever.¹⁸

Most of the twelve modified TV sets distort the live TV image in various modulations – two of them invite the visitor to create electronic images from nothing, without using the live TV image – other two visualize audio signals from a tape recorder or from a live radio program. The TV modifications are the most advanced works in «Exposition of Music – Electronic Television», but the visitors were more impressed by the overall ensemble of the environment. As a resume: Paik’s first exhibition is a multi-sensorial, participative environment, which is a precursor of various art forms, later labeled as video art, sound art, and interactive art.

IV. Marshall McLuhan and Nam June Paik: random access tactile television

The relation of Paik to McLuhan must be understood vis-à-vis the Paik-Cage relation. Paik indicated that in 1965 he first heard about McLuhan through Cage.¹⁹ The difference between McLuhan and Paik can be compared to the dif-

14 On the available German television programs from 1963, see Manuela Ammer’s detailed research in Susanne Neuburger, ed., *Nam June Paik: Exposition of Music – Electronic Television, Revisited*, Köln: Walter König, 2009, pp.63–76, p.68.
 15 Nam June Paik in a conversation with the author in Wiesbaden on 24 September 1990.
 16 Nam June Paik, “Afterlude to the exposition of experimental television,” 1964, in Kristine Stiles and Peter Howard Selz, eds., *Theories and documents of contemporary art: a sourcebook of artists’ writings*, Berkeley; Los Angeles: University of California Press, 1996, p.433.
 17 MAC Lyon (Musée d’Art Contemporain de Lyon) has complete reconstructions of the 1963 TV rooms of Nam June Paik and Wolf Vostell.
 18 The 2009 documentary show «Music for All Senses» at the Museum of Modern Art Vienna also did not try to go beyond this. See Susanne Neuburger, ed., *Nam June Paik: Exposition of Music – Electronic Television, Revisited*, Köln: Walter König, 2009.
 19 Nam June Paik, in Edith Decker, ed., *Niederschriften eines Kulturnomaden: Aphorismen, Briefe, Texte*,

ference between Cage and Paik regarding media technology and audience participation. Again there are some similarities, but also important differences: McLuhan talks of the tactility of the TV image perception as an analysis of how things are; Paik develops an (inter-)active practice of TV image manipulation, and he offers a prospectus of things to come.

It is important to look at the dates precisely: Nam June Paik put his own ‘participation TV’ into practice in 1963, one year before McLuhan in *Understanding Media* wrote about TV as a “cool” medium with a high degree of spectator participation. Paik’s concept of ‘participation TV’ was developed independently from McLuhan. This is why Paik’s work is not at all an ‘illustration’ of McLuhan’s theory – as it is often said. Evidently at this moment in time, the art and the theory of media are two sides of the same coin.

At the 1963 exhibition in Wuppertal, Paik still worked inside the TV set, modifying the circuitry. As Paik admits, the most simple idea to use a magnet outside of the TV set only occurred to him two years later, on the occasion of his first American solo show titled «Electronic Art» at Galeria Bonino, New York in 1965. Another way of distorting the TV image is the use of a degausser, a magnetic ring put in front of the screen. These experiments are even closer to McLuhan writing about TV as a tactile medium at the same time – which Paik has certainly read by 1965 after moving to New York. Still the question of ‘influence’ is not a simple one; remember the similarities of Benjamin and McLuhan, which are not based on a direct ‘influence’ of any kind. In 1965 Paik mentioned McLuhan in the catalogue – and he linked McLuhan to Norbert Wiener and to John Cage in a diagram.²⁰

$$\frac{\log_a \text{Cage} - \sqrt[3.5]{\text{McLuhann}} = \pm \text{sorry}}{\text{Norbert Wiener}}$$

This marvelous formula can be read as a summary of Nam June Paik’s own works with TV. Two years later in 1967 Paik published a text on “Norbert Wiener and Marshall McLuhan”: “McLuhan’s famous phrase ‘the medium is the message’ also existed implicitly in the science of communication since the 1940’s. Norbert Wiener wrote that the information, in which a message was sent, plays the same role as the information, in which a message is not sent. It sounds almost Cagean ...”²¹

We are entering a complex set of relationships. Paik’s TV work can be

Köln: DuMont, 1992, p.111.
 20 Diagram of Cage/McLuhan/Wiener from «Nam June Paik Electronic Art», Galeria Bonino, New York, 1965. John Cage also wrote an introduction to this catalogue, Galeria Bonino, New York 1965. Cage’s recommendation helped Paik receive the grant from the Rockefeller Foundation in 1965 that enabled him to buy his first video recorder.
 21 Nam June Paik, “Norbert Wiener and Marshall McLuhan,” 1967, in Judson Rosebush, ed., *Nam June Paik: Video 'n' Videology 1959–1973*, exh. cat., Syracuse: Everson Museum of Art, 1974, unpagged.

linked to: Cage's idea of indeterminacy; McLuhan's theory of the active perception of TV; and Norbert Wiener's concept of feedback in cybernetics. This combination is put into practice in Nam June Paik's second solo show at the Galeria Bonino, entitled «Electronic Art II» in New York in 1968. He developed an interactive videotape with live feedback and image manipulation, – and the subject of this piece is McLuhan himself – treated as a random-access tactile TV image. Also in the title, Paik combines McLuhan with John Cage: «McLuhan Caged» is written with a big C. In an interview right before the «Electronic Art II» exhibition, Paik says that “even McLuhan misuses and mixes up the words ‘electric’ and ‘electronic’, which have as much difference as tonal and atonal. In the electronic trade jargon, we distinguish roughly two sorts of processes: (1) peripheral units ... (2) central processing units,” and adds that he plans to show his first works which use ‘data processing’ in the upcoming exhibition.²²

How does «McLuhan Caged» work? Paik gives the following description: “There was an important program about Marshall McLuhan, made by NBC in 1967 or early 1968 ... I videotaped the program while it was on the air. I put various electromagnets on the set and turned McLuhan right and left. What I wound up with was a McLuhan videotape loop that can be played with around and around.”²³

«McLuhan Caged» is a new step in Paik's participation TV, based on a combination of strategies developed since 1963: the distortion of images taken from broadcast TV; the interaction of the viewer with the TV image; now with random access for video instead of audio materials. Five years after his first show with modified TV sets, Paik could use a videotape recorder for an elaborate combination and one of the first real-time interactive video works ever. Apart from the technical side of the piece, the content is also very sophisticated. Paik takes a quote from McLuhan's TV appearance which already contains in a nutshell the remediation theory developed by Jay David Bolter and Richard Grusin three decades later: “Movies tend to be the content of TV, and books and novels used to be the content of movies. So every time a new medium arrives, the old medium is the content. And it is highly observable – the real ‘massaging’ done by the new medium – it is ignored.”²⁴ McLuhan ‘Caged’ in the video loop is repeating these sentences over and over again. Paik subjects McLuhan's theory to remediation in its own right – not

22 Jud Yalkut, “Art and technology of Nam June Paik - Interview,” *Arts Magazine*, April 1968, p.51, reprinted in Judson Rosebush, ed., *Nam June Paik: Video 'n' Videology 1959-1973*, exh. cat., Syracuse: Everson Museum of Art, 1974, unpagged. See also Nam June Paik quoted by Gene Youngblood:

“Electronics is essentially Oriental ... but don't confuse ‘electronic’ with ‘electric’ as McLuhan often does. Electricity deals with mass and weight; electronics deals with information: one is muscle, the other is nerve,” Gene Youngblood, *Expanded cinema*, New York: P. Dutton & Co., Inc., 1970, p.137.

23 Douglas Davis, “Interview with Paik,” *Art and the future: A history-prophecy of the collaboration between science, technology and art*, London: Thames & Hudson, 1973, p.149.

24 Quoted from a video documentation of Paik's deforming experiment with McLuhan's TV appearance on NBC in 1968.

in a theoretical elaboration but in a demonstration, that the new tactile and interactive television will become a new medium, which makes the old linear broadcast television its content.

The next step in Paik's development of electronic interactive tools is Paik-Abe Video Synthesizer, developed together with the engineer Shuya Abe.²⁵ I am not going into technical details (which are interesting but complex) but will focus on the practice of this device. According to Paik, the video synthesizer had “to be played in real time – like a piano. From a purely artistic viewpoint that is highly interesting – a truly new thing that has no precedent. You simply play and then see the effect.”²⁶ This links back to John Cage and the prepared piano – and it brings us directly to the topic of this publication: television commune.

The first important live appearance of the Video Synthesizer is the four-hour broadcast «Video Commune» transmitted by the Boston TV station WGBH in 1970. This live-mix from pre-recorded videotapes and manipulated camera images in the studio was accompanied by the music of the Beatles. The studio crew was joined by passers-by which Paik invited into the studio from the street to play hands-on with the Video Synthesizer. Also the public at home in front of the TV set was prompted to participate. At various intervals, a narrator explains the nature of this experimental broadcast. “This is participation TV,” he says, urging the audience to play with the dials of their television set, adjusting brightness and color. Viewers limited to black-and-white sets are encouraged to “distort [their] picture with a strong magnet.” All audiences are pushed to “do your own thing and treat it like electronic wallpaper.”²⁷

Within seven years from 1963 to 1970, a significant shift happened in Paik's work with and for television: the 1963 exhibition of modified TV sets in the private gallery in Wuppertal was a symbolic intervention, which is a model for turning consumption of TV into participation. But it did not interfere with broadcast TV itself; it took place in an art space and it was completely ignored by German TV at the time. In 1970 with «Video Commune» Paik's concept of participation TV entered a broader realm of the mass medium, and it established an exchange between production and consumption: it makes broadcast TV something you can touch and move while it goes on. It is important to notice that since 1970 all videotapes by Paik have been produced by television and have been broadcast on television. This is often not acknowledged in art

25 There are several surviving versions of this machine, one in the collection of the Nam June Paik Art Center, which belongs to what is known as its first generation. In collaboration with Shuya Abe in 2011, the Nam June Paik Art Center has rebuilt the synthesizer, using a compact model. Several compact versions of the machine were produced through studio class led by Paik and Abe for an educational purpose at the California Institute of the Arts. The function and design of the restored synthesizer by the Nam June Paik Art Center is based on the original editioned Paik-Abe Synthesizer.

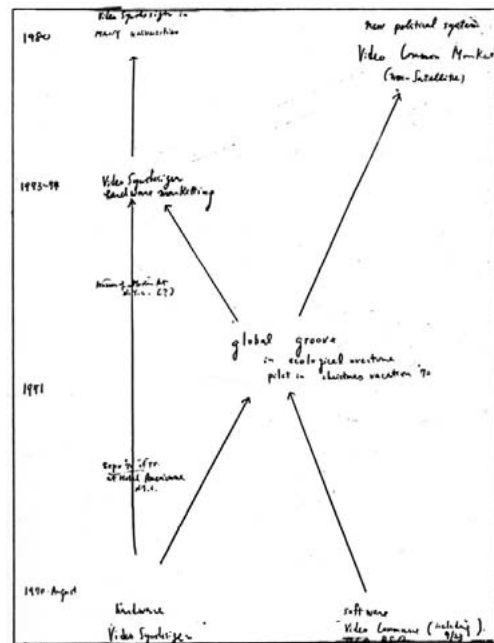
26 Nam June Paik, *Werke 1946-1976*, Köln: Kölnischer Kunstverein, 1976, p.133.

27 Quoted from Open Vault, WGBH Media Library and Archives, <http://openvault.wgbh.org/catalog/ntwmla000325-video-commune-beatles-from-beginning-to-end>.

history!²⁸

«Video Commune» is the peak of Paik's involvement with participation TV. After the euphoria of the 1960s, the art world in the 1970s generally turned away from audience participation. Paik's interest in the 1970s also shifted more to the social, cultural and political aspects of TV. His partly destructive attitude of the 1960s was followed by an investigation of the medium's global dimensions. Paik's well-known videotape «Global Groove» (1973) does not ask for direct participation, but it is the simulation of the future possibility of world-wide television zapping – long before satellite TV made this possible, as TV in the 1970s was still a national or even regional medium. “This is a glimpse of a video landscape of tomorrow when you will be able to switch on any TV station on the earth and TV guides will be as fat as the Manhattan telephone book.”²⁹

Three years before «Global Groove» Paik developed already the concept for a world-wide exchange of TV program in a theoretical text. The sketch illustrating the text draws a line from the 1970 Video Synthesizer to the “Video Common Market” to be expected in 1980 – a whole decade in one diagram.³⁰



28 See also Dieter Daniels, "Television – art or anti-art?: Conflict and cooperation between the avant-garde and the mass media in the 1960s and 1970s," http://www.mediaartnet.org/themes/overview_of_media_art/massmedia/, 2005.

29 Quoted from the beginning of Paik's videotape «Global Groove», 1973.

30 Nam June Paik, "Global Groove and Video Common Market," 1970, in Judson Rosebush, ed., *Nam June Paik: Video 'n' Videology 1959-1973*, exh. cat., Syracuse: Everson Museum of Art, 1974, unpaginated, <http://www.mediaartnet.org/source-text/88/>.

The central message of «Global Groove» is a cross-cultural dialogue. Paik's theory is also a critical 'remediation' of McLuhan's 'global village.' Unlike McLuhan, Paik does not expect the total assimilation in a 'global village,' but places instead the understanding of cultural diversity in the foreground. (In his own life as well, Paik succeeded in combining cultural impulses from Korea, Japan, Germany and the United States in such a way that they did not mutually expunge each other, but rather supplemented and reciprocally illuminated each other.)

What is only simulated in «Global Groove» becomes real in Paik's work with intercontinental satellite television live broadcast: «Good Morning, Mr. Orwell» (1984) and «Wrap Around the World» (1988). In a similar way to the move from the 1963 modified TV sets to the 1970 «Video Commune», we witness the shift from the symbolic intervention of «Global Groove» to a real expansion of the medium's possibilities of satellite television. These are Paik's 'unknown masterpieces', which are little noted or understood in an art context. They convey an experience of simultaneity which reminds us of Cage's «Imaginary Landscape No. 4» in 1951. Paik described «Good Morning, Mr. Orwell» as a "multitemporal, multispatial symphony".³¹ The time-space composition Paik already conceived in his concept «Symphony for 20 Rooms» and in the subsequent «Exposition of Music: Electronic Television» was translated onto a global scale.

V. What happened to participation TV?

The initial question for this essay was whether there is certain incompatibility between touching the interface of a medium and being touched by the content of a medium. This seems at least to be true in the case of Paik – he did not develop the participation TV further than «Video Commune». He left the development of interactive art to a younger generation of digital artists, but this had little or no connection to television. There have been several experiments for interactive cable TV as a mass medium since the 1970s. The most famous is QUBE (Question Your Tube), which was started by Warner-Amex in Columbus, Ohio in 1977 as a test for audience participation. Vilém Flusser expected from QUBE an "atomization" of decisions leading to a non-ideological form of democracy.³² QUBE offered pay-per-view programs, special-interest cable television networks, and interactive services. It was business framed with democratic jargon.³³

None of the experiments in the 1970s and 1980s for interactive TV were successful in the long run or on a larger scale. Most of them stopped not for

31 Nam June Paik, "Art and satellite," 1984, in Randall Packer and Ken Jordan, eds., *Multimedia: From Wagner to virtual reality*, New York, 2001, pp.39-43, p.42 here.

32 Vilém Flusser, "QUBE," in *Communication et langages*, N°47, 3ème-4ème trimestre 1980, pp. 95-102, http://www.persee.fr/web/revues/home/prescript/article/colan_0336-1500_1980_num_47_1_3468

33 See also the promotion video: http://www.youtube.com/watch?v=47k9g_PbwQE.

technical reasons or for lack of acceptance, but for lack of profit. Participation is expensive, if it wants to offer new services to the public. The only model remaining on broadcast TV is the fake participation offered by reality TV, casting competitions and quiz shows, which Endemol productions has developed and marketed on a global scale, a “branded entertainment” labeled as “participation TV”: “Generating increased ratings and fresh revenues, our programs produce thousands of lucky winners, millions of delighted viewers and many a satisfied broadcaster.”³⁴

Coming back to the initial question of this essay with regard to the “impossible triangle” of television, it seems that passion, participation and profit do not match in one format. But as McLuhan put it, the content of a new medium is the old medium – and many of the utopias of participation TV are taking place in the new medium, which is the Internet and World Wide Web. When Paik was asked way back in the early days of the Web if video art can be further developed in the future, he answered: “Yes, with the Internet, very much.”³⁵ Artists, curators and critics are still struggling to keep up with this expectation today.³⁶

34 <http://www.endemol.com/what/participation-tv>. See also the promotion video: <http://www.youtube.com/watch?v=haCvSu0C7Lc>.

35 Interview with Nam June Paik in 1995 by Susanne Rennert and Stephan von Wiese, in *Mixed pixels, Students of Paik*, Düsseldorf: Kunstmuseum Düsseldorf, 1996, p.18.

36 For a critical review of contemporary online video art projects, see Dieter Daniels, “Video art – yesterday ... today ... tomorrow?,” in Marius Babias, Kathrin Becker, Sophie Goltz, eds., *Time Pieces. Videokunst 1963 bis heute*, Köln: Walther König, 2012.