

Indeterminate Temporality Embedded in Nam June Paik's Early Experiments from 1959 to 1963

嵌於白南準早期作品實驗中不明確 的時間性：從1959至1963

KIM Hee-young

金嬉英

Professor, Department of Fine Art, College of Arts, Kookmin University, Seoul, Korea
韓國首爾國民大學校藝術大學美術學部教授

Abstract

This paper revisits Nam June Paik's early experiment from 1959 to 1963 in Germany as an archive, which is not fixed in history, but still viable to our understanding of the indeterminacy in contemporary experiences. It intends to evoke a future-oriented model of memory by investigating the historical, aesthetic, and socio-cultural context, in which his early work was formed and structured. His early work addresses his critical questions posed on the conventional boundaries between music, sound, electronics, space, and time. His initial interest in music had developed by embracing electronic music and consequently performance. Employing television as a medium, his first solo exhibition *Exposition of Music-Electronic Television* in Wuppertal manifested his radical experiment in art. This paper contends that Paik's early experiment, which challenged the conventions in art, was an invasive effort to intervene what was centralized and established. It looks into the conceptual and practical paths, in which Paik developed his interests in indeterminate temporality against the backdrop of the historical context of postwar West Germany. His radical experiment made a breakthrough in both the aesthetic and the political rebels.

Keywords: Nam June Paik, indeterminacy, action music, television, *Exposition of Music-Electronic Television*

摘要

本論文以1959年至1963年間白南準於德國創作的實驗作品為歷史資料，雖然這些歷史資料尚未成為歷史，但仍能助於我們理解當代經驗的不確定性，通過檢視他早期作品的歷史、美學、社會文化脈絡，試圖喚起眼望未來的記憶模組。白早期的作品承載了他對於音樂、聲音、電子、時空間存在的傳統邊界之批判性提問，最早，他對於音樂的興趣源於電子樂，其後延伸至相關表現。以電視作為媒材，白在德國烏朋塔（Wuppertal）的第一個個展《音樂展—電子電視》（Exposition of Music-Electronic Television）為他的在藝術中的激進實驗提出了聲明。本文主張白早期挑戰藝術常規的實驗是一種侵入性的努力，以介入被中心化與建制化的一切；以戰後的西德為歷史背景，本文檢視使白得以發展其對於不定的暫時性之興趣的概念與實踐路徑——他激進的實踐，不論對於美學或政治來說，都是巨大的反叛。

關鍵字：白南準、不定、行動音樂、電視、《音樂展—電子電視》

Introduction

The contribution of Nam June Paik (1932-2006) to art history has been mostly acknowledged with his initiation of video art. Especially his first solo exhibition *Exposition of Music-Electronic Television* in 1963 has been canonized as a major contribution to the history of installation, video art. Since Paik stated that “the cathode-ray tube will replace the canvas” (Decker, 71, n.13) and employed electrons as his medium,¹ there have been significant discussions focusing on Paik’s electronic images invented on television screen.² They mainly pay attention to the aspect that he remade the television to create abstract images. Yet, Paik’s legacy would not be confined within his innovative electronic images. As Lutz Koepnick accurately points out, the canonized status of Paik as Fluxus-inspired video artist silences the significance of his work, which is his approach to temporality (2007, 200-2).

By examining his early experiment from 1959 to 1963 in Germany, this paper aims to resurface his emphasis on indeterminate temporality. It revisits Paik’s early experiment as an archive, which is not fixed in the history of art, but still viable to our understanding of the indeterminacy in contemporary experiences. In order to uncover the conceptual and practical paths of his work, Paik’s own writings and words from interviews deserve serious consideration. His statements would serve to reveal multiple inspirational sources for his innovation. This paper intends to evoke a future-oriented model of memory while examining the historical, aesthetic, and socio-cultural context, in which Paik’s early work was formed and structured. It examines Paik’s early experiment as a base for his lifelong challenge to the aesthetic and cultural conventions in his continued quest for new ways to communicate. As invasive efforts to intervene what is centralized and established, his early experiment was grounded in his belief that “art is the oldest form of communication” (Paik 1980, 47). This paper also contends that the indeterminacy embedded in his early work confronts the centralized time imposed in the post-WWII Germany.

1 Nam June Paik stated that “as collage technique replaced oil paint, the cathode-ray tube will replace the canvas” in his flyer for the first presentation of videotapes in New York in 1965.

2 Among others, see Mehring, Blorn, and Stooss and Kellein, 79-82.

I. Back to Paik's Early Years

Although Paik is well-acknowledged to have created new images by replacing the paint with cathode-ray tube, it is worthy of looking back to his early years, during which he developed his interests in such diverse areas as music and electronics. The several years from 1957 to 1963 in West Germany were invaluable for Paik to incubate radical ideas and explore experimental possibilities. The years were also fruitful for Paik since he got inspirations and encouragement from his encounters with avant-garde artists, musicians, and even scientists. By the early 1960s, he was familiar with the concept and practice of atonal music, cybernetics,³ electronics, as well as I-Ching. He continued his creative explorations with different media to open our eyes to the world. His quest for indeterminacy and variability in life motivated his experiments. Trained as a musician and studied art history and philosophy, Paik opposed the separation of genres as he stated that “art history and musicology suffered too long from the separation of the unseparable. Technical division of work [...] Woelfflinesque obsession with style [...] all these toils killed the subject of the study before studying” (1967, 8). Rather, he suggested the vision with “Mix Media,” in which “the study of various arts should merge too into one by the qualified investigator, who, [...] is a specialist in his own field but possesses a thoroughly sound and trained acquaintance with the fields of his neighbours” (1967, 8).

Paik was exposed to twentieth-century Western music at a young age. As the youngest son born to a wealthy merchant family in Korea, he studied piano with Jae-Dok Shin, and composition with Kon-Uh Yi (Stooss 17). Having already composed atonal music, Yi introduced Arnold Schönberg (1874-1951) to Paik in 1947 when he was only fourteen and a half years old (Pickshaus 89-90).⁴ It is not a surprise that Paik developed his interest in innovative music and got a Bachelor's degree in aesthetics with a thesis on Schönberg at the University of Tokyo in 1956.⁵ Inventing the twelve-tone method, Schönberg is considered the father of atonal or “pantonal” compositions, in

3 There was an international conference on the issue of cybernetics relevant to Nam June Paik's work in 2011 in Korea and various discussions were published in *Cyberneticus, NJP Reader 3*. Nam June Paik Art Center, 2012.

4 In his interview taken in 1987, Paik mentioned that even the renowned composer Milton Babbitt got informed of Schönberg in 1948.

5 Paik studied aesthetics, music, and art history. Paik's study of Schönberg is at the Sohm-Archiv in the Staatsgalerie Stuttgart. See Decker-Phillips, 55, n.61.

檔案轉向：東亞藝術史的當代性

which no one tone dominates and any melodic combination of tones can be made without restrictions.⁶ This characteristic of atonal music is radically different from classical music. Yet Paik recalled that then information-starved Korean musicians were open in receiving new western music with little concerns about genealogy (Pickshaus, 90).⁷ To further his study on music and philosophy, Paik went to West Germany in 1956 and enrolled in a course in music history taught by Thrasybulos Georgiades in the University of Munich in 1956-57 (Decker-Phillips 24).⁸ During his doctoral seminars, however, Paik decided to leave Munich to study composition at the Musikhochschule Freiburg with Wolfgang Fortner, who developed twelve-tone composition (Pickshaus 62).⁹ During the two years between 1957 and 1958, Fortner realized that Paik's interests were beyond traditional music including twelve-tone music. Thus, he advised Paik to work in the electronic studio of the West German Radio (WDR) in Cologne. In his recommendation for Paik, Fortner mentioned that Paik was very interested in "noises and problems of sound organization." He also commented that Paik's interest was comparable to that of Pierre Schäffer in Paris and John Cage in America. One of Paik's compositions that he completed in Freiburg consisted of an audio-tape collage based on a ninth-century Korean poem and mixed sound elements such as water noises, baby talks, and fragments of a piece by Tchaikovsky (Tomkins 47).

In the 1950s, the electronic studio WDR became an important center for contemporary music, which attracted young composers including Karlheinz Stockhausen(1928-2007). The studio was technically well equipped to produce synthetic sound by employing sound generators that constructed and recorded on tape the composers' original material. By the time when Paik arrive at WDR, he no longer worked merely in the methods of serial music. He began to explore the use of tape-recorded sounds in his compositions, thereby expanding the possibility of music by embracing disparate sounds. The principle of collage became the basic structure of his compositions

6 <https://www.britannica.com/biography/Arnold-Schoenberg> (Accessed on 7 Aug. 2017).

7 Paik learned German language merely to study Schönberg, while Japanese was the forced language during the Japanese colonial regime. See Pickshaus, 93.

8 Paik's family did not want him to be a musician. Paik tried academic studies to please his family, but he soon realized that it was not his interest.

9 Paik said that he did not enroll in a Conservatory.

and later works including videotapes. The yearly International Summer Courses for New Music in Darmstadt was an important forum for young composers. Paik met Stockhausen there in 1957 and John Cage (1912-1992) in the following year (Decker-Phillips 25). His encounter with Stockhausen and Cage made an indelible influence on his pursuit of new approach to music, sound, and time.

After WWII, magnetic recording was significantly improved, whose method of preserving sounds in the form of electrical signals radically altered early program structures and their claim for present-ness and immediacy. The recording system enabled the editing sounds not only to improve the quality but also to integrate different sounds. In the mid-1950s, Stockhausen pioneered in electronic composition, while developing his interests in correlative properties of sound (Stockhausen and Barkin). For instance, *Gesang de Jünglinge* (song of the youths) produced in 1955 exemplifies his radical and innovative approach to music. Stockhausen modified the recording of a twelve-year-old boy's voice into an electronic choir (Stockhausen and Kohl 74-77). He prepared a dozen tape-loops with melodies from sine-waves and let the boy hear the sine-tone melody over headphones and sing it back, again and again. After everything the boy sang was recorded on a tape recorder, Stockhausen chose the best versions and copied them with multiple tape recorders, superimposing them into complex choral singing, in which the boy sang together with himself. On 30 May 1956, the tape was played back in four channels placed around the audience at a concert titled *Unerhörte Musik* (literally unheard-of, incredible music) in the large auditorium of WDR. There were no musicians on the stage. Only “dehumanized music” issued from loudspeakers and a spherical construction with twelve loud speakers on the ceiling. Stockhausen utilized recording technique as an integral component of the composition to produce a new musical quality. Paik is said to have been impressed “the sober austerity and aggressive complexity” of Stockhausen's early pieces (Zielinski 141). Stockhausen's electronic music composition compelled Paik to pioneer in “electronic television” (Truman 38).¹⁰ Paik began to study electronics in 1961, which he enjoyed very much (Paik, 1964). He thought that he would master electronics, if necessary (Pickshaus 109). Between 1958 and 1963, Paik worked at the electronic studio WDR,

10 Paik preferred to use the term electronic television to video art. He said that electronic television made references to modern electronic music and so on.

檔案轉向：東亞藝術史的當代性

where Stockhausen was working. Paik's work with audio electronics was conducive to his work with visual electronics. Then he began experimentation with manipulated television sets, which subsequently became part of his *Exposition of Music: Electronic Television* in 1963.

Paik had already heard of John Cage, Schönberg's former student, in Japan through the music critic Kunihara Akiyama and his teacher Yoshio Nomura (Decker-Phillips 55, n.64).¹¹ Yet his meeting with Cage and attending his concert in Darmstadt in September 1958 made a crucial influence on his understanding of music and composition. Cage delivered three lectures at Darmstadt with the theme of "Composition as Process," each of which was entitled 'changes,' 'indeterminacy,' and 'communication' (18-57).¹² As early as in 1937, he manifested his new idea of music as "organization of sound" (3).¹³ He also regarded the composer as organizer of sound, who would be faced with the entire field of sound and of time. It is also noteworthy that his view on the future of music includes the potential of electrical instruments for a substantial change (3-6). Since 1947 he had been studying Zen Buddhism and was struck by the idea that all things are of equal value, which eliminates a hierarchical order. While giving sounds and noises equal value, he opposed the idea that silence is the lack of sound (Decker-Phillips 26). As to his piece 4'33" first performed in 1952, Cage called it "an affirmation of life," stating that "life goes on very well without me and that will explain to you my silence piece 4'33" " (qtd. in Decker-Phillips 26).¹⁴

Cage's anarchic ideas that attack the traditional music and his interest in chance and indeterminacy also became very significant to Paik. While studying German music theory and exploring electronic music, Paik came to realize that there was no fundamental answer to the question "what is music?" except that music is merely a sequence of events in time. His critical approach to music and interest in electronics were conducive to his

11 Paik said that he first heard of Cage through Akiyama.

12 The third lecture on "communication," with some revisions, was delivered earlier in 1958 at Rutgers University in New Jersey. Its excerpt was published in the *Village Voice*, New York City, in April 1958.

13 The text was delivered as a talk at a Seattle arts society in 1937 and reprinted in the brochure accompanying George Avakian's recording of Cage's 25-year retrospective concert at Town Hall, New York in 1958.

14 John Cage's letter directed against the music critic of the New York Herald Tribune, Paul Henry Lang, it was dated May 22, 1956.

philosophical reflections on the ontology of music (1963).

II. Paik's Action Music from 1959 to 1962

While taking Cage's view on music and Stockhausen's experiments with electronic music, Paik went beyond the traditional notion of composition. Added to his innovative composition, he brought aggressive and unpredictable actions in his performance of the pieces. This mode of work was to be called 'action music,' which subverts traditional music and performance practices. Wolf Vostell commented that Paik was the first person who started action music in Europe with his idea that music can be made with body and objects. Vostell considered Paik's action music as "opposition" (Pickshaus 39-40). As to the significance of action music as an outlet for a change, Vostell said that Stockhausen was seeking a change considering to include action components when he was working on the commissioned piece *Originale*. Paik was to contribute to *Originale* with his performance *Zen for Head* on October 26, 1961.¹⁵

On May 2, 1959, Paik wrote a letter to Wolfgang Steinecke, head of the Summer Courses of New Music in Darmstadt, describing his work in progress entitled "Antithesis of the Twelve-Tone Mannerism" for the 1959 Summer Course (Decker-Phillips 28). Paik also described it as "antimusic, called Hommage à John Cage" (qtd. in Belting 394-95). While announcing 'anti-music' for this piece dedicated to Cage, Paik alluded to Dada spirit. He wanted to "complement Dada with music," rather than making music (qtd. in Nyman 82). In the piece, there would be three movements. For the first movement, a tape collage would be employed. For the second movement, there would be a prepared piano, which was to look "quite unlike Cage." And it had to be "as boring as possible." In the third movement described as "a musical philosophy rather than a philosophical music," quotations from French writers would be used, yet to be turned into stage performance (qtd. in Belting 395).

Entitled *Hommage à John Cage: Music for Tape Recorder and Piano*, this piece was

15 Paik performed *Zen for Head* again on August 9, 1962 at the Fluxus International Festspiele Neuster Musik held at Städtliches Museum Wiesbaden. *Special Exhibition for Nam June Paik Art Center Prize*, 47.

檔案轉向：東亞藝術史的當代性

composed of an audio tape collage combined with two prepared pianos. It was performed at Jean-Pierre Wilhelm's Galerie 22 in Düsseldorf on November 13, 1959. In the audience were Joseph Beuys and Mary Bauermeister, abstract painter and Stockhausen's wife. It marked a new phase of Paik's musical work (Nyman 79).¹⁶ While initiating a phase of action music, it also anticipates his later work that would defy conventional boundaries of genres by embracing electronic music, sound, noise, and performance into his work.

Assessing the working formula of the five-minute performance of the 'music' for tape recorders and piano, Ernst Thomas refers to "collage and montage" (qtd. in Drechsler 44).¹⁷ The performance was backed with a type of a tape collage, made out of a mixed bag of classical and non-musical sound sources, which was then pioneered by Paik. It was consisted of Beethoven's Fifth Symphony, a German song, a new announcement, a lottery announcement given over the phone, a recording of toy car, a prepared piano, and so on. Paik spent eighty percent of his time on the tape and sound components of the performance, which aimed to deconstruct the traditional understanding of music (qtd. in Nyman 82). Beyond the overt actions involving screaming, toys, tin boxes full of stones, eggs, smashed glass, a live hen and a motorcycle, there were serious philosophical and musical purposes. Jean-Pierre Wilhelm explains Paik's new approach to music as follows:

"Our universe, the very place of our existence, becomes music, sound and tone through and through. Paik liberates us from atonality—from any systematics. What he is giving us is pure sound. We come to realize that the rattling of a few cans on asphalt pavement is worth more than Beethoven's Ninth Symphony" (qtd. in Ronte 74).

While exploring an audiovisual and intermedial synthesis, Paik's performance ideal was "variability as a necessary consequence of intensity" (qtd. in Nyman 80). Paik also stated that "the elevated and the ugly are inseparable—therefore every listener has to

16 Nyman considers Paik as composer even while he was a video artist. He divides Paik's musical work into three phases: the first one with his conventionally notated works began in 1947 and developed up to the non-serial *String Quartet* of 1955-57; the second phase began in 1959 with *Hommage à John Cage: Music for Tape Recorder and Piano*; the third in 1964 with his long collaboration with the cellist Charlotte Moorman.

17 Ernst Thomas also provides a detailed firsthand report of the event.

behave as though he had just heard the *St. Matthew Passion* for the first time” (qtd. in Nyman 82).

As part of the performance, Paik pushed a piano over on its back. He considered the piano as a taboo object to be destroyed, mistreated or abused. Thus, he demonstrated destruction and directed aggression against musical instruments. His effort to “change the superficial forms of the piano” could be assessed as both destruction and construction (qtd. in Nyman 83). His destructive performance was not intended to amuse the audience, but to eliminate traditional music and performance practices. It turned out, however, that people paid attention to several ‘actions.’ Paik expected that his crafted tape collage would have more impact than his actions.

While paying homage to Cage, Paik substantially extended the experiment initiated by him. It is noteworthy that Paik had already indicated his theoretical and artistic interest in television in a letter to Cage written in 1959. It says as follows:

“My new composition is now 1 minutes. (For Prof. Fortner) [...] I use here: Colour projector. Film 2-3 screens. Strip tease. boxer. hen (alive). 6 years girl. light-piano. motorcycle and of course sounds. one TV. // “whole art” in the meaning of Mr. R. Wagner” (Rosebush 2).

As Hans Belting points out, in finding “an entirely new style” in music, this ‘music for tape recorder and piano’ dedicated to Cage might have not been successful for Paik. He would rather have found it later by employing television (395). Paik’s following remark made around 1960 seems to support Belting’s assessment: “As a musician I wouldn’t be as good as Stockhausen or Cage. Now I will change my field. Now I will do Video art. Here I can become the best of all. Artists are not very intelligent” (Pickshaus 36).¹⁸

Following up the piece dedicated to Cage, Paik made an aggressive interaction with Cage in his performance of the *Étude for Pianoforte*, which took place on 6 October

18 Paik later said that he wasn’t a very good composer and he did not want to be a second-rate Stockhausen. Truman, 38.

檔案轉向：東亞藝術史的當代性

1960 in the studio of Mary Bauermeister in Cologne. It began with Paik's playing of some Chopin on the piano, which soon followed by his destructive acts of hammering or sawing up the piano, breaking glass panes, towing up a motorbike to the fifth floor, and starting and leaving it there with its engine revving. Picking up a long pair of scissors, Paik leaped down to where Cage, David Tudor, and Stockhausen were sitting in the front row. After cutting off Cage's necktie at the knot, he poured a bottle of shampoo over Cage's head and also over Tudor's. When the bottle was empty and both Cage and Tudor were fully lathered, he went out of the crowded room, leaving the audience asphyxiated by the motorbike. After a while, he called from a telephone to say that the concert was over. This radical acts, almost like a sinister slapstick, shocked people, who felt as if they were circumcised (Pickshaus 36-37).¹⁹

This rebellious acts performed in his action music were not only an attack to the conventions in music, but also political and cultural comments. It is noteworthy that Paik often commented on the importance of press in those days. He was well aware of the power of press and telecommunication. While conversing with Bauermeister on sociopolitical ideas, Paik said that if he became well-known, he would become a politician to change something (Pickshaus 37). He thought that the artist's role was to challenge accepted social norms and to destroy conventional social and musical values. Paik's vision for change went beyond the area of music, which was to be manifest in his solo exhibition in Wuppertal in 1963.

Paik performed another piece of action music entitled *Symphony for 20 Rooms* in the spring of 1961 in Cologne. He was critical about most indeterminate music, in which the composer was given the freedom to interpret, whereas the audience had "a quite old freedom" to hear or not to hear the music (1962). The following statement explains Paik's new approach to music:

"[I was tired of] renewing the form of music — serial or aleatoric, graphic or five

19 Mary Bauermeister was sitting behind John Cage and observed that Cage's shirt was sweaty. She appreciated Cage's faith in Paik since he allowed Paik to do whatever he wanted, instead of being scared and walking away from the scene. For the description of the event, see also Tomkins, 50-51 and Truman, 37. Tomkins compared Paik's radical performance with "happenings" done by contemporary New York artists.

lines, instrumental or belcanto, screaming or action, tape or live... — I must review the ontological form of music. In the normal concert, the sounds move, the audience sit down. In my so-called action music, the sounds, etc., move, the audience is attacked by me. In the “Symphony for 20 rooms”, the sounds, etc., move, the audience moves also [...]” (1963).

The structure of the *Symphony for 20 Rooms* was meant to realize the concept of action music, which would compel the audience's participation. In each room, various types of sounds could be heard from machines, or be made by direct audience participation, by utilizing vast ranges of means. Its published score shows that each of the sixteen rooms has its own music/visual/dynamic lighting and occasionally heat/smell character. The sketch for the piece shows that Paik had established his way to handle time and space, as he described its conceptual structure as follows:

“In 1961, I have written a sketch to the “Symphony for 20 rooms”, where the audience has a choice of at least 20 different sound sources, between which they can freely circulate. The free time leads the music necessarily to the space-music (room music) because the free time requires more than two vectors (directions) and two vectors constitute necessarily the space (room). In this case, the room (space) is no longer merely the enrichment of the sound, but the indispensable “better-half” of the sound” (1963).

Cage had stressed the relations between space and time along with indeterminacy, while embracing improvisational elements in his music. Paik took a step further by taking on disparate components, which radically blurred conventional boundaries. As Michael Nyman assesses, it was “a genuine symphony in its all-inclusiveness and formal/spatial organization,” that is, a symphony in the etymological sense of “many things sounding together” (87).

Around this time, Paik played a crucial role in initiating Fluxus Festivals in Germany in June 1962 by helping George Maciunas (1931-1978). Although it might be a detour, it would be useful to see how Paik supported Maciunas in launching Fluxus. It would explain Paik's vision with new art.

檔案轉向：東亞藝術史的當代性

Having studied art history and architecture, Maciunas developed a particular interest in nomadism and global art, which was conducive to his openness to different cultures.²⁰ He became fascinated by the work of La Monte Young, whom he met in December 1960. Inspired by Young, Maciunas had developed the underlying aesthetics and broad social network of Fluxus. Young attended the International Summer Courses for New Music in Darmstadt in 1959 and first came across Cage's aleatoric methods (Kellein 44).²¹ As early as March 1961 the word "Fluxus" first came up in the AG Gallery in New York when an invitation card to concerts and exhibitions was printed (Kellein 44).²² It indicated that the ticket sales in the Gallery were to be used to publish a journal entitled *Fluxus*. Fluxus was "a cultural concept *avant la lettre*, intended to embrace all artistic genres, old and new music, even revolutions" (Kellein 44).²³ After closing the AG Gallery in July 1961, Maciunas was planning Fluxus Festival, besides Fluxus journal publication. Taking the bread-and-butter job at the US Army and Air Force Exchange Service at Wiesbaden, Maciunas left New York in November 1961. As the main contact in realizing his plans for Fluxus, he had La Monte Young in New York, and Paik in Germany (Kellein 57).²⁴ While assisting Maciunas, Paik suggested many ideas for Fluxus and informed Maciunas with the current state of music in West Germany. Paik also advised him to get to know the "kinetic painting of Göts," "Electronic television-Oyvind Fahlstrom (Sweden)," "Music Machine-Knut Wiggen," "Tinguely," "N.J.P [Nam June Paik] by Mary Bauermeister," "Painting with printing press-Ossirograph-Kirchgässer," "Painting with shooting gun-Niki de Saint Phalle" and "Sonorealization of city-Fehn (Park of Sound)." Paik also suggested that the great thinkers such as Martin Heidegger, Jean-Paul Sartre, Ernst Bloch should be involved in Fluxus and that musical theorist Wolfgang Steineck in Darmstadt, Daisetz T. Suzuki in New York, and Theodor W. Adorno in Frankfurt should be teaching for Fluxus. Added to his advice, Paik brought Maciunas "a record from Paris with electronic and concrete

20 See Kellein, especially 17-33, for the biographical information of Maciunas' early years.

21 Coming back to San Francisco where he was studying then, Young passed Cage's methods to his colleagues. Cage's work had already introduced in New York since he was teaching at the New School for Social Research in New York in the late 1950s and his lectures and writings were compiled and published as a book entitled *Silence* in 1961. In late 1960, Young and some of the musicians and artists arrived in New York.

22 It is not known to what the abbreviation "AG" might refer. It could stand for Almus (Salcius) and George. Salcius was Maciunas' friend from whom the gallery space was taken over.

23 After Maciunas first met Yoko Ono in December 1960, he began to make his notes on index cards about his encounters with artists, plans, and information.

24 In an interview with Michael Oren on 18 March 1978, a few weeks before his death, Maciunas recalled that in Europe he met Paik first.

music by Stockhausen, Koenig, Eimert, Kagel, Ligeti, Berio, Maderna, Evangelisti, Pousseur, and others” (Kellein 57-58). Maciunas got substantial support from Paik who shared his idea of a revolution.

Paik's suggestions and encouragement for Maciunas indicates his vision for the revolution of 'anti-art.' Paik continued to evolve his interest in simultaneity and telecommunication. He proposed an idea for an unprecedented form of concert in 1961/1962.

“In San Francisco one pianist plays the left hand part of Johanna Sebastian Bach's Prelude and Fugue in C Major from the 'Well Tempered Clavier.' Another plays the right hand part simultaneously in Shanghai. At midday, 12:00 Greenwich mean time, both parts are then broadcast on the radio exactly in time using a metronome set at 80 beats per minute. Telecommunications would enable the two separate performances on different sides of the Pacific Ocean to be put together in a techno-imaginary way” (Zielinski 156).

As Edith Decker points out, “[t]his idea came a little too early to be carried out, but shows how advanced and well-informed Paik's thinking was, as the first television transmission by satellite between America and Europe by Telstar 2 was in July 1962” (qtd. in Drechsler 47). Paik's early experiments not only challenged the established conventions in music, but also expanded the way in which we perceive time and space.

III. *Exposition of Music-Electronic Television*

Paik's early experiments with action music and his interests in electronics came to culminate in his first solo exhibition in Wuppertal. It went largely unnoticed at the time, yet it later gained recognition as a radical break from the aesthetic convention and became a milestone of video art. Along with his innovation in art by embracing television as a medium, Paik's interest in indeterminacy was realized in the exhibition. The rebellious exhibition also addresses his socio-cultural comments on the experience of time, which had publically been controlled in post WWII West Germany. It would be better to look at

what was shown at the exhibition and then move on to discuss its social implication.

From March 11 to 20, 1963 Paik presented the *Exposition of Music-Electronic Television* in the industrial city of Wuppertal. This exhibition took over the entire Wilhelminian mansion, where the architect Rolf Jährling lived and ran the Galerie Parnass. Between January 1949 and September 1965, Jährling's Galerie Parnass hosted various exhibitions, which dedicated to challenging the hegemony of abstract modernism in postwar West German culture. Held two years before its closing, Paik's show stood in the same vein of its effort to explore unconventional "aesthetic attitudes, political positions, and cultural alternatives" (Koepnick 2007, 202).

The title *Exposition of Music-Electronic Television* indicates a visualization of music by means of electronic technology. One part of the exhibition "Exposition of Music" manifested the logical step, with which Paik challenged the traditional understanding of music and raised a fundamental question on the ontology of music. This part included four prepared pianos, "*Schallplatten-schaschlik* (phonograph-records-kebabs), *Random Access*, and many *Objets Sonores* (sound objects) (Decker-Phillips 33).

The first hall presented four prepared pianos, whose cases and keyboards were packed with toys and objects. One piano was laid down to expose the keys and strings; part of it was hammered, and viewers were allowed to tread on it. Another one, covered with electric cables and wires, was transformed with all sorts of everyday objects suspended, stuck and nailed on to it. *Klavier Intégral* (1958-1963) was devised so that the piano could be 'played' in a completely different way (Fig. 1). The transformation would give the visitor an unpredictable experience that would affect all the senses. In part, the piano keys had functions like switches for lamps, sirens, ventilators, radios and film projectors. Developed from Cage's prepared piano, which was modified to broaden its function and to redefine its sound potential, Paik's altered pianos pushed further to consider the piano merely an object. For his music is "not necessarily played on the keys alone" (Schilling, qtd. in Ronte 74).

To provide the audience with freedom to play, Paik did not perform music, but



Fig. 1 Nam June Paik's *Klavier Intégral*, manipulated piano with various items installed at *Exposition of Music – Electronic Television* (1963). Photo by Manfred Montwé © montwéART. Image courtesy of Nam June Paik Art Center.

“exposed the music.” He wanted to let the audience act and play by itself. Therefore, “the sounds, etc., move, the audience moves also” (1963). According to Tomas Schmit, Paik’s collaborator at that time, it was “more like a performance, a potential performance,” because gallery visitors were encouraged to participate (qtd. in Drechsler 44). On its opening, there was an extreme example of participation. Paik had a piano delivered to the gallery and place it on the floor to play it with feet. Beuys came to the show with an axe and smashed that piano with great force, which scared most people at the show. It was not planned but Beuys did it on his own. Paik did not see him destroying the piano since he was engaged in adjusting television sets in the next room (Pickshaus 97-98). Paik characterized this event as a situation wherein “the sounds sit, the audience plays or attacks them” (1963). He explored “the question of moving sounds around, or allowing the audience to move around sounds, or allowing them to produce sounds with specially designed installations” (Nyman 87).

檔案轉向：東亞藝術史的當代性



Fig. 2 Visitor at *Record Schaschlik* at *Exposition of Music – Electronic Television* (1963). Photo by Manfred Montwé © montwéART. Image courtesy of Nam June Paik Art Center.

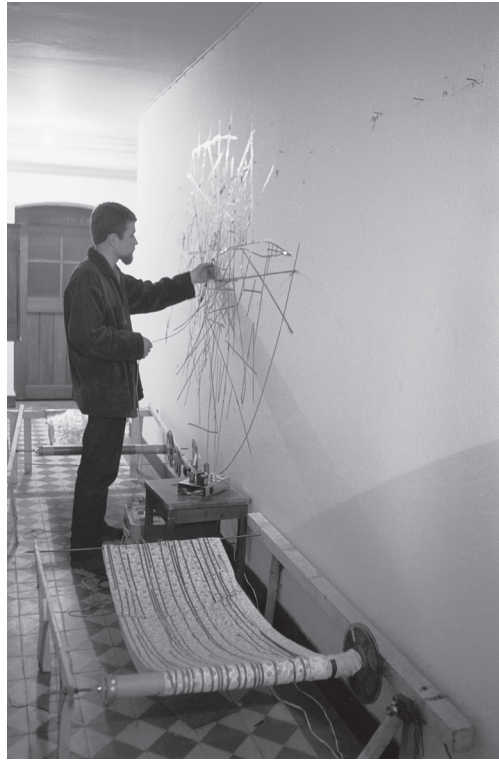


Fig. 3 Peter Brötzmann demonstrates *Random Access*, Strips of audiotape at *Exposition of Music – Electronic Television* (1963). Photo by Manfred Montwé © montwéART. Image courtesy of Nam June Paik Art Center.

The basement displayed various sonic devises; Paik’s famous record players (*Schallplatten-schaschlik*, “phonograph-records-kebabs”), which were a stack of turntable records to be played by the visitor with an unfastened pick-up arm (Fig. 2); *Random Access*, an assembly of audiotape strips glued to the wall, with which the audience could make sounds at randomly chosen spots with a movable magnetic playback head (Fig. 3). While drawing on the term “random access” from computer terminology, Paik suggested a procedure which made it possible to have the same access to all the information on one magnetic tape of a computer.

Upstairs, there was a disjointed dummy partly submerged in a bathtub, a Zen Box, and an assemblage of photos and press reports documenting the death of Marilyn Monroe, entitled *Memory to the 20th Century*. With its title, Paik made it clear that Monroe was just

a tool to show that the twentieth century was all about media, and to show how the media was capable of changing reality. Wulf Herzogenrath assesses this piece as Paik's first work that deals with the theme of media's power. He esteems it anticipating Paik's turn to the field of media (2012, 101).²⁵ Paik had been well aware of the power of press and media. In the garden, an installation of diverse objects hanging from a shrub and producing arbitrary sounds entitled *Zen for Wind* and a parachute spread out on the lawn with an a sewing machine on top.

Another part of the exhibition "*Electronic Television*" is now considered as a milestone in the history of television and video art. Thirteen black and white television sets,²⁶ purchased second-hand early in 1963, were displayed in the garden room, next to the first hall with prepared pianos (Fig.4). Its setting indicated their relatively isolated position considering the diverse aspects of the exhibition. Two of the televisions were damaged during the transport to Wuppertal, but Paik included them in the arrangement. He put one of them on the floor with its screen facing downward, thus its brand name "Rembrandt Automatic" was visible on its back casting. On the other one, the picture was reduced to a horizontal line due to a defect in the cathode-ray tube. He turned it 180 degrees, which would become known as *Zen for TV*.

The seven television sets radically manipulated regular broadcast images through pre-set electronic and magnetic interventions. The other four sets invited the visitor to participate in producing interactive images by using radios, tape recorders, foot pedals, and microphones. Included was *One Point TV*, to which a radio set was connected to generate pulse. If one turned the volume on the radio up or down, the one shining point of light in the center of the screen became bigger or smaller. An audio tape recorder was attached to *Kuba TV*, which made the picture bigger or smaller depending on the tape's amplitude (Fig. 5). Foot-operated switch was connected to a microphone whose impulses

25 Upon the death of Marilyn Monroe on the 4th of August 1962, Paik collected all the newspapers and magazines he could get with Marilyn in the title. There were about 50 different Italian, French, English, German magazines. In 1962, Paik couldn't get them in Dusseldorf.

26 There are different descriptions about the number of television sets shown at the exhibition. Although Paik clearly stated thirteen televisions, Decker-Phillips, Zielinski, Daniels mentions that there were twelve televisions. Decker-Phillips, 58, n.117; Zielinski, 144; Daniels, 144. Yet, Mehring and Koepnick mentions eleven television sets in the garden room. Mehring, 46; Koepnick, 2007, 204.

檔案轉向：東亞藝術史的當代性



Fig. 4 Thomas Schmit in the television room at *Exposition of Music – Electronic Television* (1963). Photo by Manfred Montwé © montwéART. Image courtesy of Nam June Paik Art Center.



Fig. 5 Nam June Paik's *Kuba TV* at *Exposition of Music – Electronic Television* (1963). Photo by Manfred Montwé © montwéART. Image courtesy of Nam June Paik Art Center.

were conducted through a sound amplifier and created fireworks of points of light on the screen. In his experiments with distortions of television, Paik explored the technical possibilities of the medium to nullify its one-directional character, thereby creating more possibilities of intervention. Paik tried to relate televisions to his idea of audience-participation.

However, these manipulated televisions went unnoticed or misunderstood. What had received so much attention was a cow's head, fresh from the butcher, hung above the entrance door.²⁷ There were harsh criticism about show, disapproving it as "Neo-Dada Kindergarten," "hullabaloo," or a "fun fair." While having noticed the televisions in passing, critic Siegfried Bonk commented that the cow's head represented "an ongoing act of sacrifice, in which the "art shaman" Paik sacrificed "on a self-made altar of visual-acoustic totality the normal conception of art as divided into different branches" (qtd. in Decker-Phillips 39). However, what Paik meant by the cow's head was to "get the audience in an oneness of consciousness so they could perceive more" (qtd. in Decker-Phillips 40). Lamenting the lack of understanding, Paik said that "[I]n Gallery Parnass, one bull's head made more sensation than 13 TV sets. Maybe one needs 10 years to be able to perceive delicate difference of 13 different "distortions"(?), as it was so in perceiving the delicate difference of many kinds of "noises"(?) in the field of electronic music" (1964). Against a backdrop of dominantly negative receptions, Paik's experiment left a legacy of new art with electronic television. The exhibition embodied Paik's new approach to music, time, and communication.

IV. Socio-cultural Implications of Indeterminate Temporality

Along with various aspects of the *Exposition of Music-Electronic Television* challenging the conventions in art, the temporality of aesthetic experience deserves a further discussion. What was innovative in Paik's way to deal with time is the rhythms,

27 The head of a freshly butchered cow results in the Galerie Parnass being reported to the police for infringement of the Cadavers Act. A misunderstanding or reprimand is still indicated in Zielinski's harsh comments on the bloody ox's head as a successful spectacle, which "turns out to be highly effective PR stunt" to draw the attention to the 12 manipulated televisions as the beginning of media art practice. Zielinski, 144.

檔案轉向：東亞藝術史的當代性

beats, and pulses of the visual, the shifting tempos of moving images, and the productive tensions between a work's duration and the audience's engagement with unpredictable stretches of time (Koepnick 2013, 111). By inviting the spectator/audience to experience the new sense of time, Paik's work was to be conducive to defy the centralized time imposed by the postwar West German TV broadcast system.

To uncover a social meaning of indeterminacy imbued in Paik's work, it is also important to look into the immediate historical context, in which he worked with television. During the 1950s and early 1960s postwar Germany, television watching began to open unprecedented windows onto the world and bring new entertainment into people's living rooms. *Exposition of Music-Electronic Television* was held nine years after nationwide television broadcasting started in West Germany on November 1, 1954, four years after the use of magnetic recording, and a few weeks before the introduction of West Germany's second nationwide broadcast channel, ZDF, on April 1, 1963. Thus, Paik's television sets were tuned to the same program broadcast by a single television station, named ARD, which broadcast a black-and-white program during evening hours (Koepnick 2007, 201-2).²⁸ As Dieter Daniels describes, this exhibition was "the first exhibition of a television broadcast in the literal sense" (26).²⁹ Taking live programs as the base material for electromagnetic image distortion, Paik manipulated the circuitry and worked directly on the electronic image signal. Thus, the broadcasting hours of ARD resulted in restricted opening hours of the exhibition between 7:30 and 9:30 pm only.

Upon the start of West Germany's first statewide channel ARD in 1954, television had spread rapidly and 35 percent of households in West Germany had a television set by 1963. Despite its status of a mass-cultural medium, West German television in the early 1960s emphasized its own political and moral responsibilities (Koepnick 2007, 207). Around 1936 Nazi engineers and politicians actively sought to develop the technology of television. Instead of promoting political propaganda, televisual experiments were

28 ARD is an abbreviation of Arbeitsgemeinschaft der öffentlichrechtlichen Rundfunkanstalten Deutschlands. It is noteworthy to consider the different experience of viewers in the postwar U.S. Americans, who had already "consumed roughly 5 hours of television per day and, depending on where they lived, had a choice of more than ten public and commercial broadcasters around the clock, increasingly in color after 1957." See also Daniels, 16.

29 Daniels points out that contemporaries such as Isidore Isou and Karl Gerstner still limited their effort to the outside of the set.

designed mostly to prove the technological competence and modernity of Nazi society. In 1937, television was called as “electric eye,” allowing the viewer to stand “silently and inconspicuously right behind Hitler when reviewing his troops and party members in Nuremberg” (qtd. in Koepnick 2007, 213).³⁰ During its formative development between 1952 and 1963, the task of how the Nazis sought to seize control over the electric eye of television was to direct the medium’s future. Although Konrad Adenauer (1949-1963), founding Chancellor of West Germany, sought to secure institutional and political centralization in his endeavor to reconstruct West Germany, lessons of the Nazi past brought uneasiness about the potential that television could play into the hands of powerful political or economic agendas. Against so-called “Adenauer television,” the West German Supreme Court made a final decision on February 28, 1961 to start a second television channel to represent diverse voices in postwar German society. A second West German television channel ZDF was installed a week after the closing of *Exposition of Music-Electronic Television* (Koepnick 2007, 212-14).

With his manipulated televisions, Paik wanted to provide electronic interfaces different from those set by West German program directors and broadcast advisory boards as the hegemonic form of television. Paik’s aim was to explore the open possibilities inherent in television, operated by the mechanism of cathode-ray tube, in which the paths of the electronics are not determined and open for unexpected results (Yi).³¹ Paik characterized that “a television image could not be controlled or fixed by the artist in any traditional sense. It was therefore “indeterministically determined” (qtd. in Stooss and Kellein 31). Paik perceived electronic television as:

“not a mere application and extension of electronic music into the field of optics. [...] but it is much more that they represent a contrast with electronic music (at least in its first stage), showing a fixed, determined tendency in both its serial compositional method and also in its ontological form (for the repetition of destined recordings on tape)” (Stooss and Kellein 47).

30 *Nationalsozialistische Rndfunkkorrespondenz*, August 11, 1937.

31 See Jung, esp. 195-97 for the significance of communication aspect in Paik’s video art.

檔案轉向：東亞藝術史的當代性

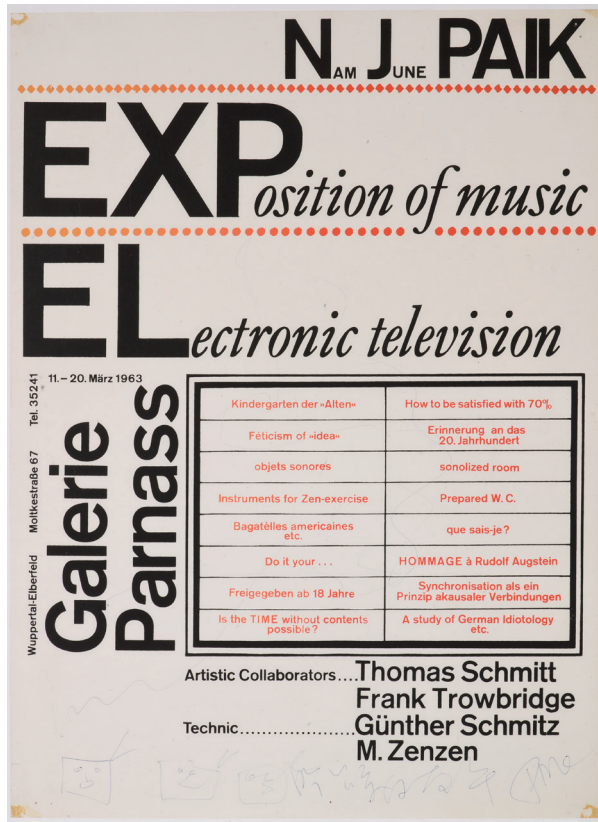


Fig. 6 Nam June Paik, *Exposition of Music – Electronic Television*: exhibition poster (1963). Erik Andersch Collection. Nam June Paik Art Center Archives. ©Nam June Paik Estate.

Rather, he deemed his experimental TV “the first ART (?), in which the “perfect crime” is possible,” adding that “I had put just a diode into opposite direction, and got a “waving” negative Television” (1964). He consequently demonstrated a rebel “on post-fascist television screens” (Koepnick 2007, 214).

The design of the *Exposition of Music-Electronic Television* provides another indication of Paik’s resistance to traditions. Paik implied his intention to eliminate conventions by stressing first couple of letters of the two parts of the exhibition, that is, EXP-EL (Fig. 6). The announcement of the exhibition also draws out attention particularly to the newspaper, on which it was printed (Fig. 7). It is noteworthy that Paik used a certain Korean newspaper called *Kyung-hyang-shin-moon*, which suffered a forced suspension of publication for a year due to its democratic stance. Paik’s announcements for the exhibition in 1963 were printed on the newspaper from April 27, 1960 when it was resumed to May 28 1961. It was a volatile period with serious protests against the

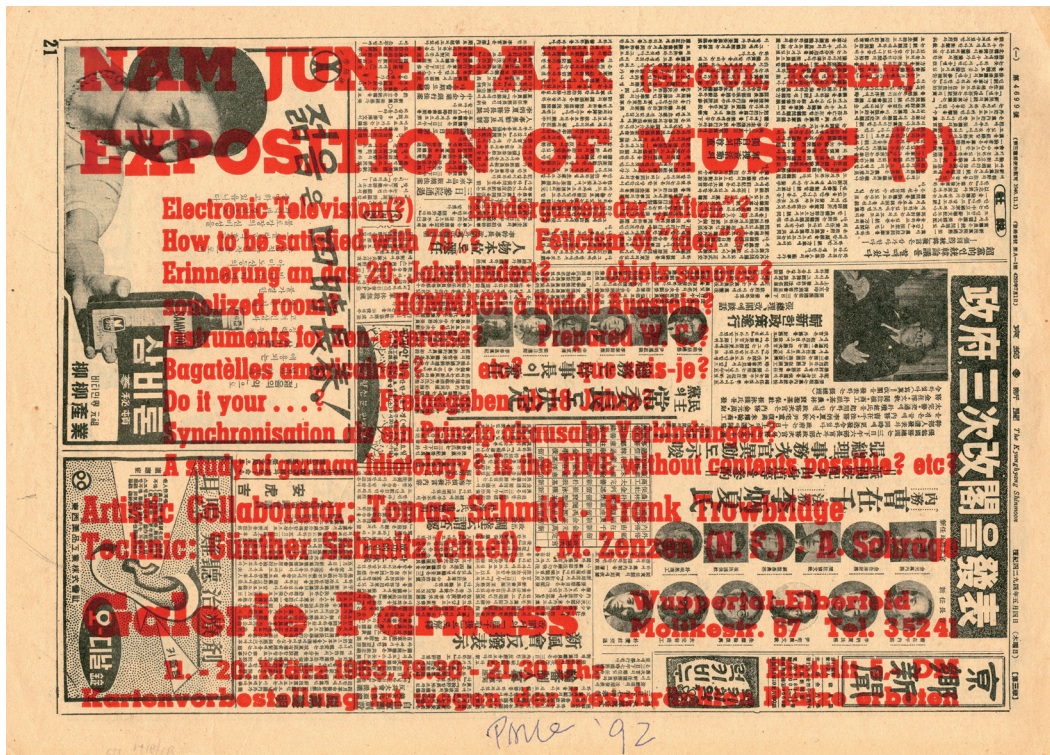


Fig. 7 Nam June Paik, *Exposition of Music – Electronic Television*: exhibition poster reinterpretation (1963). Erik Andersch Collection. Nam June Paik Art Center Archives. ©Nam June Paik Estate.

oppressive political situation in Korea (Shin 89-91). During the Cold War and dictator's control in Korea, freedom of speech was severely suppressed. The announcements of the subversive exhibition were printed against the backdrop, which reported people's resistance to the suppressive political situation.

Conclusion

Paik's basic interest lies in the "indeterminism and variability," which was "the very underdeveloped parameter in the optical art, although this has been the central problem in music for the last 10 years" (1964). While encompassing great thinkers in diverse disciplines, he defined indeterminism as:

"[A] core in the thought of the twentieth century from Heisenberg via Sartre to Cage, reflected also in Wiener and McLuhan. For Wiener, indeterminism was

檔案轉向：東亞藝術史的當代性

entropy, a classical terminology of statistics, and for McLuhan indeterminism was the ‘cool media with low definition’” (1967, 8).

In realizing the issue of indeterminism of life, time and variability would be the most essential elements. Paik wrote that “video art imitates nature, not in its appearance or mass, but in its intimate “time-structure” ... which is the process of AGING (a certain kind of irreversibility)” (1976, 98).³² He characterized his experimental TV as close to ‘nature,’ which is beautiful due to the simple fact that it changes (1964). Thus, he had no qualms about changing his works, using parts for new works, and adapting ideas. Even in the presentation of old works, he has not “clung slavishly or even retrospectively to old forms, or even bothered about the ‘authenticity’ of the first appearance, but about the best possible execution at a particular time” (Herzogenrath 1983, 19).

To realize his visions in a novel way, Paik secretly studied physics and mathematics (Pickshaus 109). He anticipated that the transition to electronics was inevitable. From 1961 Paik built on personal archive, which includes a newspaper article on the 60th birthday of physicist Werner Heisenberg, reprinting his research on the innermost features of matter. He was informed about the unified field theory of elementary particles, about the field operators, independent of time and space. He subsequently familiarized himself with electronic device signal manipulation (Stooss and Kellein 30-31). In the essay written immediately after the *Exposition of Music-Electronic Television*, he wrote about his work process alluding to the concept of cybernetics:

“Usually I don’t, or cannot have any pre-imaged VISION before working. First I seek the “WAY”, of which I cannot for-see where it leads to. The “WAY” ... that means, to study the circuit, to try various “FEED BACKS”, to cut some places and feed the different waves there, to change the phase of waves etc [...]” (1964).³³

Paik subsequently predicted the replacement of heavy industry by the electronics industry, which would parallel to the gradual freeing of the idea, the pure thought, from

32 Emphasis original.

33 Emphasis original.

the material.

A wide range of Paik's early experiments were based on his fundamental reflection on the indeterminacy of life and human communication. Defying any fixed forms or predetermined ideas, *Exposition of Music-Electronic Television*, in particular, called attention to the contingent relationship between media and their users, the aesthetic and the political. Against the social and cultural backdrop of 1963, Paik explored various possibilities to resist the established system and at the same time seek harmony with diversity by allowing individual engagements in the event. Paik's revolution of art by expanding conventional borders aimed to go beyond the new aesthetic experiences. Paik's emphasis on indeterminacy and interactive image manipulation indicated his claims on who should have the authority to control what could be seen and heard. His experiment was a cultural intervention intending to change the way in which the audience would perceive the world in a new way.

檔案轉向：東亞藝術史的當代性

Works Cited

- Bauermeister, Mary. "The Concert is Over." Pickshaus. pp. 34-37.
- Belting, Hans. "Beyond Iconoclasm. Nam June Paik, the Zen Gaze and the Escape from Representation." *Iconoclasm: Beyond the Image Wars in Science, Religion, and Art*, edited by Bruno Latour and Peter Weibel, ZKM, 2002. pp. 390-411.
- Blorn, Ina. "Becoming Video: The Prehension of Painting." *NJP Reader* 4. Nam June Paik Art Center, 2013. pp. 164-76.
- Cage, John. "Composition as Process." *Silence*. Wesleyan University Press, 1961. pp. 18-57.
- . "The Future of Music: Credo." *Silence*. Wesleyan University Press, 1961. pp. 3-6.
- Cyberneticus*, *NJP Reader* 3. Nam June Paik Art Center, 2012.
- Daniels, Dieter. "Viewing television (as Art)." *Tele-Gen: Art and Television*, edited by Dieter Daniels and Stephan Berg. Hirmer, 2015. pp. 14-32.
- Decker, Edith. "Hardware." Stooss and Kellein. pp. 67-71.
- Decker-Phillips, Edith. *Paik-Video*, translated by Marie-Genviève Iselin, et al., Station Hill Arts, 1998.
- Drechsler, Wolfgang. "Sonatine for Goldfish." Stooss and Kellein. pp. 41-48.
- Hanhardt, John G. *Nam June Paik*. Whitney Museum of American Art in association with W.W. Norton & Company, 1982.
- . "Non-Fatal Strategies: The Art of Nam June Paik in the Age of Postmodernism." Stooss and Kellein. pp. 79-82.
- Hanhardt, John G. and Ken Hakuta. *Nam June Paik: Global Visionary*. Smithsonian American Art Museum, 2012.
- Herzogenrath, Wulf. *Nam June Paik: Fluxus-Video*. S. Schreiber, 1983.
- . "The Anti-technological Technology of Nam June Paik's Robots." *Nam June Paik Art Center Interview Projects*. Nam June Paik Art Center, 2012. pp. 108-21.
- Jung, Hunyee. "Nam June Paik's 'Zen Time'." *The Misulsahakbo: Reviews on the Art History*, vol. 28, 2007, pp. 185-208.
- Kellein, Thomas. "The World of Art of the World: Nam June Paik as Philosopher." Stooss and Kellein, pp. 27-37.
- . *The Dream of Fluxus: George Maciunas: An Artist's Biography*. Edition Hansjörg Mayer, 2007.
- Koepnick, Lutz, "Fluxus Television." *Framing Attention: Windows on Modern German Culture*. Johns Hopkins UP, 2007. pp. 200-39.
- . "Experimental Television @50: Paik and Screen-Based Installation Art Today." *NJP Reader* 4. Nam June Paik Art Center, 2013. pp. 110-20.
- Mehring, Christine. "Television Art's Abstract Starts: Europe circa 1944-1969." *October*, vol. 125, 2008. pp. 29-64.
- Nyman, Michael. "Nam June Paik, Composer." Hanhardt. pp. 79-90.
- Paik, Nam June. "About the Exposition of the Music." *décollage*, no. 3, Dec. 1962, n.p.
- . "New Ontology of Music." *Postmusic: The Monthly Review of the University for Avant-Garde Hinduism*, edited by N.J. Paik, 1963. Reprinted in Rosebush, n.p.
- . "Afterlude to the Exposition of Experimental Television, 1963, March, Galerie Parnass." *Fluxus*, June, 1964. Reprinted in Rosebush, n.p.
- . "Cybernated Art." *Manifestos*. Great Bear Pamphlets. Something Else Press, 1966, p. 24. Reprinted in Rosebush, n.p.
- . "Norbert Wiener and Marshall McLuhan." *Institute of Contemporary Arts Bulletin*, vol. 172, 1967. pp. 7-9.
- . "Input-Time and Output-Time." *Video Art: An Anthology*, edited by Ira Schneider and Beryl Korot, Harcourt Brace Jovanovich, 1976. pp. 98-99.
- . "Random Access Information." *Artforum*, 1 Sept. 1980. pp. 46-49.
- . "Jeder Imperialist ist beste Lehrer." Pickshaus, pp. 86-117.
- . "'Pensées' at 59." Stooss and Kellein. pp. 17-19.
- Pickshaus, Peter Moritz, editor. *Nam June Paik*. Verlag Buchhandlung Walther König, 2009.
- Ronte, Dieter. "Nam June Paik's Early Works in Vienna." Hanhardt. pp.73-78.
- Rosebush, Judson, editor. *Nam June Paik: Videa 'n' Videology 1959-1973*. Everson Museum of Art, 1974.
- Shin, Wonjung. "'Homage à Rudolf Augstein' - The Issue of Politics in Nam June Paik's Wuppertal Exhibition." *Journal of History of Modern Art*, vol. 38, 2015. pp. 87-112.

- Special Exhibition for Nam June Paik Art Center Prize: Nam June Paik on Stage*. Nam June Paik Art Center, 2013.
- Stockhausen, Karlheinz, and Elaine Barkin. "The Concept of Unity in Electronic Music." *Perspectives of New Music*, vol. 1, no. 1, 1962. pp. 39-48.
- Stockhausen, Karlheinz, and Jerome Kohl. "Electroacoustic Performance Practice." *Perspectives of New Music*, vol. 34, no. 1, 1996. pp. 74-105.
- Stooss, Toni, and Thomas Kellein, editors. *Nam June Paik: Video Time-Video Space*, Harry N. Abrams, 1993.
- Tomkins, Calvin. "The Profiles: Video Visionary." *The New Yorker*, 5 May 1975. pp. 44-79.
- Truman, James. "Set Pieces." *The Face*, no. 29, 1982. pp. 36-38.
- Vostell, Wolf. "Öffnete Paik und mir die Augen." Pickshaus. pp. 38-40.
- Wien, Barbara. "Jetzt ist: Utopie. Das ist wichtig." Pickshaus. pp. 58-69.
- Yi, Won Kon. "Cathode Ray Tube and Media Art: Focusing on *Exposition of Music-Electronic Television* (1963) by Nam June Paik." *Bulletin of Korean Society of Basic Design and Art*, vol. 16, no. 6, 2015. pp. 407-18.
- Zielinski, Siegfried. *[...After the Media]: New Form the Slow-Fading Twentieth Century*, translated by Gloria Custance. Univocal, 2013. pp. 125-72.