

# An Origin of Interactive Art: Nam June Paik's Progressive Musical Instruments

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## Abstract

Nam June Paik is recognized for being known as the father of video art. However, some recent research about Paik focuses on his early interactive art. Since *Exposition of Music – Electronic Television Revisited* in 2009 represented his first solo show in Wuppertal in 1963, the study of his early interactive art has gained momentum. Nevertheless, regarding Paik a pioneer of interactive art is still a minor opinion in art history. This paper explores Paik's rich background about his early interactive pieces. When he studied musicology and composition in Germany, he wrote several articles about new music for Korean readers from 1958 to 1959. These still remain unexplored materials for both Korean and Western scholars. Among them, "Chance Music" was written right after meeting John Cage. It reveals significant clues to articulate his fundamental concept about interactive art. Based on the music background, Paik found how to appropriate musical instruments to make interactive art in his own way.

## Introduction

Smithsonian Museum curator, John G. Hanhardt, had already stressed the relationship between Paik's progressive art and his music experiences in several exhibition catalogues of Nam June Paik. This paper agrees with the interrelationship and deeply traces his early music background in West Germany. Even though Paik graduated from the University of Tokyo with a thesis on Arnold Schonberg, a pioneer of twelve-tone technique, his major was the history of art and aesthetics. He was trained to articulate artworks in both history and philosophy. This background helped him not only explain his works but also convince his colleagues and institutions, such as the Rockefeller foundation, of his progressive ideas. Whereas his English pronunciation was sometimes hard to understand, his writing in English was as clear and visionary as his artworks. He left a plethora of clues about interactive art from his essays, statements, and pre-interactive works. Among them, his Korean articles about new music during the 1958-59 period are still unexplored materials for the study of his interactive art. This paper mainly will analyze one of these articles to find fundamental ideas about Paik's interactive art. The previous research paper, "A Pioneer of Interactive Art: Nam June Paik as *Musique Concrète* Composing Researcher," dealt with his article "A Report on the Paris Studio of Pierre Schaeffer and *Musique*

*Concrète*" in 1958. It insisted that Paik actively applied the process of making *Musique Concrète* to his early interactive pieces. [1] In the following year, he wrote dual articles entitled "Chance Music." Whereas "A Pioneer of Interactive Art" explored his practical aspects of interactive art, this paper will use "Chance Music" to find his theoretical elements of interactive pieces. This new paper will reinforce the idea of Nam June Paik as a pioneer of interactive art.

## Nam June Paik as a Musicology Student

After completing a thesis on Arnold Schonberg's serialism, or twelve-tone technique, from the University of Tokyo in 1956, Paik headed for West Germany to pursue his PhD in musicology. Schonberg's impact on Paik was so magnificent that he decided to study abroad in West Germany. [2] He finally settled down in Munich on November 23, 1956, and enrolled in the winter/spring academic year in the University of Marximilian in Munich. In the exhibition catalog *Time Collage* in 1984, Paik left his feedback on his first Japanese article in West Germany, *The Bauhaus of Music* in 1957; he said that he studied musicology rigorously so as not to regret the study abroad. [3] As a second choice, he considered becoming a professor who taught the history of medieval Western music in Korea. [4] Paik also recollected that he had "a kind of academic life" during this period. [5] Paik was an energetic musicology student who dealt with Western theories of music. Even though he quit his study in Munich soon to find a more progressive music practice, he obtained a lot of knowledge about both new and traditional music there. As a matter of fact, his study was not limited to music. He took diverse courses from architecture to art history, just as he did at the University of Tokyo. Based on his wide range of academic background, Paik published his articles about new music in the Darmstadt music festivals twice in the Korean newspaper *Chayushinmun*. The second article was written right after meeting Cage and right before showing his first project to the public during a great transitional time for Paik. This article analyzes several potential elements for his future projects as well as his artistic perspective.

### Chance Music

"Chance Music – the yearly International Holiday Courses for New Music in Darmstadt festival" was published on January 6 and 7, 1959 in *Chayushinmun*. The topic of the article was the Darmstadt music festival that took place from September 3 through 12 in 1958. In this article, Paik mainly deals with "chance music" from American musician, John Cage. This is the reason Paik titled this article "Chance Music." In fact, Cage was not expecting to be invited to the Darmstadt music festival. He introduced his first performance in West Germany during the Donaueschingen Music Festival in 1954, which was a rival international music festival to the Darmstadt. [6] However, he only received negative feedback in Donaueschingen. For this reason, Dr. Wolfgang Steinecke, the founder and chair of the Darmstadt music festival, did not want to invite Cage to Darmstadt. Instead, he wanted to invite Cage's friend, talented pianist David Tudor. About two months before the festival, French musician, Pierre Boulez, cancelled most of his performances and courses due to technical problems. Because he was a headliner for the festival of 1958, Dr. Steinecke needed to find a decent substitute as soon as possible. He asked several musicians and composers to teach some courses and give some performances; however, he could not find any musicians who could replace Boulez. Finally, he contacted John Cage and David Tudor to ask them to take part in some courses and performances. As expected, Dr. Steinecke did not like Cage's performances and courses. However, Paik was one of few audiences who were fascinated by Cage's performances, and who found Cage's greatness in new music. For this reason, Dr. Steinecke did not ask Paik to translate his Korean and Japanese articles about this event. Paik did not translate Korean article about Cage into German, unlike his previous article, "The Music of 20<sup>th</sup> Century." [7] Music critic Heinz-Klaus Metzger edited the archives of the Darmstadt music festival and published the book *Darmstadt-Dokumente 1* in 1999. This book includes more than 40 letters between Dr. Steinecke and Paik, Paik's Japanese article, "The Bauhaus of Music," which translated it into German by himself, and a German version of "Chance Music." Kunsu Shim, a Korean musician in Germany, translated this article into German and his colleague, Gerhard Stabler, supervised the translation. [8] In the same year, this article was also introduced in the exhibition catalogue of *Nam June Paik Fluxus/Video*. This became significant literature for the Western scholars who have scarcely any information on Paik's Korean articles about new music.

### John Cage in Darmstadt in 1958

At the beginning of "Chance Music," Nam June Paik mentions a relationship between a composition and a method of the composition. He stresses that twelve-tone technique cannot guarantee the quality of a composition. Conversely, Paik insists that we also cannot transcendently convict the method to create a

composition. In other words, if a composition is great, we suppose that its method is great too. However, Paik insists that it is not a logical process because the method is not 'a priori,' but private or secretive. Paik emphasizes the difference between a method of composition and composition itself when we evaluate a composition. This first paragraph hints at Paik's progressive vision for new music. He was not satisfied with the popular twelve-tone composition, and was looking to Post-serial approaches for new music. His dissatisfaction can be clearly found in his Japanese article "Twelve-tone Mannerism." [9] When he was waiting for the 'After-Serialism' experiment, John Cage performed his unique compositions in Darmstadt. Paik was immersed in Cage's works and analyzed their particular methods in his article.

Paik explains Cage's methods of music composition and performance in detail. Cage's chance operation functions via random throwing of three coins based on the *I-Ching*, an ancient Chinese divination text. Reflecting the materiality of paper and the chance operation, Cage traces the natural stains on the paper with his pencil. Then, he overlays the paper with a transparent sheet of blank music notation. These stains become tones. Pianists can decide the tones' lengths freely. Whereas Karlheinz Stockhausen's chance music in the Darmstadt music festival of the previous year could be changed by performers' decisions, John Cage's indeterminate composition concentrated on the materiality of chance generators such as a coin and paper as well as performers' chance. In Paik's Japanese article "Serie, Chance, and Space," he compares a musician playing a composition by Cage to a car driver who can go any time during a green light. [10] His score is based on simple graphics like lines or rectangles. Because some parameters are missing in this score, musicians can interpret them in their own way. This indeterminate approach can make the music of change. Paik asks Cage that if one could make more than 20 compositions a day by using this simple rule, how one could choose among these a single composition for a performance? Cage answers that it does not matter which one is chosen. Paik was impressed by his answer, not because of irresponsibility, but because of its conformation to Nature by removing a fixed thought between consciousness and unconsciousness. Furthermore, Paik was shocked that the piano could be played in a new way when he witnessed a pianist that beat, hit, and scratched the lid and the body of the piano itself. Cage's idiosyncratic performance encouraged Paik to break through the rigid boundary of music and pursue avant-garde musical experiments such as a-music, anti-music, and action music.

Even though Paik mainly deals with Cage's chance music, in the second half of the article, Paik deals with spatiality in Karlheinz Stockhausen's experimental composition, *Group for Three Orchestras* (1958). Stockhausen turns a time-based medium, music, into a space-based medium by employing three orchestra teams, which surrounded the audience in a horseshoe

curve. In 1956, Stockhausen composed *Gesang Der Jünglinge*, which fused the sonic components of recorded passages of a youth choir with equivalent tones and timbres produced electronically. [11] The composition is historically important not only because it is a very early piece of electronic music, but also because it was one of the first uses of the spatial deployment of sound. *Gesang Der Jünglinge* had five tracks from five loudspeakers. This made an environment of surrounding sound for the audience. They were “in the eye of the sonic storm, with music emanating from every side and rotating in various directions.” [12] Stockhausen developed the surrounding environment further. In *Kontakte* (1958), he used four different tracks, which were recorded by four fixed microphones positioned around one rotating loudspeaker. [13] This composition became the main score for *Originale*, a precise time-based theater consisting of diverse artists from a poet, a painter, a musician, and a sound engineer. Paik took part in the music theater as an action music performer.

In a similar context, Paik writes briefly that Pierre Boulez installed eighty-four microphones around the theater to realize a space where the position of sound would be equal. Paik was a high school student who dreamed of a communist society such as the one of Karl Marx’s theories. In the same context, his obsession with equality was identified with his artistic intentionality. As Arnold Schönberg used each of the twelve tones equally, Boulez experimented with using any position of sound equally. This method was a new idea of accessing sound databases without bias. With his macro vision, Paik stresses that this mixed experience is not limited to music, but it becomes phenomenon, which prevails in diverse sciences and arts. [14]

After experiencing new ideas of music, Paik suggests that instead of extinguishing the flames of a young genius’s extraordinary trials, [we] must directly take the path of genius [ourselves]. In this sentence, there is no subject as it is possible for Korean to omit the subject in a sentence. In the ambiguous sentences, the subject would be Paik himself since he had been composing his first work, *Hommage à John Cage* (1959) at that time. These sentences imply Paik’s ambition toward a genius musician who can overcome his status as a racial minority. Paik adds, “even though Korean people do not understand the genius’s trials at all, they first pick on him but in the end use sophistry to rationalize their own reactions.” Interestingly, these sentences exactly coincide with his reputation in Korea 30 years later. Paik ends with a quotation from the famous German critic, Karl Wullner. “The history of new music for ten years is the history of Darmstadt for ten years.” Paik emphasizes the role of the Darmstadt music festival as the core of art and new music as he did in his previous article, “The Music of 20’s Century.”

### Three Steps for Nam June Paik’s Interactive Art

Paik’s interactive art can be defined by three different steps: a-music experiments, pre-interactive art, and interactive art in his first solo exhibition. After meeting

John Cage, Paik’s aesthetics about music and art thoroughly changed. Unlike his correspondent role in the East, he became a “cultural terrorist” as an artist performing action music in Europe, which subverted the traditional Western music. He practiced how to break the Bourgeois musical tradition and expand the realm of music into theatrical performance. Paik developed the idea of his a-music following Schönberg’s atonal and Cage’s a-composition. As a creator of a third kind of radical music, he coined the term “a-music,” and thereby expanded the definition of music into including non-musical elements. In a letter from Paik to Dr. Steinecke on December 8, 1958, Paik informs Dr. Steinecke that he would include situations such as musicians talking with audiences and one in which a prepared piano would not be used as only a normal instrument, but also as a chordophone and a percussive instrument. He also would introduce a scooter, ready-made sounds, and a performance in which he would shoot a glass. The a-music idea can also be found in the following letter from Paik to Cage in 1959:

“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.” [15]

His performance began with the idea of Wagner’s whole art, “Gesamtkunstwerk,” which was opposite to purism, admired by Paik in his previous Korean article, “The Music of 20’s Century.” By betraying purism and elitism, Paik started his career outside academia. He lifted his violin very slowly above his head, and then forcefully smashed it on the table in *One for Violin* (1961). By breaking a musical instrument, he created much more radical sounds than Cage did.

After dismantling the musical instrument in a-music, Paik created his pre-interactive piece, *Urmusik* (1961). “*Urmusik* is Sigmund Freud’s music box: it encourages the playful, evoking an infantile type of lust—the desire to make music—and welcomes the amateur who never went to music school.” [16] Paik returned to his kindergarten memories. His sister remembered that he did not follow his master’s instructions. He stubbornly played piano in his own way. [17] At the very beginning, Paik’s piano was not an instrument, which generated beautiful sounds or harmonies, but an interactive device like a Fisher Price toy. This Freudian idea equally allows viewers to interact with *Urmusik* regardless their musical ability. *Urmusik* looks like a childlike object, which consists of daily materials such as a wooden crate, a tin can, and strings. The title means primitive music and implies a new starting point of music in Paik’s musical background. After studying music too much, Paik returned to his kindergarten joy with the musical instrument. This instrument became the precursor of his interactive work. Paik’s idea of interactive art started during “Cage Shock” in 1958, and completed with Paik’s declaration against John Cage’s indeterminate music.

There are two misleading topics between John Cage and Nam June Paik, Zen Buddhism and indeterminism. Paik emphasized that he was not excited by Cage’s

theory but by his performance only. [18] Furthermore, Paik did not like Zen because he thought that Zen, in the United States, was based on Japanese nationalism. [19] Paik made this negative feedback about Cage's indeterminate music because Paik thought that audiences, passive listeners, could not distinguish it with a normal music. [20] In his statement, *About the Exposition of Music* in 1962, Paik suggested providing audiences with physical interactive experiences to create their own music. This is a significant change in Paik's artistic life, which directly led to his interactive art. Paik finally introduced his interactive art pieces in his first solo show in 1963. Whereas Cage maintained the role of piano as a musical instrument in his prepared piano, Paik denied the role of it in *Klavier Integral* (1959-1963), and made the piano an interface for interactive art. Through the piano, Paik provided audiences with the experiences beyond audio and visual media. By connecting each key with a hairdryer, a light bulb, a motor, or anything else, Paik created a five-sense synthesizer. From Cage's prepared piano, which Paik was surprised by in the Darmstadt music festival because he realized that the piano could be made new again, Paik developed his new piano art, *Klavier Integral* as interactive art.

Paik also actively used Stockhausen's and Boulez's idea of spatiality in music. In *Random Access* (1963), Paik visually attached many strips of audiotapes onto a white wall, and encouraged viewers to play it with the mobile header of an audio player in a nonlinear way. Similarly, in *Record Shashlik* (1963), Paik threaded several records through two vertical poles on a table. He made a movable head for playing a pile of records on two rotating axes. Each position on the records has an equal status regardless of its content. Audiences could choose any starting point of the records. In other words, viewers could nonlinearly play it with their spatial gestures. In Paik's interactive art, the most radical change is that a subject changes from musician to audience member. Paik pushed progressive music one step further than Cage and Stockhausen did. This experiment from images to sounds encouraged Paik to make a creative work in an opposite direction. Based on his knowledge of electronic music, Paik succeeded in making an interactive image on television. By connecting electronic music devices such as an oscillator, an amplifier, and microphones to a television, Paik created his first electronic interactive art piece, *Participation TV* (1963). Viewers could generate abstract images on the television by making sounds through the microphones. He created his first video art without a video device, and it became a pioneering piece of interactive art. During his diverse experiments, he actively employed multiple senses and cross-modality between images and sounds in his interactive art. This new kind of art was based on Paik's theories in new music and his practices in electronic music.

## Conclusion

This paper traces Nam June Paik's article about new music in the Korean newspaper, *Chayushinmun*. This

uncharted area depicted his passion toward new music during his energetic academic life in West Germany. After Schonberg's serialism, Paik actively explored post-serialism in the center of new music, Darmstadt. He actively analyzed ideas of the contemporary musicians, Karlheinz Stockhausen and John Cage in the Darmstadt music festival of 1958. The radical perspective in his articles predicted his unprecedented interactive art. Based on his progressive music background, Paik found a creative method for appropriating musical instruments into his interactive art. The study of Paik's musical background will bridge the gap between Paik as an experimental musician and Paik as an inventor of interactive art. Finally, it contributes to acknowledging him as one of the most creative pioneers of interactive art.

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