Reanimating NJP: Nam June Paik’s Interfaces: Introduction
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Introduction — Jihoon Kim
This symposium, the 8th edition of the “Gift of Nam June Paik,” the biennale conference hosted by Nam June Paik Art Center, was developed in parallel to the last few years’ context in which new curatorial and scholarly attentions to the ideas and works of Nam June Paik began to dramatically rise in the Western institutions and academia. With their large-scale retrospective on Nam June Paik in 2010, Tate Liverpool and the Museum Kunstpalast Düsseldorf published a highly valuable catalogue that brought together new several essays of revisiting his wide-ranging, cross-disciplinary works encompassing his relationships with Joseph Beuys and John Cage, his philosophical texts on art and media, and a variety of his video and television-based practices. In 2012, the Smithsonian Museum opened another large-scale exhibition named “Nam June Paik: Global Visionary” based on the Paik Estate, and established the Nam June Paik Archive that aimed to catalogue and preserve a massive blend of Paik’s letters, writings, postcards, punch cards, faxes, telegrams, recordings, vintage electronics, and etc. Since the museum let the archive open to researchers in early 2013, it triggered considerable interests of the scholars across different disciplines, not simply art historians but musicologists and film and media scholars. Accordingly, there have been a series of new conference presentations and the articles published in the journals dedicated to art history, experimental film and video, and visual culture, and a new anthology of collecting Nam June Paik’s writings has been in progress, which will be published in MIT Press in a couple of years. It is within this interdisciplinary demand for reanimating Nam June Paik beyond the established boundaries of framing him as a privileged object of art history that I organized this symposium as a platform for introducing this new scholarship on his ideas and practices.

In developing this initial idea and interweaving the participants’ different yet overlapping essays in my dialogue with Nam June Paik’s writings, I was caught by a passage in his short essay entitled “New Projects,” one that he wrote in 1972 and 1973 and was later published in “Videa ‘n’ Videology, 1959-1973” catalogue. This passage summarizes a key underlying idea of Paik’s cross-disciplinary, intermedia projects – more than his pioneering development of the early technical-aesthetic configuration of video – as follows: “Research into the boundary regions between various fields, and complex problems of interfacing these different media and elements, such as music and visual art, hardware and software, electronics and humanities in the classical sense… this had been my major task since 1958.”

Paik’s use of the term ‘interface’ opens up multiple avenues not simply for seeking new interpretations of his various ideas on the relationships between the arts, between art and the human, between art and technology, and between art and nature, but also for making renewed perspectives on the influences of those ideas on several key characteristics of contemporary digital art and culture, including the pervasive liquidation of object and experience, the growing replacement of the human time by the machine time, the paradoxical tension between control and chance, and the unprecedented mediation of surfaces and infrastructures. These two possibilities for the refreshed scholarship on Paik’s thoughts and works fit into three conceptual implications of the term ‘interface’ proposed by new media studies, namely, interface as window and threshold, the cultural interface, and the ‘unworkable’ interface. First and most generally, as Alexander R. Galloway neatly puts it, the interface – be it a window or a surface – means “a gateway that opens up and allows passage to some place beyond.” In this vein, the interface, more than its usages in cybernetics and system theory, implies the language of transitions or thresholds, which refers to connecting an entity to another or traversing between different layers that constitutes a given system operating in a particular space and time. Second, the interface can be seen as a set of

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cultural or artistic forms of previous media that the computer adopts to structure its interaction with humans. This idea of the interface is demonstrated in Lev Manovich’s conception of cinema as a notable example of the ‘cultural interfaces’ that are adopted by and operate within the computer as metamedium: that is, the computer’s algorithms for allowing the user’s access to information and visualizing it in three-dimensional, navigable space are not purely unprecedented but considerably indebted to the codes and languages of cinema, such as framing, camera movements, perspective, etc. Finally, setting itself against the myth of transparency or coherence implied in the first meaning of the term, the interface appears as a medium that does not mediate and thus is ‘unworkable,’ one within an object ‘between the aesthetic form of the piece and the larger historical material context in which it is situated.’ As we are more deeply connected to the things and media that serve as interfaces, such as windows, doorways, screens, networks, or mobile devices, and as we rely on their functionality and effects, the interfaces reveal their invisibility, autonomy, and even malfunctions. It is for the unworkability or opacity of the interfaces that they demand creative interventions into their material and process-based dimensions.

These three implications of the term ‘interface’ are what Paik’s writings and artworks suggest in different ways. Both his pioneering conception of cybernetics and his configurations of video and television as intermedia, for instance, attempted to promote passages between different media (film, video, and the digital), different arts (music, performance, cinema, video art, sculpture, mixed-media installation, and laser art), and different aesthetic forms (sound and image, figurative and abstract imagery, and the still and the moving images). Paik already declared in a short manifesto in 1965 that “as the Happening is the fusion of various arts, so cybernetics is the exploitation of boundary regions between and across various existing sciences.” Following his final words in that manifesto, “We are in open circuit,” he conceived his broadcast and satellite videos and video sculpture as seeking a kind of intermedial space in which the intersections of existing media and art forms lead to restructure human thought and perception. Thus it is Paik’s pursuit of that space that drove him to explore video apparatuses and early computational media. Second, as demonstrated by his essays such as “Video Synthesizer Plus,” “Global Groove and Video Commune Market,” and “Expanded Education for the Paperless Society,” to name just a few, Paik’s proposals for the humanized uses of video, satellite/cable television, and the computer in the postindustrial society’s processing and archiving of information, which were realized in his various artworks, also prefigured our understanding and experience of contemporary media governed by the principles of computation and network. Finally, his predilection for chance, noise, interruption in his writings and artworks invites us to see the operation of media, their infrastructure and material context which underlie his playful and even chaotic surfaces of the image. In his writing after his groundbreaking exhibition “Exposition of Music – Electronic Television” at Galerie Parnass in Wuppertal in 1963, he argued that “INDETERMINISM and VARIABILITY is the very UNDERDEVELOPED parameter in the optical art, although this has been the central problem in music for the last 10 years.” While maintaining his belief in the uses of electronic media and computer to enhance human perception, collapse temporal and spatial distances, and reinvent existing art forms, Paik endeavored to create white noises as entropy and open up random access for the improbability of information not simply on the surfaces of the images and screens that he produced and employed, but between the images and screens, and between the heterogeneous components of the dispositives with which he played or even struggled.

I would briefly demonstrate these three implications of the term ‘interface’

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implied by Nam June Paik’s ideas and practices from another angle by taking as an example an artwork, which has left unfinished and was recently discovered in the Nam June Paik Archive. The artwork is *Etude 1* (1968-69), one of the three artworks that Paik made by experimenting with the IBM GE-600 as an analogue mainframe computer during his residency at Bell Lab. At first sight, the work is composed of four concentric circles. On closer view, we can also see that these geometric shapes form four words, LOVE, HATE, GOD and DOG. The work also includes an array of unsorted computer punch cards, as well as the printouts showing the FORTRAN 66 programming language that Paik explored and applied in creating the piece. Here I would not delve too much deeply into what this piece means in relation to Paik’s entire universe, or the material and technical conditions of early computational media that he struggled with. In the meantime, however, suffice it to argue that this work helps us to understand the implications of Nam June Paik’s interface from two conceptual perspectives, namely, synchronic and diachronic or media-archaeological perspectives.

The idea of Paik’s interface as synchronic perspective corresponds to the idea of intermedia that Paik sought to realize with his various works and his self-devised apparatuses, articulating it as a conceptual device for cultivating cross-media expressions of the arts and media that existed alongside Paik’s ideas and practices in a given time. During his residency at Bell Labs in 1967 he wrote, “It is my ambition to compose the first computer-opera in music history.” This passage suggests that the artifacts that form *Etude 1*, such as punch cards, circles, letters, and printouts, were produced to reinvent opera as a traditional art form with new languages, expressive possibilities, and aesthetic experiences offered by electronic and computational media, including the capacities for producing new electronic and code-based audiovisual forms and incorporating music, abstract film, video art, and computer art into those forms. It might be possible to consider the piece to be grounded in the dematerialization of music and at the same time the reinvention of music in the hybrid configuration of the old artworks and the new media, which was made possible due to the internally heterogeneous aspects of the mainframe computer: it had a filmstrip, a plotter, a CRT monitor, and the FORTRAN language as the means for calculation-based information, a complex assemblage of the analogue and the digital. Thanks to these hybrid aspects, *Etude 1* and other moving image pieces that Paik produced with the mainframe computer share their visual aesthetics and technical traces with the early computer animation pieces produced by Kenneth Knowlton, Stan VanDerBeek, and Lillian Schwartz, all of whom strived to translate the computer’s codes and algorithms in the complex and abstract forms that they thought would represent a new vision of the computer. The competition between dematerialization and new materiality, or between the efforts to dissolve the medium-specific, discursive, and institutional boundaries between the arts and those to reinvent the art forms and culture by exploring the material, technical, and aesthetic properties of electronic and computational media, was one of the most vibrant characteristics of the art world at a time when Paik played with the apparatuses and languages at Bell Lab.

The idea of Paik’s interface as diachronic perspective means to ponder about the impacts of Paik’s ideas and practices on contemporary digital media through the filter of media archaeology. During his residency at Bell Labs, Paik frustrated the hardware, the software, and the outputs that he made with them. Thus, *Etude 1* as the collection of the artefacts as pre-matured experiments with the ‘first computer-opera’ might remain imaginary, subject to failure and oblivion. Then it is these imaginaries, and even failed characteristics that media archaeology is interested in and aspires to revisit as one of its key research topics. As Jussi Parikka notes, “suggesting that imaginary media...
are important not only as exercises of imagination but as entry-points to the wider unconscious surrounding the technological culture, the notion becomes a way to look at how technological assemblages are embedded in hopes, desires and imaginaries of mediation. All the components that form the piece, such as the concentric circles and the enigmatic words printed on the fax paper, the punch cards, and the printouts, can be seen as the evidence of Paik’s failure, or a kind of ruins that have long been left forgotten. But it is the “hopes, desires, and imaginaries” embedded in those ruins that allow us to see how the hybrid aspects of the early computational media enabled him to dream of reinventing opera with new audiovisual forms and experiences and to extend this dream to his Paik-Abe Video Synthesizer and the kaleidoscopic audiovisual expressions that he produced with that apparatus, including those in Video Commune: Beatles from Beginning to End (1970), Global Groove (1973), etc. In this sense, the ruins of Etude 1 as imaginary media challenge our prevailing assumption of the linear progression of media technologies from the analogue to the digital, therefore stimulating us to reconsider Paik’s idea of media history as multilayered intersections of the two. Then the ruins, too, serve as the ‘dialectical image’ in Walter Benjamin’s sense, in which the flash of the past encounters the subject that strives to understand his/her present in ways that go against the continuum of the linear history. In fact, Paik acknowledged his predilection for the ruin in one of his documents that he wrote during his artist-in-residence experience at Bell Labs, whose title is highly suggestive, ‘Archaeology’: “You dig up ruins after ruins to understand the past, as if you know something about the present. But we know about the present as little as about the past.” Seen in this light, Etude 1 encourages us to consider our contemporary apparatuses and culture not as unprecedented and transparent but as the continual clash of old media and computational media, in which cinema, television, and video are summoned up and embedded within the latter’s infrastructures, codes, algorithms, and interfaces.

Deepening the three implications of the term ‘interface,’ and offering both the synchronic and diachronic perspectives, this symposium positions Paik’s conceptual and artistic layers within a wider interdisciplinary frame of investigations. It aims to provide a series of new scholarship on not simply well-known artworks, apparatuses, and concepts devised by Paik (such as the Paik-Abe Synthesizer, Global Groove, and Electronic Superhighway), but also relatively unexamined works (including his experiments at Bell Labs) and their related writings. In so doing, the symposium will illuminate a range of possible ‘interfaces’ implied in Paik’s works and writings, while also seeking possible connections between the ‘interfaces’ and the historical and contemporary trajectories of the media art and culture. The participants will shed new light on Paik’s works and their underlying thoughts either in terms of rewriting the varying yet interrelated histories of the expansion of the moving image in the 1960s and 70s, or in terms of articulating his influences on the aesthetics and politics of contemporary digital art and culture, which include the shifting ideas of information, archiving, transmission, and media.

In his “Uncanny Machines and Philosophical Toys: The Animation of Paik’s Early Sculpture,” Andrew V. Uroskie suggests ‘animation’ as a conceptual interface in order to understand Nam June Paik’s work in the 1960s (musical performance, film, and kinetic installation) in the context of the fundamental reconfiguration of the concepts of institutional space, exhibition form, and medium in the post-war avant-garde art. Here, animation goes beyond the general assumptions of the term, either in terms of the specific techniques or materials for generating the illusion of motion or in terms of a genre of the moving image that is distinguished from live-action cinema. Rather, by
this concept Uroskie means variety of aesthetic and technical constructs that serve for
the "novel explorations of liminal states and zones of transition between the cinematic
and the sculptural, between stasis and duration, between object and performance, and
between the still and moving image." This definition can be extended in two ways.
First, animation is a kind of apparatus that organizes the dynamic material and aesthetic
flows in which various movements formed between spectator, exhibition space, and
artwork (the motion of an object, the temporal and spatial flux around the object, and
the spectator’s interaction with the object) converge. Second, it is a concept for reading
the cross-fertilizations that link the aesthetic liquidation and performative instance
that were common to sculpture, performance, and installation. Based on these two
implications of the metaphor of animation, Uroskie provides his fascinating reading of
the aspects of movement that bind Paik’s early works. According to his reading, Zen for
Film (1964) is an experiment that activates the ‘event-structure’ beyond the traditional
cinematic apparatus, and Random Access (1963) builds the ‘feedback loop’ that allows
viewers to experience John Cage’s lesson of process and indeterminacy through their
interaction with its haptic and kinetic interfaces.

Uroskie’s attempt to seek an interface between Paik’s divergent practices can also
be found in Lee Inseul’s essay. Through her in-depth analysis of the footage, montage
and visual effects in Global Groove, she vividly illuminates its interface with Fluxus Year
Boxes (1963-75), a collection of Fluxus’ indefinite and variable archives. Paik’s single-
channel videotapes or satellite broadcast videos represented by Global Groove are closely
aligned with the boxes in that all of them “sought not to follow the main network
of the capitalist market economy, but rather to detour the fringe of the system.”
According to Lee, Global Groove, an application of the Fluxus boxes’ encyclopedic
model to the technological and aesthetic elements of television, is more than an
incarnation of Paik’s intermedial interest in archiving different arts and cultures.
Inasmuch as it embodies the three logics of the Fluxus boxes, ‘purge’, ‘flood’, and ‘fuse’,
Global Groove provides Paik’s envisioning of the ‘video common market’ through which
“the future world will operate by exchange of electronic objects and connect with the
global information network.” This raises the significance of Paik’s theory and practice in
pondering the digital archive that enables the random access, storage, and transmission
of information.

Chris Meigh-Andrews and Carolyn L. Kane seek other interfaces to access the
Paik-Abe Video Synthesizer, actually a complex of heterogeneous things and thus
an interface as such. In his vivid account of the development and legacy of PAVS,
Meigh-Andrews argues that this hybrid machine realized “the desire to manipulate
and control the moving image… and in this way to extend the TV medium to a much
more inclusive and less elite group.” Kain’s article extends Meigh-Andrews’ assessment
from a more techno-cultural perspective. She persuasively asserts that the abstract and
psychedelic aesthetics of the synthetic color experimented by PAVS was the result of
projecting the medium-specific properties of video as an electronic medium onto the
 technological imaginary of the utopia of spiritual transcendence. Drawing on and
 extending Martin Heidegger’s tool-analysis, she further demonstrates that the synthetic
color in the early video synthesizers that embodied this technological imaginary was
predicated upon a new relationship between technology and human beings that was
shaped by electronic media. In other words, Paik’s work of experimenting with the
possibilities and capabilities of the early video synthesizer pioneered the ontology of the
technology after electronic media, a technology that becomes “invisible and inaccessible
to representation but transparent and intuitive for use and habituation.”

Paik’s other experiments with the technology after electronic media, which
oscillate between invisibility and transparency, are the topic addressed by Zabet Patterson. Paik's work at Bell Labs has not been thoroughly examined in the existing studies on Paik, and in this context Patterson's essay explains the ways in which it is similar to and different from other works at the Bell Labs as a key headquarter of early computer art. Through her close study of Paik's short computer film *Digital Experiment at Bell Labs* (1967-68), Patterson further underlines that the coexistence of randomness and order and the noise of mechanical errors in this film is expressive of what Norbert Wiener has called the 'machine time,' a time that indicates the ways in which "the machine operates outside of our control, on a different time scale altogether." With this time, the machine points us "towards what we can't see – and what we can't think." Consequently, Patterson suggests that the randomness, contingency, and error of the analog computer that fascinated Paik do not simply challenge the myth of transparency that pervades today's digital culture, but they also foresaw the ambivalence of today's computers, namely, the coexistence of material processes and invisible manipulation. In this regard, Paik's experiments at Bell Labs problematize the linear narrative of the development from the analogue to the digital computers, while also suggesting a conceptual and aesthetic interface between the two.

Another way of seeking Paik's interfaces is to take a look at Paik's discursive and practical promises of video and early computers from the era in which the computer and the Internet were settled down beyond their early status as new media and as an integral part of life. The writings of Maeve Connolly and Kwak Yung Bin guide us toward this route. By discussing the implications of Paik's well-known concept of 'electronic superhighway' in close dialogue with the artistic and policy discourses on the telecommunication and cable TV in the 1960s and 1970s, Connolly evaluates Paik as a pioneer who intervened in the impacts of the infrastructures of transportation and communication on art and life. Juxtaposing Paik's view of media infrastructure and policy with the “Electronic Superhighway 1961-1966” held at the Whitechapel Gallery in 2016, Connolly also opens up a rich interface between Paik and the contemporary art that takes theoretical and practical approaches to the material and cultural influences of the computer and the Internet in the post-internet age. Similarly, Kwak's essay attempts to answer how Paik's work and discourse anticipated the time and space of the computer and the Internet, as well as the new modes of human behavior and existence that the computer and the Internet provide, and what clues Paik's work and discourse offer to understand these new time-space and modes. The temporality of entropy that Paik experimented with aesthetically and technically in his work with video and the computer provides a useful framework for reading the ambivalent status of medium/media caused by the impacts of digital technology, namely, the tension between media's mediation into different forms and the media's immediacy that structures this mediation. According to Kwak, Paik's lesson in the digital era that makes us clearly be aware of the inevitable material obsolescence of media technologies is as follows: “how do you live without losing play in the entropic world that is supposed to be destroyed?” Thus, the keyword entropy is the shadow behind Paik's praise for the utopian possibilities of media infrastructure, or the other side of the coin that is the media infrastructure. Seen in this light, juxtaposing Connolly's and Kwak's articles with each other points us toward new interfaces for reading Paik's work and thought in terms of the 'new materialism' or the 'infrastructural turn,' an emerging trend in today's digital media studies.

All the essays that contribute to this symposium ultimately aim to reanimate Paik, giving his works and ideas “new images of thought” in the words of Gilles Deleuze. In the preface to the English edition of his two-volume *Cinema* books, Deleuze
argues that the great directors of classical and modern cinemas can be compared with thinkers because they created images and signs that mobilize the thinkers’ philosophical concepts. He further notes that the directors’ images and signs are more meaningful at a time when cinema was faced with crises caused by the impacts of electronic and digital media, because “they lay claim to the new materials and means that the future makes possible.” By investigating the images, signs, and machines that Paik presented as gifts, the symposium will attempt to illuminate “the new materials and means” that informed his future – and our present, so to speak.
