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# Travel Diary of *Transmission*

## Colophon

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박상애

《트랜스미션》 여행 일지

백남준아트센터

Travel Diary of

아키비스트

**Transmission**

Archivist,

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PARK SANG AË

박상애는 백남준아트센터 아카이브를 총괄하며, 미술관 아카이브, 미디어 아트 아카이브, 그리고 백남준에 관한 연구를 하고 있다. 최근 연구 성과로는 백남준아트센터 인터뷰 프로젝트, 비디오 테이프 분석, 연구 단행본 출간 등이 있다. 2021년부터 백남준아트센터 비디오 아카이브 스트리밍 플랫폼 “백남준의 비디오 서재”를 기획하고 운영 중이다. 「정보원으로서의 동영상 이용 유형별 요인에 관한 연구」로 연세대학교에서 박사학위를 받았다. 《비상한 현상, 백남준》(2017), 《웃어》(2021), 《트랜스미션: 너에게 닿기를》(2023) 전시를 기획했고, 『백-아베 비디오 신디사이저』(2011), 『백남준아트센터 인터뷰 프로젝트』(2012-2020), 『백-아베 서신집』(2018)을 편집, 출간했다.

Park Sang Ae is a researcher and archivist at Nam June Paik Art Center. Her areas of practice are art museum archives, media art archives, and Nam June Paik. Among her recent projects are the management of NJP Art Center archives comprising primary materials including videos, research monograph publication among others. In 2022, Park has launched **Paik's Video Study**, a free web streaming platform of NJP Art Center Video Archives. She obtained her Ph.D. from Yonsei University, Seoul, for her dissertation **A Study on Factors in Type-Specific Use of Video as an Information Source**. She co-curated **Extraordinary Phenomenon, Nam June Paik** (2017), **Humor Has It** (2021), and **Transmission** (2023). She has edited research monographs including **Paik-Abe Video Synthesizer** (2011), **Nam June Paik Art Center Interviews** (2012-2020), and **Paik-Abe Correspondence** (2018).

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## 1. Transmission Tower

Nam June Paik's **Transmission Tower** is a laser artwork intended for outdoor installation, shaped like a radio transmission tower and measuring 8 meters tall and 4 meters wide. It was originally created through the Public Art Fund project of New York City in 2002.<sup>1</sup> The artwork uses lasers and neon lights to visualize the flow of invisible communication signals and energy.

In 2002, the Public Art Fund initiated discussions with Nam June Paik about exhibiting his outdoor installation **32 Cars for the 20th Century: Play Mozart's Requiem Quietly** in the square of Rockefeller Center in New York City. However, the Public Art Fund felt that that installation, which consists solely of cars, was insufficient for an outdoor exhibition amongst the skyscrapers of Manhattan, and thus asked Nam June Paik to also create a new piece. In response, Paik conceived a laser sculpture similar to **Jacob's Ladder**, which he had shown at his 2000 exhibition **The Worlds of Nam June Paik** at the Guggenheim Museum in New York. Paik believed that electronic music, video, and lasers were all media governed by the same principles, in that they used technology to convey information through frequency bands. Having foreseen the era of lasers, Paik had been experimenting with laser technology since the 1960s, and had presented laser artworks in exhibitions worldwide, including at the Whitney Museum in New York in 1982 and at various exhibitions in Europe in the 1990s. Always embracing novelty, Nam June Paik started focusing particularly on lasers in the post-video era. Collaborating with laser specialist Norman Ballard, who had also helped to create the laser artworks exhibited at the Guggenheim Museum in 2000, Paik completed **Transmission Tower**.

1 When the artwork was exhibited in New York in 2002 and in Sydney in 2004, it was titled **Transmission**, which was also the name of the exhibition. But a

document accompanying the work when it was donated to Nam June Paik Art Center after the 2004 Sydney exhibition lists the title as **Transmission Tower**.

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While conceiving the work, Nam June Paik realized that Rockefeller Center (the exhibition venue) was not only the headquarters of NBC, but also the former location of RKO Radio Pictures.<sup>2</sup> Inspired by the logo of RKO Radio Pictures, he created a replica of a radio transmission tower as a symbolic monument referencing both mass communication and the history of the installation site.

Through the use of lasers, **Transmission Tower** artistically realized the idea that the medium itself can be the message. Neon tubes were attached to each side of the steel tower, with laser projectors installed on the top. Operating together, the neon and lasers visualized the movement of invisible control signals. Flickering red crackle neon lights on the lower part of the tower symbolized energy sources, while solid neon lights were attached from bottom to top on all four sides of the tower, expressing the flow of energy. Meanwhile, representing communication signals, straight laser beams were projected from the top of the tower onto the surroundings, creating reflection effects, while other lasers formed graphic images in the air.<sup>3</sup> The main tower was surrounded by several mini towers, 5.5 meters in height and equipped with reflectors, effectively visualizing the zigzagging frequency trajectories. The lighting effects were further enhanced by par lights installed below all of the towers. **Transmission Tower** was thus a powerful metaphorical spectacle visualizing the invisible energy of communication.

2 Founded in 1929 and closed in 1959, RKO Radio Pictures was one of the “Big 5” film studios during the golden age of Hollywood, producing such landmark films as *King Kong* (1933) and *Citizen Kane* (1941).

3 Summary of Norman Ballard’s email (2023): Outdoor lasers are produced by a total of four units, each with an output of 20 watts. Three of the units are connected to straight projection programs, and one enables graphic projection. The

lasers require programs with a four-channel full-color beam show, a vertical sky beam program, and a single-channel scanner effect program to enable graphics. Each laser channel is operated according to programming in computer software, and the programs are stored on digital players for operation during the exhibition. For the laser beam projection in 2002, the Pangolin laser system was used, and the Solinger program was used for laser graphic animation.

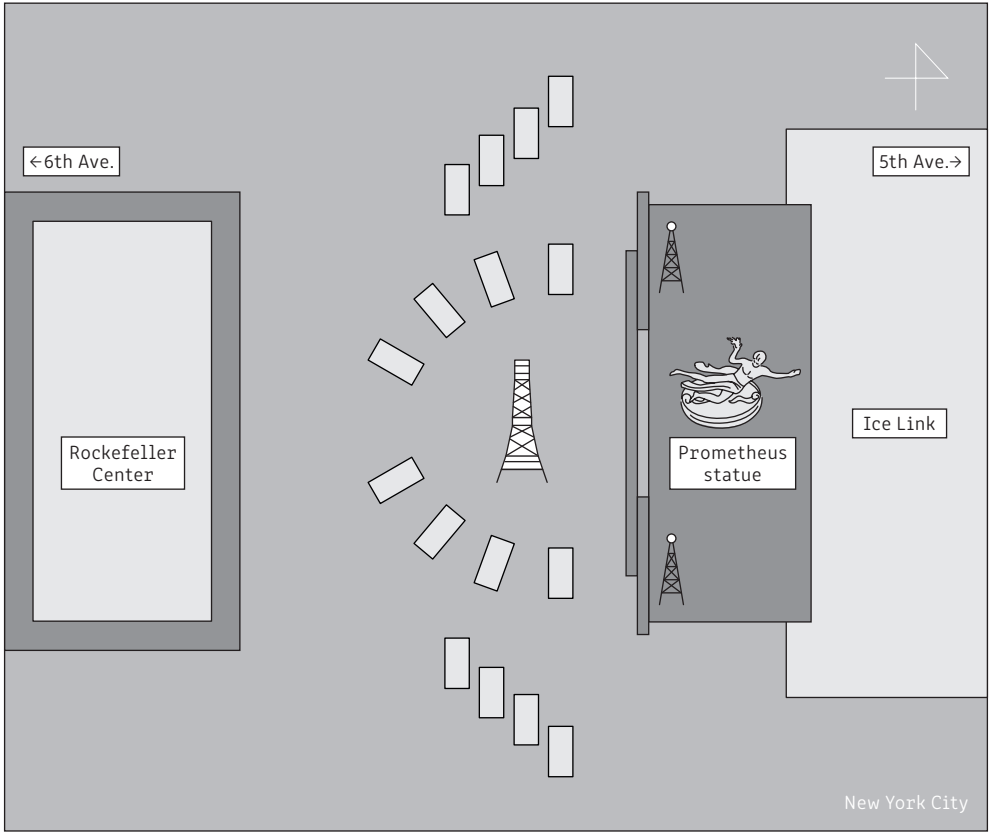


Fig. 1. Installation layout in New York, 2002



Fig. 2. View of the exhibition in New York, 2002 (<https://www.publicartfund.org/exhibitions/view/transmission/>)

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## 2. New York in 2002

In the summer of 2002, as the centerpiece of the exhibition **Nam June Paik: Transmission** (Jun. 26–Sep. 2, 2002), **Transmission Tower** was unveiled in the square of Rockefeller Center (Figs. 1, 2). The towers were accompanied by sixteen classic cars painted entirely silver, which were from Nam June Paik's installation **32 Cars for the 20th Century: Play Mozart's Requiem Quietly**, presented in 1997 at Skulptur Projekte Münster.<sup>4</sup> The towers and cars were installed in the square between the huge Prometheus statue and the Rockefeller Center building. The main tower directly in front of the Rockefeller Center, facing east. Then, eight cars were arranged in a semicircle around the tower, with four more cars on each side.

The cars dated from the 1920s to the 1950s, with four cars being selected to represent each decade. Each of the four groups of cars had one pair of speakers installed in the trunk of one car, playing Mozart's **Requiem**. The volume was adjusted to a level that allowed the music to resonate throughout the surroundings, without being too loud. To increase the range and movement of the lasers, two mini towers with reflectors were installed below the square, with additional reflectors attached to the exterior walls of surrounding buildings. Embodying frequency trajectories, the reflecting laser beams created a powerful visual effect that spread through the entire square.

For the exhibition opening, held on the evening of June 26, groups of people gathered to view the work, chatting and holding glasses of wine. Among them were representatives from the Public Art Fund and the Consulate General of the Republic of Korea, along with various artists, curators, and

<sup>4</sup> For this work, Paik had collected thirty-two discarded cars dating from the 1920s to the 1950s (eight representing each decade). He then painted the cars silver and filled their interiors with

cases for televisions and record players. The cars were installed outdoors and accompanied by a specific section of Mozart's **Requiem** chosen by Paik, which played from dusk until 11:30 pm.

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gallerists, as well as random passersby who were drawn by curiosity. In the midst of it all, Nam June Paik appeared in a wheelchair. Despite still suffering paralysis on his left side due to a 1996 stroke, Paik's mind remained as sharp as ever. The opening was to include a piano performance by Paik, who had spent an especially long time practicing due to his limited mobility. Moreover, Norman Ballard, who had designed and programmed the lasers for the installation, had programmed the neon lights and lasers to respond directly to Paik's piano performance. The electronic piano performance, entitled **20/21**, was curated by Nam June Paik himself under the theme of "Americana."<sup>5</sup> This theme was likely meant as a show of support for the United States as the nation struggled to recover from the wounds of 9/11.

After the twenty-minute performance, Nam June Paik was asked to explain the meaning of the cars and lasers. Although his speech was slurred, Paik responded with certainty: "[The] car is a symbol of twentieth-century machine culture. And [the] laser is a symbol of twenty-first century information culture."<sup>6</sup> Thus, Paik emphasized that these two artworks needed to be shown together to convey their full meaning. For Nam June Paik, who integrated the technical features of media into his art, lasers were a medium encompassing the twentieth century that he lived in and the twenty-first century that he foresaw. Having lived through the machine age while anticipating the information age that lasers could bring, Nam June Paik combined these two artworks, symbolizing machines and information, to create a new media environment.

5 As confirmed by a video recording of the event, the main repertoire of Paik's piano performance included the following: Bizet's "Toreador Song" from the opera **Carmen**; Wagner's "Bridal Chorus"; Beethoven's "Ode to Joy"; Verdi's "Brindisi" from the opera **La Traviata**; Verdi's "La donna è mobile" from the opera **Rigoletto**; and the American folk

song "Oh! Susanna." Video 3046, Nam June Paik Art Center Archives, Paik's Video Study (<https://njpvideo.ggcf.kr/asset/video/924>), accessed on May 2, 2023.

6 Video 3046, Nam June Paik Art Center Archives, Paik's Video Study (<https://njpvideo.ggcf.kr/asset/video/924>), accessed on May 2, 2023.



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### 3. Sydney in 2004

After New York, the two works were invited to a special exhibition at the 2004 Sydney Festival, held from January 8 to 26, where they were installed in front of the Sydney Opera House. This time, the main tower was placed in the center of the square in front of the Opera House, surrounded by eight cars in a circular formation, with four more cars on both the east and west sides, arranged in a straight line (Figs. 3, 4).

As in New York, sixteen cars were displayed, but the selected cars were different, as was their arrangement. Unlike in New York, where four cars had been selected from each decade, Sydney selected sixteen cars regardless of their production date. In Sydney, CD players were installed in each car to play Mozart's **Requiem**. Since Nam June Paik did not attend the exhibition, there was no opening performance. The neon lights were turned on after sunset, and the lasers operated four times per night, at 30-minute intervals starting from 9:30 PM. The four feet of the main tower were mounted atop four wooden bases, each around the height of an average man. Par lights were installed on the top of these bases, replicating the lighting effect from New York. The laser graphics were projected in two directions: towards the stairs of the Opera House and towards the forest on the opposite side. One graphic screen and six mini towers with reflectors were also placed around the Opera House, helping the lasers visualize waves of energy. Just as in New York, the movement of the lasers being reflected off the mini towers created a dazzling spectacle.

### 4. Yongin in 2023

Nineteen years after its last public appearance at the 2004 Sydney Festival, **Transmission** made its glorious return. From August 31 to December 3, 2023, Paik's two artworks were exhibited outdoors at Nam June Paik Art Center. Once again,

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the arrangement differed from the previous two exhibitions, as did the laser programming. The towers were installed between NJP Art Center and the low hills behind the building. While the previous installations surrounded the main tower with a circular arrangement of cars, the new installation placed two mini towers symmetrically in front of the main tower, with three cars on one side and two cars on the other side (Figs. 5, 6).

For the 2023 exhibition, artist Yun Jeho was commissioned to design a new MIDI program, combining the lasers, neon lights, exterior lights, and sound into a single program that would pay homage to the original work.<sup>7</sup> During the day, Mozart's **Requiem**, the audio component of **32 Cars for the 20th Century**, was played through speakers in the exterior walls of the building. Then from 5:00 to 8:00 PM, as the sun set, a newly composed electronic soundtrack played as a tribute to Nam June Paik. Highlighting the unique properties and colors of the lasers and neon lights, Yun Jeho designed a vast media space within nature, which dynamically combined lights, sound, and the surrounding landscape. In the previous installations, the lasers had alternated between straight beams and graphic forms, but Yun's new program combined both types into a unified projection. The lasers reflected off the mini towers, back through the glass walls of the building, and into the exhibition hall, swimming through the interior space and seamlessly connecting the indoor and outdoor spaces into one.

## 5. Journey Between Two Centuries

In New York, Sydney, and Yongin, **Transmission Tower** was displayed alongside **32 Cars for the 20th Century**. And in all

<sup>7</sup> When the artwork was donated to Nam June Paik Art Center in 2004, no laser devices or MIDI programs were included in the inventory.

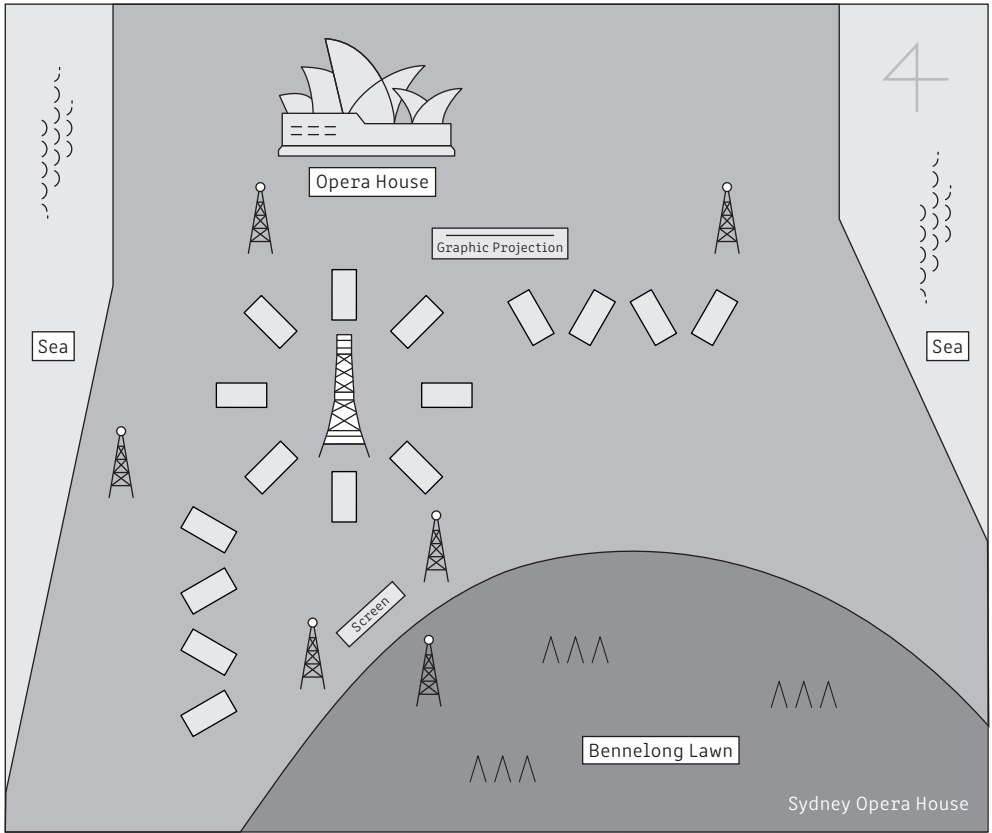


Fig. 3. Installation layout in Sydney, 2004



Fig. 4. View of the exhibition in Sydney, 2004 (photo by Sydney Festival)

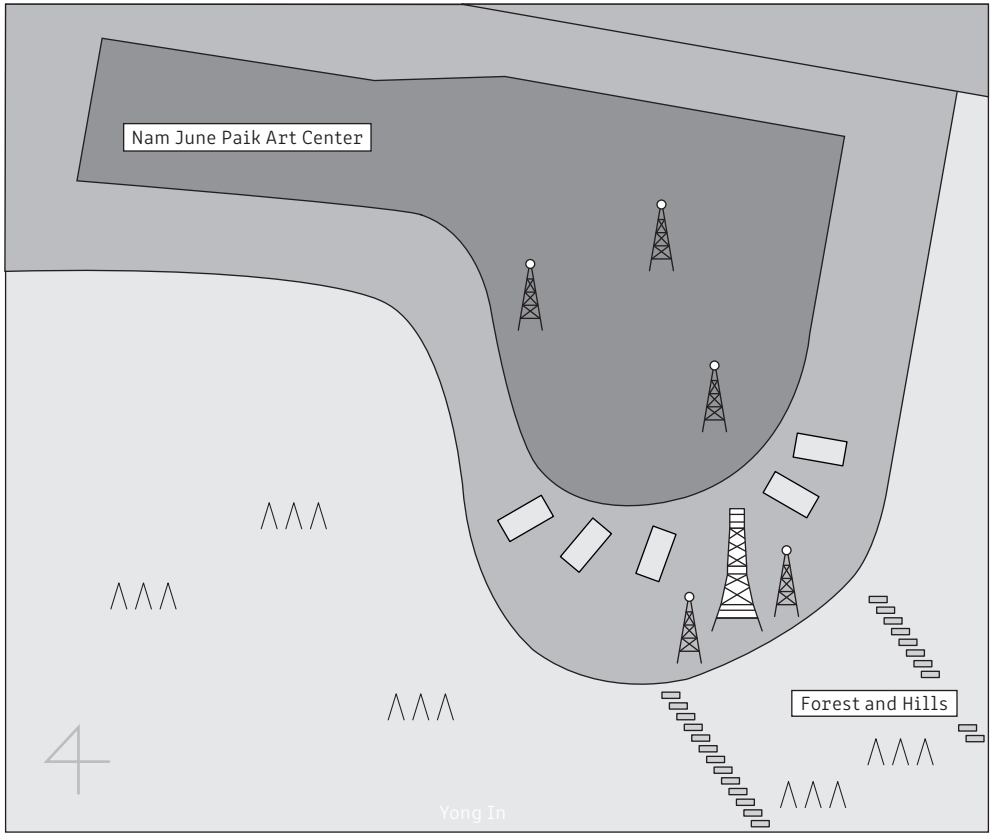


Fig. 5. Installation layout in Yongin, 2023



Fig. 6. View of the exhibition in Yongin, 2023

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three exhibitions of these two works, respectively symbolizing the twentieth and twenty-first century, the method of installation was strongly influenced by the surrounding space and the contemporaneous technology.

In all three instances, the projected lasers visualizing energy waves and signal trajectories showed different characteristics. In downtown New York City, an urban area densely populated with people and skyscrapers, the lasers were projected off the surrounding buildings, thus incorporating them into the artwork. In contrast, for the Sydney exhibition, held in an area adjacent to the sea and a forest, a greater number of mini towers were employed to provide more reflectors for the laser projections. Then in Yongin, both Art Center building and the surrounding natural landscape were conceived as spatial elements. By connecting the outdoor and indoor spaces, the projected laser beams created a new media environment.

In addition, the method of securing the main tower and storing the equipment varied in all three exhibitions. At Rockefeller Center, which was already equipped with an underground space with electrical facilities, the main tower could be installed without having to consider where to house the components of the network infrastructure.<sup>8</sup> The main tower was erected atop four concrete pads, while all of the electrical equipment, including the main body of the large laser device, was installed underground. The laser signals were transmitted to the projector atop the tower by custom-made fiber-optic cables, tailored specifically for the artwork. In the case of Sydney, large wooden bases were built to support the four corners of the main tower, which also served to conceal the necessary equipment. In addition to their storage function, these bases also increased the overall height of the main tower, making it visible from a

8 At Rockefeller Center, the main tower was installed in the exact location where the Christmas tree is installed each year, enabling the use of the

underground electrical infrastructure that was already installed. From an email from Norman Ballard (2023)

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great distance. Finally, in Yongin, the tower was constructed atop supports made from rubber mats and steel plates, which provided a level surface on the uneven cobblestone ground. In 2002, the lasers had required large pieces of equipment and a constant supply of cooling water, all of which had to be stored underground. Thanks to technological advancements over the past twenty years, however, the lasers for the Yongin exhibition were installed directly on top of the main tower and operated by a separate network of small computers and minimal hardware.

When juxtaposed in outdoor exhibitions, **Transmission Tower** and **32 Cars for the 20th Century** powerfully symbolize how our civilization has changed from one century to the next. In its three journeys, the methods and arrangements of this installation have changed depending on the time and location. And as media technology evolves and the characteristics of exhibition venues change, the two pieces may undergo further transformations in the future. Under such circumstances, museums must strive to create and maintain environments that best express the messages that the artist hoped to convey through the artworks. To this end, I believe that institutional efforts to document the collection, exhibition, and conservation of these important works will provide essential nutrients for maintaining their vitality for future generations.