OBJECT NO: 124.2000
ARTIST: Nam June Paik
TITLE: Untitled
DATE: 1968
DEPARTMENT: Painting & Sculpture
CLASSIFICATION: Sculpture
DIMENSIONS: 9 x 13 x 10” (22.9 x 33 x 25.4 cm)
CONTACT INFORMATION:

SIGNED:

MEDIUM: Manipulated television set and plastic pearls

COMPONENTS:
1 8" CRT Symphonic Model TPT television encrusted with silver-painted pearls
1 2-prong ungrounded power supply (permanently attached to the television); 120V and 60Hz

OTHER OWNERS:

Uneditioned: 1 of 1

DESCRIPTION:

Untitled consists of a Symphonic Model TPT 800 television encrusted with painted silver-grey plastic pearls. The set includes a metal antenna, a brown plastic handle, and three silver dials located on the front panel.

The pearls are affixed to the television with an adhesive, and cover the surface of the television’s front section, the two side panels, the top panel, and the front panel. The television’s screen, back section and bottom panel contain no pearls.

When powered on, the television displays an 8” diagonal line from the top-left to the bottom-right corner of the screen. The deflection yoke 90 volume must remain off, and the antenna and handle should be in their resting positions.

According to a CRT repair expert at CTL Electronics, Inc., the diagonal line was obtained by first disabling one of the television’s vertical deflection circuits. This yields the same 525 lines of resolution, but compressed into a thin horizontal line across the screen. Then, a turn of the deflection yoke 90-degrees creates a diagonal scan.

The television contains a number of dials, and prior to any adjustment, these dials should be assessed by a technician to determine how they might affect the work’s image. Below is an outline of their functions:

Right-side Proper
CONT: adjusts the image contrast
V. HOLD: controls vertical roll problems with the picture; connects directly to the vertical deflection circuit

Rear
H. HOLD: controls horizontal tearing of the picture; connects directly to the vertical deflection circuit
V. LIN: controls vertical linearity (if not linear the top or bottom of the image appears stretched; vertical circuits use feedback to adjust the signal for optimum linearity, corrects picture distortions)
HEIGHT: controls the ‘pincushion’ of the image (retains a square versus a polygon with uneven sides; used to control image distortion)

Front
OFF VOLUME: combines On/Off function with the audio volume level control
BRIGHTNESS: increases or decreases brightness of the image  
CHANNEL SELECTOR: selects between one UHF and eleven VHF channels

PHOTOGRAPHIC RECORD:

ADDITIONAL DOCUMENTS:  
A manufacturer’s manual is available from Sam’s Technical Publishing. See Equipment Purchase Recommendations.

KEY QUALITIES:
The artist’s representative John Huffman confirmed that the essence of *Untitled* is the construction of the diagonal line image on the monitor. The cathode ray tube’s electron beam, the image-making scan lines, and Paik’s manipulation of the process is fundamental to understanding this TV sculpture as a work of art. Consequently, Huffman encouraged CRT tube maintenance for this piece. Although Nam June Paik was not opposed to the migration of media, LCD and plasma screens are discouraged for the preservation of *Untitled*, and should only be used as a last resort when CRTs can no longer be maintained or replaced.

Huffman also emphasized that Paik’s works explore notions of time and transience. The artist celebrated decay, and had a love for the patina of an object – the resonance of a past long vanished – and thus, Paik’s aesthetic extended to an appreciation of the visible aging of the work. Accordingly, Huffman recommends the work not be restored to a clean, polished, pristine state. Furthermore, Huffman suggests that any pearls that fall off need not be replaced, particularly if they are few. An anecdote from Fernanda Bonino supports this recommendation. While in her care, some pearls had fallen off the piece and Bonino asked Paik if he would like them to be reglued. Paik opposed the restoration of the pearls, and explained that like him, the work was growing old.

EXHIBITION HISTORY:  
*electronic art II*, 17 April to 11 May 1968, Galeria Bonino, New York.


TECHNICAL HISTORY:  
13 December 2006 - no repairs to the television have been made thus far.

EXHIBITION DESIGN REQUIREMENTS:  
According to John Huffman, Curator at the Nam June Paik Studios, the work should be exhibited as a video sculpture on a table or stand, set up away from the wall, with all sides, including the back, easily viewable. The lighting should be diffuse to avoid obscuring the contrast; however, some light should illuminate the pearls on the top and sides.

INSTALLATION INSTRUCTIONS:  
The television should be turned off during the exhibition’s closed hours.
EXHIBITION MAINTENANCE SCHEDULE:
The screen and back of the television should be gently dusted on a regular basis.

CONDITION NOTES:
The surface of the television is soiled with dust and grime, and the exposed adhesive has yellowed. A number of pearls are missing, particularly along the right side, and the gray paint is flaking off some of the others. In addition, the image of the diagonal line has left a permanent burn on the screen. The television handle moves and the antenna fully extends upwards and rotates on its axis. A handwritten sticker under the handle reads “1017,” and one on the back section reads “2701”. A number on the Symphonic label (also on the back section) reads “Japan T4 – 261618”, and is assumed to be the serial number. The power cord is intact, and the set powers on and displays the image correctly. The control dials were not assessed – details of their functionality are not known. As the back of the television has yet to be removed, no assessment of the set’s inner mechanics has been performed to date.

The power cord is intact, and the set powers on to display the image correctly. The control dials were not assessed, and whether they function properly is currently unknown. Furthermore, no assessment of the set’s inner mechanics has been performed to date.

TREATMENT PERFORMED:
Pearls were re-glued to the front section shortly after acquisition (exact date unknown)

MIGRATION SCHEDULE:
Not applicable

STORAGE RECOMMENDATIONS:
Current macro conditions in a stable, moderate environment (68°F Fahrenheit and 50% relative humidity) are proper for the time being. The temperature and humidity conditions may need to be reassessed upon inspection of the television’s inner workings if any materials are found that may respond poorly to the storage environment, though this seems unlikely. Plastics could possibly be stored in a slightly lower temperature and relative humidity long term, but moderate conditions are probably best for a balance among the different materials making up the piece. Care should be taken to watch for signs of mold in the glue, as this may signal that drier conditions may be required.

Current micro conditions – including a clam shell-like box constructed of acid free cardboard with blue foam inserts and the piece wrapped in Tyvek – require revision. The double-sided tape keeping the box closed has failed and should be replaced with tape or Velcro as an initial step. The piece will benefit from enclosure and reduction of dust exposure, and the box itself should be examined for structural integrity. The box shows signs of age, and was likely constructed from two separate pieces of cardboard. It is recommended that a lightweight crate be built for the piece to prevent shifting or other movement of the television and protect it from impact.

While in storage, the condition of the glue (excessive decay, mold) and the CRT (is it still working?) should be checked periodically.
The piece should not be moved very much, as jostling may loosen parts.

The piece should be stored away from magnets and magnetic fields.

The piece should be stored in low to no light conditions.

**GENERAL RECOMMENDATIONS:**

*Untitled* suffers from a thick coating of dust and grime – conditions that can lead to machine failure and, in the presence of spores, promote mold growth. Jon Huffman, the artist’s representative, agreed that a light cleaning would be in order – caution must be taken with the adhered pearls. Solvents should not be used on the plastic. Either a simple dusting/brushing or a cotton swab dipped in water should be used. If water is used, the surface should be dried immediately after application. Occasional pearls may fall off without reattachment, as Paik’s aesthetic extended to an appreciation of the visible aging of a work. *Untitled* may undergo cleaning or restoration work, but it definitely should not be restored to a pristine state. John Huffman explains that Paik celebrated decay and loved a work’s unique patina. Specifically, he remarks that Paik would not necessarily want all the missing pearls to be restored to the television’s surface. These comments should be considered prior to performing any conservation actions.

An experienced technician should be hired to open the case and gently vacuum the inside, to look for any signs of damage or potential conservation issues inside the television, and to determine exactly how Paik created the on-screen image. This procedure may generate valuable details for future reference regarding CRT replacement and recreation of the image, and should be clearly delineated and monitored to ensure the technician does not “fix” the piece or cause damage. The technician should also be interviewed regarding the use of the various control knobs and the affect they may have on the piece, as well as asked for another opinion of the options available for refreshing/restoring/replacing the CRT tube and other parts of the television.

Museum patrons may potentially wish to take pearls from the piece – one method of avoiding this involves posting a guard nearby, and a second method involves enclosure of the work in a Plexiglas box. The Plexiglas solution is not recommended – *Untitled* needs space and plenty of airflow while exhibited in order to prevent overheating, and even a ventilated Plexiglas box may restrict the needed air circulation. It is also recommended to research the possible use of filters in any open vents on the television to prevent dust from entering. These filters would need to be thin enough to allow proper airflow so as not to cause overheating. Other exhibition-related concerns to keep in mind: proper grounding for the power cord (which it currently does not have), the need to ensure that electronic devices are warmed up to room temperature before being turned on, and the purchase of backup 8” CRT screens that will fit the television.

Jon Huffman, the artist’s representative, stated that use of the same make and model of the original would be preferable but not necessary. A CRT screen by itself may be difficult to find, so purchase of similar televisions to be used for parts retrieval may be more practical. This long-term concern for the survival of the piece should be implemented in the near-term while parts are still available.

In order to extend longevity of the original instruments, the piece should only be exhibited in temporary shows, as these tend to have a shorter display term than collection rotations. During display, the number of hours the piece operates should be logged and recorded in the work’s file, to give a rough guide to where the CRT is in its lifespan and help dictate exhibition guidelines.
Part of the meaning of the piece lies in the physical workings of the CRT monitor. The use of a CRT in the piece should be maintained as long as possible. Jon Huffman stated that Paik was not opposed to migration. If CRTs can no longer be maintained or purchased, the tube could be replaced by an LCD, plasma, or other type of screen and the diagonal line could be recreated – perhaps through video. At this point, any video playback machine and connector cables should be hidden from view and the non-CRT screen should be integrated as unnoticeably as possible into the original case. While such non-CRT adaptations would seem to change a certain essence of the piece, Paik was more interested in having his work seen than in strict adherence to any “original” formation. This tension between access and preservation, creator and conserver, is the eternal conundrum without recommendation. That must be left to a negotiation between people and between philosophies.

A few websites of individuals that specialize in the repair, restoration, parts, and information for vintage televisions include:

- Amptech Systems  http://www.amptechsystems.com/
- Antique Electronics Supply  http://www.tubesandmore.com/
- Early Television Museum  http://www.earlytelevision.org/
- Radiola Guy  http://www.radiolaguy.com/
- Tubepedia  http://www.aade.com/tubepedia/1collection/tubepedia.htm

Issues recommended for further research:

- Contact the Technical Assistants listed in the Electronic Art 2 catalog to see if any of them worked on this piece or have any specific memories about it.
- Contact Otto Piene and interview him about his role in and memory of working on the piece.
- Investigate the various stickers that have been adhered to the television. Contact Fernanda Bonino, Carl Solway Gallery, and curators of the Video Time – Video Space exhibition to see if they put the stickers on for any reason. Also contact owners of similar Paik works to see if their pieces have similar stickers.
- Research the Video Time – Video Space exhibition further to determine if the piece was truly exhibited by them and what the history of that exhibition was.
- Research the possible use of filters in any open vents on the television to prevent dust from entering. These filters would need to be thin enough to allow proper airflow so as not to cause overheating.

RECOMMENDED EQUIPMENT PURCHASE:
A manufacturer’s manual is available from Sam’s Technical Publishing (http://www.samswebsite.com/photofact/pf_search.asp), as an electronic file for $22, or shipped as hard copy for an additional $9.25 S&H.

The purchase and retention of backup CRT tubes of precise make and model is recommended, as these tubes, no longer manufactured, are approaching obsolescence. Care must be taken when replacing the tube because different manufacturers have different specifications for both the electron gun and the internal electronics. Because TV tubes are considered ‘high-voltage’ electronics, there is a danger of
implosion if incompatible electronic parts are interchanged. Furthermore, the artist’s representative stated that use of the same make and model of the original would be preferable but not necessary. Just a CRT tube may be difficult to find, so purchase of similar televisions to be used for parts retrieval may be more practical. Some vendors claim they can refresh or revive a dead CRT, but further research into cost-effectiveness and work quality would be required for this route.

CONSERVATOR:
Handling New Media students, Fall 2006, NYU Moving Image Archiving and Preservation

REPORT DATE: 13 December 2006