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# Conservation Issues: The Case of Time-Based Media Installations

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## Introduction

New technologies are increasingly present in museum collections. They were considered experimental when used as art in the 1960s and pushed the boundaries of the art object, but today contemporary art institutions worldwide increasingly acquire such works. Mass produced objects, as introduced by Marcel Duchamp and his Ready-made in the second decade of the twentieth century, initiated the re-evaluation of the nature of artworks and questioned the notion of the original. Less than forty years later, mass produced technological objects made their way into galleries, raising more questions and catalyzing new debates. Still questioning the idea of the original, new media artworks pushed the limits even further: artists could now manipulate the immaterial. A pioneer in the field was South-Korean artist Nam June Paik. His piece *Magnet TV* (Figure 1), created in 1965, represents one of the earliest instances of the use of television monitors as part of art objects. Art pieces were soon sculpted using light (as we see in Figure 2 with Dan Flavin's

untitled work of 1996), space, architectural features (as in Figure 3, *Running*, a 2003 piece by Pascal Grandmaison), as well as time, codes, and sound.

The category new media is a very broad one; it encompasses different artistic manifestations, including anything from slide shows, sculptures incorporating video or audio signals, to virtual artworks, referred to as net art. Within this amalgam we also find time-based media installations; they are comprised of at least one of the following elements: film, slides, video, audio, and computer based elements, which are rendered in a space and context specified by the artist, and have a duration. By this definition, such pieces must be experienced in the context of the passing of a period of time. In order for these artworks to exist, two components need to be present: a signal and a display. Signals, as used

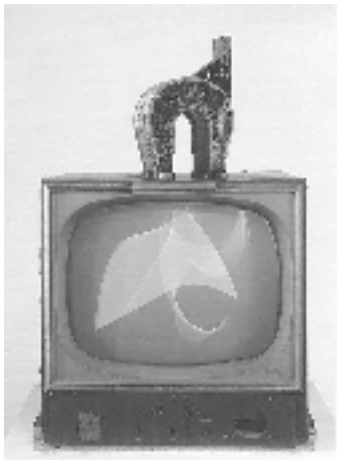


Figure 1. Nam June Paik,  
*Magnet TV*, 1965  
©The Estate of Peter Moore

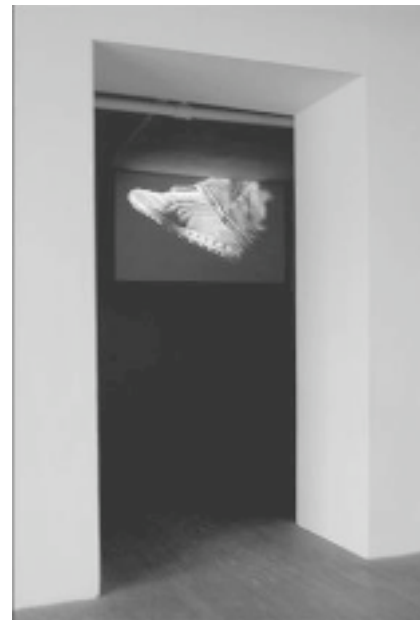


Figure 3. Pascal Grandmaison,  
*Running*, 2003  
©Galerie René Blouin

Figure 2. Dan Flavin,  
*Untitled (Marfa Project)*, 1996  
©The Chinati Foundation



in art installations, are encoded sounds or images which can be transmitted or decoded by a specific piece of equipment. Examples of these are audio and video magnetic tapes, CDs, DVDs, and computer programs. Display components include elements of space, lighting, acoustics, and the actual physical equipment. These in turn can be either sculptural or functional; a sculptural piece of equipment is one that has become an essential component of the physical and aesthetic scheme of the work. Functional elements, on the other hand, are often not visible and do not play a determined part in the visual rendering and meaning of the work.

A good example to illustrate these concepts is the 1991 installation by Gary Hill entitled *Between Cinema and a Hard Place* (Figure 4). There are two signals in this piece, video and audio, and both types of display are present; the exposed monitors (Figure 5) are both functional and sculptural elements since they are essential to the aesthetics of the piece. The disc player and computer are functional equipment only; they are kept hidden and synchronize the entire installation.

As with any new medium, conservators are faced with unique challenges when dealing with media art. A shift has occurred in meaning from the single precious art object to concepts and experiences. Professionals cannot rely on traditional preservation strategies to conserve artworks where significance is channelled in great part through the intangible. Even notions such as colours are not straightforward anymore. How does one conserve colours which can appear and disappear at will by the mere flick of a switch?

There is much to be said about conservation challenges presented by new media or anything digital; this is a vast research topic on its own. This paper focuses on problems raised by the conservation of time-based media installations. After having identified the issues and discussed challenges inherent to such artworks, innovative conservation strategies are briefly outlined. Four recent or ongoing international collaborative projects are then presented: DOCAM, The Variable Media Network, Media Matters, and Inside Installations.

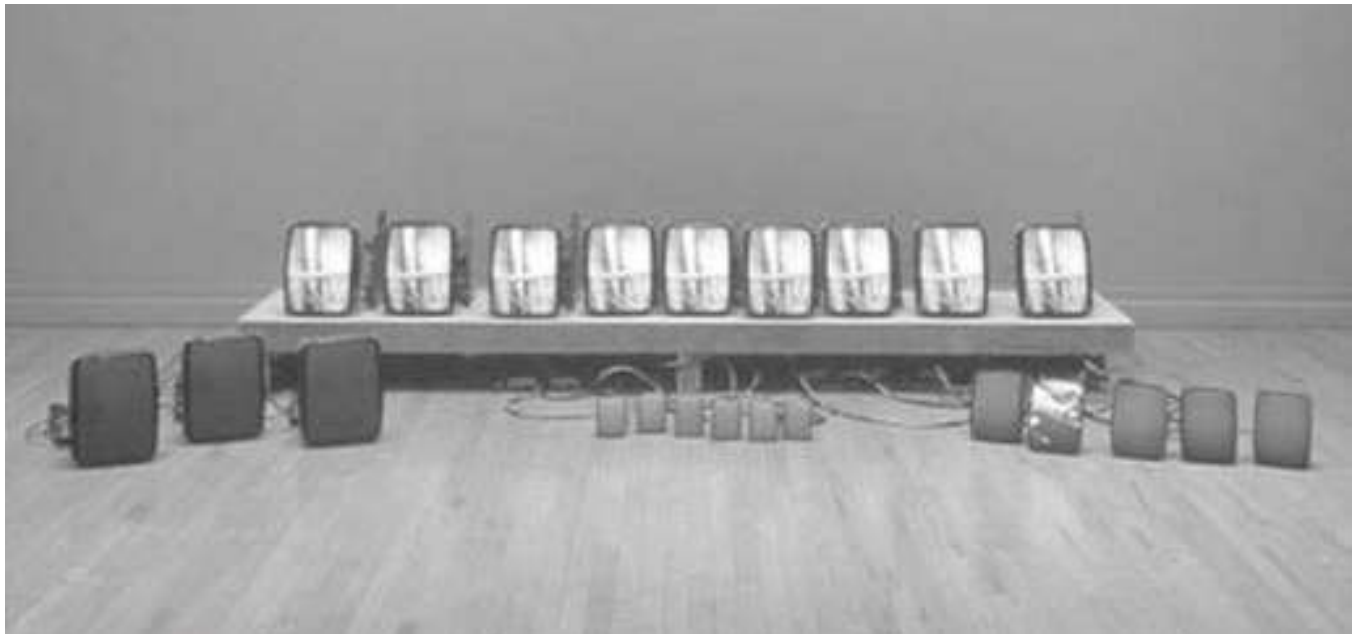


Figure 4. Gary Hill,  
*Between Cinema and a Hard Place*, 1991  
©Gary Hill

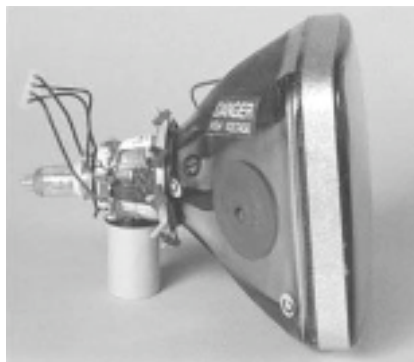


Figure 5. Exposed monitor from Gary Hill's  
*Between Cinema and a Hard Place*, 1991  
©Tate

### Conservation Issues

The conservation issues raised by time-based media installations are hereby divided into six groups. First, we have the shift away from the unique object. As previously mentioned, one common aspect of contemporary art is to abandon, or at least question the notion of the work of art as a single, authentic object. Jon Ippolito, who is currently an Assistant Professor of New Media at the University of Maine, argues that from a preservation point of view, media-based artworks should be viewed as sets of instructions rather than precious originals. This notion is a great departure from traditional ideas of conservation where the physicality and materiality of the art object defined its unique character. While we still aim to retain the integrity of the work, the object itself cannot guide our practice, so we must go back to the artist's intent. One way of documenting this is with artists' interviews, a practice which is more and more widespread in museums.

Secondly, there is the factor of intrinsic vulnerability. Because a time-based media installation is best understood in its installed state as a dynamic system, it is in a state of near non-existence or dormancy for most of its life. This vulnerability is twofold: first, separating the installation elements shuts down the work, strips it of its meaning, and secondly, time-based media components naturally add a level of precariousness to the work. If the nature of the artwork is dependent upon the dynamic created between all parts when they are assembled in a certain way, then significance is context-dependent. This is yet another new element conservators must work with: the notion that a piece is created or revived when assembled brings forward the issue of authenticity. It is likely that the artist will not be present every time his work is prepared for exhibition, therefore not be present to a certain extent for its re-creation. This is why proper documentation is essential, especially at the time of the acquisition of a piece and during its first installation.

The risk that a work is not installed correctly or that it will not even be displayable in the future is ever present. Technological obsolescence is perhaps the most straightforward and pressing challenge in the conservation of time-based media artworks. The greater the significance of the equipment and technology is to the meaning of a piece, the more pressing is the risk of obsolescence. This means that there will be inevitable loss as time passes, technologies change and certain components are no longer manufactured or available. It is therefore imperative for conservators to define acceptable loss for individual artworks by determining the work-defining properties and the relation of components to the meaning of the installation. Conservation treatments of these pieces, then, come down to managing change.

Like other objects, time-based media installations are susceptible to degradation. Adding to the usual problems with corrosion and material deterioration, are certain forms of degradation specific to these types of artworks. Cathode ray tubes (CRT) for example, in addition to being at risk of becoming obsolete, also degrade with use; their brightness and

colour balance are affected by the deterioration of the tube. We must be mindful of the amount of use a monitor is getting while on view, in the same way, for example, we need to account for the amount of time a watercolour is exposed to exhibition lights.

Installations also depart from the more rigid traditional notions of preservation in that it is not uncommon to see the artist, who is still alive, wishing to re-conceive his work. Preserving the integrity of the piece means preserving its intellectual, aesthetic, and historical integrity, but we must know where to set the boundaries. If an installation was originally created in 1974, for example, and purchased in this form by an institution, would a re-conceived display of the same work today be a reflection of the artist's mindset and creative maturity in 1974 or 2007? We can ask ourselves: Can such works be allowed to change, or will each new re-installation be a new acquisition? This, again, emphasizes the importance of thorough documentation at the moment of acquisition. The same needs apply to artworks which do not enter museum collections. Thorough documentation should be produced every time a piece is installed and taken down; this ensures that the state of a work is recorded through time, while providing valuable information for the care and management of the piece.

With such a great variety of unresolved problems, ethical choices, and unpredictability, conservators must stay alert and open minded in order to find viable solutions. It is too easy for professionals trained to deal with visual material to dismiss or overlook the importance of audio or spatial components. All of these elements affect the viewer's experience and therefore the impact of the work. Because with time-based media installations the artwork often is the experience, this is what we must preserve. Success, then, is the ability to continue to display these works in accordance with the artist's intent.

### Conservation Strategies

The following conservation strategies were suggested in the approach developed by the Variable Media Network. Initiated by a collaboration between the Solomon R. Guggenheim Museum (New York) and the Daniel Langlois Foundation for Art, Science, and Technology (Montreal), this project aimed at "sharing information and directly involving the communities and institutions concerned with preservation."

Storage has been the default conservation strategy for museums between the 18th and 20th centuries but it is now proving to be too limited for 21-st century needs. It entails keeping all the original objects and conserving them in their original form for as long as possible. Figure 6 shows a great example of storage, with a view of Nam June Paik's Broome Street studio. This option is still useful but only short to medium term storage can be viable because of budget restrictions and the problem of obsolescence. For example, Nam June Paik was most concerned with preserving the original look and feel of his pieces. For *TV Garden*

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(Figure 7), originally created with CRT monitors, even if the monitors were stored - and that could be at high costs - they would not be able to operate for many years. One solution would be to store empty monitor casings and dissimulate new screens inside when exhibited in the future. The same is true for encoded information; just think of precious documents many people still have trapped onto floppy discs at home. It is pointless to preserve components in original formats if the machine to decode the signal is no longer available.

Migrating an artwork is to upgrade its medium to a contemporary standard, which can change the look and feel of the

work. Despite this drawback, it is a necessary operation when encoded information is brought into museums. The only way known today to avoid the loss of material due to obsolescence is always to keep the media on a current format. This is a critical necessity for masters acquired by institutions. Migration can also serve as a preventive conservation tool; regularly transferring video signal onto new stock can overcome problems with material deterioration. An example where this strategy would incur much loss of meaning would be in the case of a slide projection where the projector, with its characteristic sound and visuals, was a prime element of the installation. A completely different work would result from a migration to digital format.

Emulation is seen at the moment as one of the most promising conservation strategies for time-based media installations. To emulate is to devise a way of imitating the original look of an artwork by completely different means. In the case of hardware, it is rebuilt to imitate the impression conveyed by the original work. Replacing cathode-ray tubes by new screens in original casings, as mentioned earlier, falls under this category.

Finally, there is reinterpretation. This last strategy takes the greatest liberties with the original. A quite radical solution, it consists of reinterpreting the work each time it is re-created, applying the concept of the work to contemporary time and place. It can of course be a dangerous technique when not warranted by the artist but might be the only possible way to show certain performances or installations. Another type of reinterpretation can be seen with open source art. For instance, Cory Archangel has created artworks by hacking into old Nintendo game cartridges. *I Shot Andy Warhol* is based on the light-gun game Hogan's Alley, on which Archangel has changed the graphics. The artist releases his code on the internet and invites users to build their own games by altering the code. This is all part of his creative process, as



Figure 6. Nam June Paik's  
Broome Street Studio, NYC, 1999  
©David Heald

Figure 7. Nam June Paik, TV Garden, 1974,  
1982 installation at the Whitney Museum  
of American Art  
©The Estate of Peter Moore



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he feels it is important to give back, because everything he learned about programming came from homebrew culture.

### The Road Towards New Standards: International Collaborative Projects

Four international collaborative projects aiming at developing new preservation strategies for time-based media artworks will now be presented: The Documentation and Conservation of the Media Arts Heritage project (DOCAM), The Variable Media Network, Media Matters, and Inside Installations. A list of web addresses for these projects and for online resources can be found at the end of this text.

#### DOCAM

In addition to working with the Guggenheim, the Daniel Langlois Foundation has also formed its own research alliance, and the Documentation and Preservation of the Media Arts Heritage project was created in 2005. This five-year project set out to conduct multidisciplinary research to address the problems of preserving technological art heritage not only in the field of visual arts, but also performance art and architecture. Reaching out to museum professionals, academic researchers, technologists, and students, the project promotes a transfer of knowledge, in part through national and international conferences, and is also very active in the Canadian academic scene in Quebec and Ontario. Each year, several research assistantships are granted to graduate students, who in turn may be involved with the different research committees. A very rich semester-long graduate seminar was also developed by DOCAM and has been taught in two major universities in Montreal.

The ultimate objective of the project is to produce tangible, lasting results such as the implementation of new university programs and a series of new tools, like a bilingual thesaurus, a technological timeline, a catalogue structure adapted for works of art with technological components, and a best practices guide for “key stakeholders.”

#### The Variable Media Network

The Variable Media Network, from which we have already seen the four proposed strategies, argues in favour of new defining terms for media art. Many contemporary artists tend to not limit themselves to one single medium in the creation of an artwork. The use of familiar categories such as film, photography, and video would therefore be too restrictive. To overcome this boundary, a medium-independent classification was created in which descriptions of works of art are mutually compatible; these descriptions are referred to as behaviours. This entails that rather than solely looking at physical components, we evaluate how these components produce meaning — how an artwork behaves regardless of its medium. It also offers the possibilities to document precisely less tangible elements of installations.

The Variable Media initiative also developed its own form of the artist’s interview, the Variable Media Questionnaire. It is an “interactive form linked to a database used to establish curatorial and conservation guidelines for variable media

art.” While not meant to be exhaustive, it is intended to spur questions which must be answered in order to capture the artists’ desires about how to preserve their work once the original medium has expired. In a certain sense, it serves as an ethical will.

#### Media Matters

Media Matters, formed by teams from the New Art Trust, MoMA, SFMOMA, and the Tate, aims at “establishing best practice guidelines for the care of time-based media works of art.” The project recognizes that the installation of these pieces requires new skills and areas of collaboration between institutions, and wants to raise awareness of these requirements while providing practical resources to answer the need for agreement among museums worldwide. Started in 2003, it is a two-phase project: Phase one addressed issues related to the loan-in/loan-out process, and a set of guidelines and templates was produced and made accessible to institutions and to the general public through the Tate’s website. Phase two, focuses on the acquisition process. The deliverables, which are hoped to be up on the website at the end of 2007, are again templates. A frequently asked questions section will also be included to initiate a dialogue, facilitate communication, and take care of any overlooked issues. Special emphasis in this phase is placed on the documentation of pieces at the moment of acquisition.

#### Inside Installations

Inside Installations: the Preservation and Presentation of Installation Art, a European funded three-year project initiated in 2004, is based on 30 case studies. The central question is: “How can we best safeguard these expressions of contemporary visual culture [here meaning installation art in general] so that they can be experienced by future generations?” Because at present time there are no agreed standards for the care and management of installation art, and because different stakeholders may have varying views about what defines successful conservation in these cases, this project also wants to develop tools and guidelines for good practice. For example, installation guidelines may be accompanied by step-by-step photographs and continuous films in accelerated motion, of the setting-up and dismantling of the installation.

As with the previous three projects presented in this section, the results from Inside Installations are intended to be shared with the conservation community through the project’s website and a series of seminars, which are entirely available online for viewing in the online events section of the Tate’s website.

### Conclusion

The quest for solutions must be a collective effort; we have to engage in interdisciplinary collaboration in order to devise viable new strategies, find answers, even if temporary, and eventually develop standards. The need for communicating experience and information seems obvious since conservators who are confronted with the same problems are responding in quite different ways. This is why most proj-

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ects suggest the elaboration of networked databases for art created with non-traditional materials, tools, and technologies. Conservators have to be open-minded and seek and accept the guidance of artists. It is crucial for museums and collectors to understand what is important to the presentation and conservation of an artist's work. And above all we must thoroughly document the pieces by all means possible ...and not omit to make hard copies as well. If time is the matter out of which these works of art are created, it is also, paradoxically, the main factor causing their loss.

"Everybody can make this piece, but I sign.  
When I die, it is your problem to find out which is original.  
You have two originals: one piece and a better quality copy."

-Nam June Paik

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### ONLINE RESOURCES

A short selection of useful online resources :

DOCAM: [www.docam.ca](http://www.docam.ca)

Click on Resources for a comprehensive list of categorized online resources

The Variable Media Network: [www.variablemedia.net](http://www.variablemedia.net)

Media Matters: [www.tate.org.uk/research/tateresearch/majorprojects/mediamatters](http://www.tate.org.uk/research/tateresearch/majorprojects/mediamatters)

Inside Installations: [www.inside-installations.org](http://www.inside-installations.org) and [www.tate.org.uk/research/tateresearch/majorprojects/inside\\_installations.htm](http://www.tate.org.uk/research/tateresearch/majorprojects/inside_installations.htm)

International Network for the Conservation of Contemporary Art (INCCA):  
[www.incca.org](http://www.incca.org)

Netherlands Media Art Institute: Montevideo/Time-Based Arts: [www.montevideo.nl/en/](http://www.montevideo.nl/en/)

Tate Online Events: [www.tate.org.uk/onlineevents/](http://www.tate.org.uk/onlineevents/)

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