Collaborations in Conserving Time-Based Art

A Summary of Discussion Group Sessions of a Colloquium
Co-organized by the Lunder Conservation Center
Of the Smithsonian American Art Museum and National Portrait Gallery
And the Hirshhorn Museum and Sculpture Garden

May 2010

Smithsonian Institution

Office of Policy and Analysis
Washington, DC 20013

Foreword

In January 2010, the Office of Policy and Analysis (OP&A) was approached by members of the Time-Based Art Working Group to assist with conceptualizing and facilitating a series of group discussions attached to the planned symposium "Collaborations in Conserving Time-Based Art." OP&A was also asked to provide a written report summarizing the main points raised in these sessions, which brought together curators, conservators, artists, archivists, and other experts from the Smithsonian and external organizations to ponder the emerging challenges of acquiring, documenting, displaying, and preserving art created in non-traditional media such as film, video, and computer software.

For several years, and especially since the arrival of Secretary G. Wayne Clough in the summer of 2008, the Smithsonian has been ramping up efforts to address the evolving opportunities and challenges posed by the digital age. Many, although not all, of the issues raised in the "Collaborations in Conserving Time-Based Art" colloquium closely parallel those raised in wider pan-Institutional discussions of digitization and digital access: how to ensure adequate storage space for growing digital assets; how to recover information recorded on obsolete (digital and non-digital) platforms; how to systematize workflows and communications across technical and content areas that have traditionally operated at arm's length; how to train new generations of specialists with combined content and technical skills; how to deal with new legal and ethical issues of accessibility, now that the Web has made it possible to share Smithsonian assets with the world at practically no marginal cost.

Many individuals are owed thanks for contributing to the successful conduct of these discussion sessions and the completion of this report. The members of the Time-Based Art Working Group—Anne Goodyear of the National Portrait Gallery (NPG), Jeff Martin of the Hirshhorn Museum and Sculpture Garden (HMSG), Sarah Stauderman of the Smithsonian Institution Archives (SIA), Eleanor Harvey of the Smithsonian American Art Museum (SAAM), Gwynne Ryan and Susan Lake of HMSG, and Allison Jessing of NPG—put in many hours planning the event and reviewing drafts of the report. Senior Social Science Analyst James Smith and Research Scholar Claire Eckert helped the Working Group to conceptualize the sessions; collected and analyzed the resulting notes and recordings; and wrote the report. They also facilitated discussion tables at the event, along with their OP&A colleagues Whitney Watriss, David Karns, Lance Costello, and Jarrid Green. Finally, thanks go to the dozens of colloquium discussion participants who openly shared their concerns, experiences, and recommendations, and whose insights are reported in this document.

Carole M.P. Neves

Director, Smithsonian Office of Policy and Analysis

Executive Summary

From March 17–19, 2010 the Lunder Conservation Center (overseen jointly by the Smithsonian American Art Museum and the National Portrait Gallery) and the Hirshhorn Museum and Sculpture Garden coordinated a symposium titled "Collaborations in Conserving Time-Based Art." It addressed a growing concern within the Smithsonian, and in the field of contemporary art more generally, about the need for long-term preservation strategies for time-based art. The symposium was attended by approximately 200 people, and during its webcast on Thursday, March 18, 4800 people viewed the proceedings online.

To organize this event, a team of curators, conservators, archivists, and technical experts joined forces to create the Smithsonian's Time-Based Art Working Group. While cognizant of the activities of the Smithsonian's Digitization Program Advisory Committee (see https://collab.si.edu/Digi/default.aspx), the Working Group believes that current digital data preservation plans at the Smithsonian have not fully integrated concerns related specifically to the preservation of time-based art.

The Working Group feels strongly that a pan-Institutional standing committee to study the preservation of time-based art should be formed. Further, it sees an opportunity for the Smithsonian to develop an interdisciplinary center of excellence that can serve as a resource and model for our colleagues both within and outside the Institution.

The Working Group recommends the following:

- Creation of a pan-Institutional Standing Committee on Time-Based Art, comprised of curators, conservators, and technical professionals and with representation from each art-collecting unit, to address resources needs and protocols for the long-term preservation of time-based art. This Committee should be responsible for the implementation of the other recommendations.

- Establishment of Institution-wide protocols for collecting time-based art. Such protocols might mandate:

    o The completion of questionnaires documenting the work at the time of creation/acquisition;

    o Interviews with artists by curatorial, conservation, and exhibition staff—for example, to determine artistic intent and expectations for long-term preservation and display;

    o The creation of adequately budgeted plans for long-term maintenance of such art; and

- o   Other requirements developed by the proposed Standing Committee.

- Implementation of an Institution-wide survey of time-based art to evaluate the condition, risks, value, and preservation needs associated with individual works.

- Creation of a pan-Institution time-based art storage plan that adequately addresses both physical and digital storage needs.

- Creation of "digital curator" positions[1]—hybrid professionals with expertise in both art and technology—who can oversee digital preservation activities (including, but not limited to, emulation and migration efforts) with an eye to ensuring continued artistic and technical integrity.

- Commission of a study on whether and to what extent the preservation needs of time-based art can be accommodated by current Smithsonian Digital Asset Management (DAM) systems, and in what ways new strategies might be developed to accommodate these needs.

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[1] The term "digital curator" has come into widespread use in this field and will be used for convenience in this report. However, the Working Group considers it an imprecise and perhaps misleading term that may be in need of rethinking.

I.   Introduction

A series of discussion groups were held on the afternoon of Friday, March 19, 2010, the last day of "Collaborations in Conserving Time-Based Art," a two-and-a-half-day colloquium co-organized by the Lunder Conservation Center (administered jointly by the Smithsonian American Art Museum and National Portrait Gallery) and the Hirshhorn Museum and Sculpture Garden. These discussions explored the challenges of conserving time-based art, with a particular emphasis on technology-based media such as film, video, and digital/computer art. While other parts of the colloquium were open to the public, the Friday afternoon proceedings were by invitation only. They brought together a wide range of Smithsonian and external curators, conservators, registrars, archivists, exhibitions personnel, technology specialists, and artists.

The afternoon consisted of three sessions that lasted approximately one hour each. The first two sessions were conducted in small break-out groups—seven groups with 6-8 people in each, plus an Office of Policy and Analysis (OP&A) facilitator. The final session brought everyone together to report on their break-out group discussions and informally share insights.

OP&A worked with the colloquium planning committee to structure the afternoon's discussions and to facilitate debate and dialogue. This report is a summary of the lively discussions that took place.[2]

At the outset, the issue of terminology should be briefly discussed. The term "time-based art" refers broadly to works that are dependent on time for the maturation or completion of the experience. Relevant media include film, video, digital, audio, Web, performance, and installation art, and some types of kinetic sculpture. The term does not precisely fit the subject of the discussion sessions, which did not cover performance art or kinetic sculpture. Other terms in common use that might be considered substitutes for "time-based art" as conceptualized in the colloquium include "variable art," "time-based media art," and "electronic art." However, the discussants recognized that the issue of terminology is problematic; the same term might be used differently by different speakers and understood differently by different listeners. In this report, we will use the term "time-based art" for convenience.

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[2] The presence of a particular point in this report means only that the point was raised by one or more participants. It does not imply endorsement of that point by the colloquium's organizers, the other participants, or the Office of Policy and Analysis.

II.   Activity Areas

Participants were asked to focus on four specific areas of activity in the time-based art life cycle:

- Acquisition;

- Documentation;

- Installation, display, and access; and

- Preservation.

In practice, of course, these areas are fundamentally integrated at many levels, and cannot be addressed in isolation. Their presentation as distinct categories should be seen as a convenient fiction for structuring both the colloquium discussions and the results presented in this report.

1. Acquisition

Time-based artworks have often been acquired by museums without adequate planning and budgeting for their long-term maintenance. With some works, particularly software-based art, a museum must expect to spend as much or more on maintenance as it does on initial acquisition. As one participant put it, when you buy a work of software-based art, "you are buying a [living] world, not a dead object, and it requires feeding." Without such "feeding," an artwork can quickly become non-functional.

At present, a large disparity exists between funds devoted to the acquisition of time-based art, and funds devoted to their conservation. This may to some extent reflect a lack of awareness of the maintenance needs of such artworks; but it also reflects donors' and funders' priorities. As one participant noted, it is difficult to "sell" maintenance to funders: "'I gave you the money to keep this artwork alive' is not as sexy as 'I gave you this artwork.'"

One participant suggested that because of this bias, the responsibility to ensure that maintenance needs are considered at the time of acquisition may ultimately fall to the community of artists itself. Artists may have to establish norms for the expected long-term treatment of their works; they may have to individually and collectively mandate that sales and gifts are contingent upon the existence of funded plans to keep their works functioning. On the other side, museums may simply have to start thinking in terms of acquiring less art, and maintaining what they do acquire to a higher standard.

Given that artists will not be available indefinitely to answer questions about the meaning, preservation, and display of their work, it is advantageous, when possible, to create a primary source record of artists' intentions at the time of acquisition. For example, what is fundamental to the

artwork to maintain its integrity? To create such records, participants recommended that the artist, or individuals who have insight into the artist's practice, be formally interviewed at the time of acquisition by conservation, curatorial, and exhibition staff members. In such interviews, open-ended questions, perhaps about the message and essence of the artwork, should be privileged, as it is difficult to foresee what information will be relevant to future generations.[3] Asking the artist to fill out a questionnaire to clarify artistic intent, use of materials, and the message of the artwork was also suggested.

Information obtained at the time of acquisition should not pertain only to artistic intent, but should also cover the technical nuts and bolts of a work—the technologies used, the source codes for software, the specifications for replacement parts, and so on. This may involve interviews or discussions with artists' technical assistants, as well as with artists themselves. This will enable the acquiring organization to have the knowledge and documentation necessary to keep the work functioning as intended.

2. Documentation

Appropriate documentation is crucial to all aspects of time-based art conservation and accessibility. However, specific documentation standards for time-based art do not currently exist, and the major collections management systems now in use[4] are geared toward works in traditional artistic media, and do not explicitly reflect the needs of time-based art.

Participants were unsure whether it is realistic to strive for uniform documentation standards for time-based art. So much diversity exists in the time-based art world that it may be too much to expect *any* given set of documentation fields to cover it all; some critical documentation for some works will probably always have to be recorded as qualitative annotations appended to an object record.[5] However, there was more optimism that useful standards might be devised within relatively small communities of practice where a relatively high degree of homogeneity exists. For example, organizations that hold works by a particular, significant artist might work together to devise documentation standards that adequately capture the essential information for her works.

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[3] One participant suggested that Smithsonian art museums might consult with the National Museum of the American Indian on this process, as the latter has considerable experience with such interviews (albeit with an emphasis on cultural rather than artistic context). OP&A also has extensive experience with qualitative interviewing in a variety of contexts.

[4] Such as the TMS system used by Smithsonian art museums.

[5] Some participants were surprised (but pleased!) to discover in the course of the plenary session that TMS allows users to append word processing documents to collections records, presumably to deal with this issue of critical information that does not "fit" within the standard TMS schema.

Participants agreed that art museums must avoid insularity when developing systems of time-based art documentation. Even if ultimately every museum must deal with a unique set of artworks and documentation needs, all can learn from the experience of other museums that have confronted similar issues. Art museums might also look to other fields for models and lessons. For example, the Smithsonian Astrophysical Observatory (SAO) has successfully confronted astronomical imaging documentation issues that may overlap to some extent with the time-based art challenges faced by art museums.

Colloquium participants included both archival specialists and art museum staff, and the issue of archival versus art museum documentation standards was raised. Participants agreed that the two fields have fundamentally different documentation challenges, which make archival documentation standards somewhat problematic as models for time-based art. The primary difference is that archivists deal with large quantities of relatively homogeneous objects, while art museums deal with individual, highly unique objects. Workable documentation standards for time-based art need to reflect the specific needs of the latter.

Documentation standards developed for time-based art in Smithsonian collections need to be "translatable" into the TMS collections management system used by the Institution's art museums. One participant provided the group with an update on the status of TMS development, noting that Rosemary Fallon of the National Portrait Gallery was representing the Smithsonian on a Conservation Committee formed by Gallery Systems to develop the next version of the TMS conservation window, and would be the person to contact to pass along concerns or suggestions.

Participants noted that while TMS certainly has shortcomings for documenting time-based art, so does any other off-the-shelf collections management database. These systems were simply not designed with such non-traditional artwork foremost in mind.

3. *Preservation*

Long-term preservation was an acute concern for some participants, who noted that time-based art typically needs constant attention and care. The neglect often suffered by works in storage can quickly lead to a loss of functionality. For example, an undisplayed work may be "rediscovered" only after its storage medium or format code has become obsolete, and recovering it may require technical skills or technologies that are difficult to access. In some cases, artistically relevant elements of the original may be lost. In extreme cases, the work itself may not be recoverable at all. To avoid this fate, either ongoing migration to new technology platforms or maintaining the capacity for emulation is necessary.[6]

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[6] Migration refers to the ongoing transfer of data to new platforms as old ones become obsolete. Emulation is more complex. To use a definition by conservator Caitlin Jones: "To emulate a work is to devise a way of imitating the original look and feel of the piece through completely different means. The term can be applied

Far too often, preservation involves retroactive efforts to repair or reconstruct works that have already suffered some loss of functionality, rather than pro-active efforts to manage risks and limit initial damage. This is because, as noted below, care tends to be "event"-driven, rather than dictated by strategic priorities. As a short-term corrective, one participant argued that a systematic assessment of Smithsonian, national, and international time-based art collections is needed, to evaluate the risks, condition, and value associated with individual works. The point of such an exercise would be to compile a strategic list of "endangered" works that could be prioritized for conservation treatment.

In the longer run, there must be a shift toward thinking of conservation as an ongoing, pro-active process. At regular intervals, each work, whether in storage or on display, should be systematically assessed to determine the risks that it faces. Strategies can then be devised to limit any threatened loss of functionality before it happens.

Participants also stressed the diversity of time-based art media, and how they need to be addressed on their own terms. Software-based digital art, while coming in many varieties and difficult to generalize about, was on the whole considered to be more of a challenge than film- or video-based works, in light of software's relative complexity and of rapid changes in formats, operating systems, computing hardware, and the software itself. Art that incorporates three-dimensional technologies such as CRTs and projectors presents a different set of challenges. Maintaining the functionality of hybrid installations that may combine equipment no longer commercially manufactured with data in obsolete media may be the ultimate preservation challenge.

Digital data management was singled out for specific comment. Participants complained that every Smithsonian unit seems to approach this area in a different way, and with minimal coordination. One participant suggested that the minimum requirement for digital data preservation should be to get data off storage media such as hard drives and CDs and into a secure server environment. Another argued for the creation of "digital curator" positions—hybrid professionals with expertise in both art and technology—who can oversee digital preservation activities (including, but not limited to, emulation and migration efforts) with an eye to ensuring continued artistic and technical integrity.

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generally to any refabrication of an artwork's components, but it also has a specific meaning in the context of digital media, where emulation offers a powerful technique for running a program from an out-of-date computer on a contemporary one." For example, if an artwork was created on media platform A, which is three generations out of date, migration would involve transferring the work three times, to platforms B, C, and finally current platform D. Emulation, by contrast, would typically entail preserving sufficient elements of the platform A media environment that the work could, if desired, be reproduced in platform D (or any current platform) without the intermediary steps.

To some extent, the technical issues of data management and preserving three-dimensional objects are shared with collecting organizations outside of the art world. However, a unique consideration faced by art museums concerns maintaining artistic intent once an artist has turned his work over the care of a stewardship institution. Museums need to ensure, preferably at the time of acquisition, that they have a good understanding of artists' goals and what they consider important to conserve in an artistic sense. That understanding should, as far as possible, drive technical preservation decisions. For example, for some works, the look and feel of the original medium may be artistically relevant. For others, the main artistic consideration might be the "story" that the images tell. Knowing which is which can inform the preservation efforts appropriate to different works.

Another example: When formats or storage media face obsolescence, time-based art is typically migrated to newer, accessible platforms, with the inevitable result that multiple versions of a single work are created. Which of these can be ethically considered an "original" artwork? Only the (inaccessible) original version? Only the latest, accessible version? All versions?

Finally, ensuring adequate virtual (for digital content) and physical (for artifacts connected to time-based art) storage was mentioned as an important ongoing concern. This encompasses both the development of standards for long-term time-based art storage, and the provision of the necessary bytes and square feet of space. The latter is, of course, an issue with which every collecting organization must continually grapple. The recent opening of the Office of the Chief Information Officer (OCIO) data center in Herndon puts the Smithsonian in a relatively good position for now in terms of digital storage space, but the constant deluge of data created by Smithsonian units guarantees this respite will be short-lived. The state of physical storage varies across Smithsonian units, which underscores the need for strategic, pan-Institutional planning.

4. *Installation, Display, and Access*

Several participants noted that conservation efforts for time-based art tend to be tied to discrete "events" such as acquisition, loans, and above all, exhibition. Works that are displayed are cared for; those that are not often become invisible from the perspective of conservation.

Intellectual property issues were raised in the context of display and access. In some cases, it may be unclear whether a museum owns a particular work in the fullest sense,[7] or instead effectively owns a right to make that work accessible under certain conditions. To avoid such ambiguity, the terms under which a work may be displayed or otherwise made accessible should be contractually stipulated at the time of acquisition. In some cases, however, negotiating the boundary between what the artist controls and what the museum controls may be an ongoing process; museums may need to revisit relationships with some artists periodically, in light of changes in circumstances or technologies.

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[7] I.e., To display or otherwise dispose of without restriction.

One participant in a break-out group discussed a frustrating experience with a time-based art installation that required an extensive process of trouble-shooting before it could be activated. This suggests that technical issues pertaining to display need to be fully resolved when a work is received.

Participants discussed the importance of including the artist in the installation process whenever this is possible, and raised the idea of bringing in a "proxy artist" when it is not. Because installation is carried out in part by technical staff who may not have a grasp of the aesthetic issues, the artist or proxy artist is needed to provide aesthetic perspective—to address the issues of, as one participant put it, "how red is 'red,' and how blue is 'blue'?"

An important safety and preservation issue posed by the public display of some types of time-based art was raised in the plenary discussion. The equipment (for example, projectors and television sets) on which such works are created is often consumer-grade gear that was not designed to run for hours on end, and as such equipment ages, the risk of self-ignition grows. Thus, it is advisable to have heat or smoke detectors in close proximity to at-risk installations, with connections to circuit breakers that can shut down the installation immediately if necessary.

III.   An Underlying Theme: Collaboration

In addition to the four activity areas explicitly designated for discussion, a pervasive underlying theme in the afternoon's discussions was the need for greater coordination of activities and initiatives—within individual Smithsonian units, across Smithsonian units, with external organizations, in the broader community of practice, and across professional boundaries.

1.   *Within Units*

Participants noted that, within individual Smithsonian units, workflows that reflect the specific needs of time-based art are not well-established. It is not always clear who is responsible for which elements of acquisition, documentation, installation, and preservation, and gaps in the workflow may exist. Rarely (if ever) do units have personnel assigned to develop and oversee key aspects of time-based art workflows as part of their job description. Instead, a large part of the burden is typically assumed by personnel who in essence volunteer to take on time-based art responsibilities on top of their primary professional duties.

Addressing the unique challenges posed by time-based art requires collaboration across a range of skill sets and across traditional museum departmental boundaries: art historical scholarship, information technology (IT), information management, conservation, collections management, and so on. However, much of the collaboration that currently exists tends to be opportunistic and ad hoc. Participants agreed that the efforts of scattered individuals, collaborating in an ad hoc fashion, are not adequate to address the long-run challenges of time-based art conservation, and that a more integrated approach is called for. Systematic collaborative processes need to be established to create time-based art "teams" that span functions and can ensure this art is managed appropriately throughout its life cycle. One participant made the point that it is not so important exactly *who* (registrar, conservator, curator, archivist, collections manager, etc.) is responsible for steps X, Y, and Z in the process, because traditional job titles are increasingly irrelevant in the rapidly evolving world of time-based art management. Rather, it is important only that responsibility for steps X, Y, and Z is clearly assigned to someone who has, or is willing to develop, an appreciation of the specific needs of this type of art.

An obstacle to progress is that a commitment to collaboration and information-sharing across functional areas is not currently a part of the organizational culture at most Smithsonian units. Steps must be taken to deepen this commitment, not only through the creation of grassroots forums for cross-functional exchange, but also through changes at the level of formal management, such as putting incentives for collaboration in staff performance plans.

2. Across the Smithsonian

Shortcomings in collaboration and information sharing at the unit level are amplified at the pan-Institutional level, where fewer opportunities for exchange exist and the competing-fiefdoms mentality is more deeply entrenched. However, units need to cooperate to effectively address the challenges of time-based art conservation—not only in terms of information-sharing and coordination of efforts, but possibly in terms of sharing equipment and personnel.[8] For example, while it might not make economic sense for every art museum to have its own "digital curator" at this time,[9] a smaller number of "digital curators" with joint appointments across two or more units might be an efficient arrangement.

Participants stressed the need to articulate common problems, priorities, opportunities, and goals with respect to time-based art across units, and to leverage central infrastructure in areas such as storage space, IT expertise, and computing infrastructure. While the colloquium itself was seen as a promising first step, such collaboration must be sustained over time if it is to make a difference. One participant recommended the establishment of a permanent, pan-Institutional Standing Committee on Time-Based Art to brainstorm strategies in areas such as technology, human resources, storage, and IT infrastructure. For example, such a group might conduct an inventory of relevant equipment that exists across the Institution, identify critical technological gaps, and develop a pilot system for sharing equipment among units. Citing the current administration's enthusiasm for cross-unit collaboration, several participants also talked about a pan-Institutional center that would either focus on time-based art conservation, or incorporate this issue within a broader framework (such as digital data management or the concept of "endangerment" as applied not only to biological species but to cultural and artistic assets).

3. With External Organizations

The Smithsonian is a microcosm of the external world, where relevant resources and knowledge are scattered and efforts are not usually well-coordinated. Greater collaboration, information- and asset-sharing, and coordination among organizations will be critical to address the challenges identified in the colloquium.

For example, in addition to the informal exchange that takes place through personal connections and grassroots workshops, there is a need for more systematic information-sharing mechanisms, so

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[8] One participant suggested that the resources for addressing most of the problems raised at the colloquium probably already exist within the Smithsonian, but there is no easy way to find where they are and no formal mechanism for sharing them across units.

[9] This is presented as an illustrative example; the issue of whether the current workload would justify a "digital curator" at any (or every) Smithsonian art museum was not discussed, as such, at the colloquium.

important lessons learned at one organization can be effectively disseminated to others. This could mean a website with features such as online discussion forums, links to online resources, contact information for relevant individuals and organizations, and databases where collective knowledge of time-based art conservation is systematized and stored.

One participant stressed that collaborative efforts and information-sharing mechanisms need to avoid the common pitfall of focusing excessively on high-level issues and challenges. Rather, nuts-and-bolts problem solving should be an important thrust. Her point was that some recognized problems (like the risk of losses of works in certain obsolete media) need less theorizing and more immediate action.

4. *Within the Broader Community of Practice*

It is not just art museums and similar cultural organizations that have something to offer. The broader time-based art community of practice also includes artists, engineers and technicians of both digital and analogue technologies, private collectors, philanthropists, software firms, the film and television industries, and many others. Efforts should be made to invite these parties into the dialogue as well.

One participant noted the impending demise of both the generation of technicians who developed the technologies that underlie many time-based art works, and the generation of artists who defined much of the time-based art genre. In light of this, he believed it was time to undertake a massive project to document the knowledge, memory, narrative, and experience of these pioneers. Such an investment now could yield a great future payoff in terms of documenting both the technical knowledge necessary to recover/migrate time-based art and the artistic intent of these works' creators.

5. *Across Professional Boundaries*

Time-based art conservation is increasingly a specialized area that requires a mix of IT, art history, information science, conservation, and other skills. Yet there are very few formal training programs for time-based art conservation specialists, and the prospect of many more coming online in the near future is remote. To be sure, some individuals will cross-train in the appropriate fields, whether formally (for example, earning an undergraduate degree in computer science and a master's in art history) or informally. And in some distant future, "digital curators" with cradle-to-grave responsibility for the management of time-based art may be standard job descriptions at art museums. But for the foreseeable future, a large part of the solution will have to involve finding ways for professionals in the relevant fields to communicate and work constructively with each other across professional boundaries.

At present, such synergistic cross-professional collaboration is in its infancy. For example, many of the people at the Smithsonian with IT skills that might be extremely valuable for curating digital art

have essentially no contact with people in the art museums. Likewise, some of the OCIO-coordinated digitization working groups do not have adequate representation from the art museums, and are going about their deliberations without explicit consideration of the unique IT needs of the art world.

Appendix I: Bibliography

This abbreviated selection of writings spans the two decades during which the preservation of time-based art has become a growing concern to cultural institutions that collect such artworks.

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Appendix II: Resources

The *DOCAM Conservation Guide*, prepared by the DOCAM Research Alliance Conservation and Preservation Committee, is a practical guide to help museum professionals choose the best conservation approach for works containing technological components. The guide is based on the results of research conducted as part of DOCAM case studies and also takes into account various existing conservation models. http://www.docam.ca/en/conservation-guide.html

Electronic Arts Intermix is a resource for finding variable media artists, as well as providing resources on preservation and advocacy. The *EAI OnlineResource Guide* for the collection, display, and preservation of media art lays out the issues involved in conserving time-based art. Particularly recommended are the "basic questions" sections, and the condition reports. http://www.eai.org/eai/index.htm

The *Electronic Media Group* of the American Institute for Conservation provides a forum for the conservation of artifacts falling under the time-based media rubric. http://cool.conservation-us.org/coolaic/sg/emg/index.htm

Forging the Future "refines and distributes free and open-source products that boost access and aid in preservation" of our digital heritage. http://forging-the-future.net/

Independent Media Arts Preservation (IMAP) is committed to the independent artist working in with the variable medium. It provides preservation resources, classes, and advocacy. http://www.imappreserve.org/

Matters in Media Art is a "multi-phase project designed to provide guidelines for care of time-based media works of art." http://www.tate.org.uk/research/tateresearch/majorprojects/mediamatters/

The *Variable Media Initiative*, a seminal project, pairs artists with museum and media consultants to provoke comparison of artworks created in ephemeral mediums. The initiative aims to define each of these case studies in terms of medium-independent behaviors and to identify artist-approved strategies for preserving artwork with the help of an interactive questionnaire. http://www.variablemedia.net/e/welcome.html

Appendix III: Colloquium Schedule

Wednesday, March 17

6:00 PM: Opening reception and lecture

Location: Hirshhorn Museum and Sculpture Garden

Introductory remarks by **Richard Koshalek**, Director, Hirshhorn Museum

Re: Presenting the Moving Image: Time-Based Art in the Museum and Other Spaces

John Hanhardt, Senior Media Arts Curator, Smithsonian American Art Museum

Film, video, and digital media have played a central role in the art of the Twentieth Century. It is important that we see that history as a large and integral part of a dynamic and interconnected art world. As we begin this Conference on Conserving Time-Based Art it is important to both look back to where and how artists originally presented their work and to creatively address the work of new and emerging artists. The challenge to curators and conservators is to establish a practice that responds to representing, in museum gallery spaces and collections, the full range of historical and contemporary art works.

Thursday, March 18 (Program webcast live)

9:30-10:15 AM: Introductory session

Location: McEvoy Auditorium at the Smithsonian American Art Museum and National Portrait Gallery

Opening remarks by **Jeff Martin**, Contract Conservator for Time-Based Art, Hirshhorn Museum; **Dr. Eleanor J. Harvey**, Chief Curator, Smithsonian American Art Museum; and **Dr. Brandon Fortune**, Acting Director, National Portrait Gallery

The Eventful Artwork

Jill Sterrett, Director of Collections and Conservation, SFMoMA

With a time-based installation, parts do more than come together to form a whole. When the whole emerges as art, it has a behavior that brings it to life. It is in mapping behavior to parts--parts to behavior--that a refresh of traditional museum methods is required. There is a wide interpretive zone between the factual accounting of an artwork and its realization in an exhibition, and within this zone the art is best served by broad-based, expert collaborations. What kind of collaborations are we

actually creating? Are we being sufficiently open-minded and self-critical as we form new partnerships? Are our efforts serving the unique challenges of each artwork?

10:30 – 12:00 PM: Session I

Location: McEvoy Auditorium at the Smithsonian American Art Museum and National Portrait Gallery

Collaborative Work in Conserving Time-Based Works at MoMA

Glenn Wharton, MoMA

There are approximately two thousand video, performance, and computer-based works at MoMA. Conserving this time-based collection requires broad technical knowledge, a range of specialized skills, and a core understanding of conservation principles as they apply to new artforms. This presentation will provide an overview of the policies and procedures in place to help insure the future of these works, with a focus on the collaborative nature of their implementation.

Strategies and Challenges in Caring for Digital Moving Images and Sound

Chris Lacinak, Founder and President, Audiovisual Preservation Solutions

Digital file-based audiovisual content is pervasive. The decisive shift from analog physical media to file has created new challenges for accessioning and managing time-based content for preservation and access. Chris will discuss these overarching strategies and challenges, and provide examples of how these challenges have been navigated in his collaborations with MoMA, NYU and other organizations.

12:00-1:30 PM: Lunch break

1:30 - 3:00 PM: Session II

Location: McEvoy Auditorium

Modeling the Team Approach while Caring for Time-Based Media at the IMA

Richard McCoy, Associate Conservator of Objects & Variable Art , Indianapolis Museum of Art

Richard McCoy is Assistant Conservator of Objects at the Indianapolis Museum of Art, where he conserves artworks across all areas of the collection. McCoy's research extends beyond the technology and structure of artworks to include artistic intent and execution as it relates to the preservation of contemporary art. He will be discussing the IMA's team-based work in conserving time-based art works in the museum's collection.

Conservation of Video Art in The Netherlands

Ivo van Stiphout, artist/audiovisual specialist

Ivo van Stiphout is an artist and audiovisual specialist who has worked in the preservation of video art since the early 1990s. He will talk about the ongoing projects in the Netherlands to conserve this type of art.

3:00 - 3:15 PM: Break

3:15 – 4:45 PM: Session III
Location: McEvoy Auditorium

Case Study: Paul Sharits' SHUTTER INTERFACE

Andrew Lampert, archivist, Anthology Film Archives and **John Passmore**, archivist, Anthology Film Archives

SHUTTER INTERFACE (1975) by Paul Sharits is a 4-projector "locational" installation work that was restored by Anthology Film Archives in 2009. After re-premiering at Greene Naftali Gallery in New York City the piece has received numerous accolades and much renewed interest.   Anthology and Greene Naftali have collaboratively created an edition of this work so that it can be exhibited and acquired by other institutions; it was acquired by the Hirshhorn Museum in 2010 and will be on view during the colloquium. In this presentation, archivists Andrew Lampert and John Passmore will discuss the complex technical and theoretical challenges of preserving time- based media installations whose conceptual meaning hinges on near- obsolete exhibition formats, and the sometimes tenuous relationship between archival preservation and museum acquisition policies.

4:45 PM: Closing remarks by **Anne Collins Goodyear**, Associate Curator of Prints and Drawings, National Portrait Gallery

7:00 PM: Meet the Artist: **John Gerrard**

Location: Ring Auditorium, Hirshhorn Museum

Gerrard will discuss the complex process behind his stark, realistic works, which re-imagine landscape art and offer meditations on the impact of our habits of consumption. Three of his works will be on view at the Hirshhorn during the colloquium. This event is presented in conjunction with the 2010 Environmental Film Festival.

Friday, March 19

10:30 – 11:30 AM: Tour/Q&A of time-based works

Location: Hirshhorn Museum

During the colloquium, a number of major time-based works will be on view at the Hirshhorn Museum, including three works by John Gerrard; Douglas Gordon's *Play Dead (Real Time)* (2003); Miguel Angel Rios' *A Morir ('Til Death)* (2003); and Paul Sharits' *Shutter Interface* (1975). This informal Q&A will allow participants to discuss the works with staff from the Hirshhorn's curatorial, exhibits, audiovisual, and conservation departments.

12:00-1:30 PM: Lunch break

1:30 – 5:00 PM: Discussion/working groups (by invitation only)

Location: Kogod Courtyard at the Smithsonian American Art Museum and National Portrait Gallery

Appendix IV: Biographies of the Colloquium Presenters

John G. Hanhardt

Since 2006, John G. Hanhardt has been the Senior Curator for Media Arts, Nam June Paik Media Arts Center, Smithsonian American Art Museum. Since beginning his career at the Department of Film the Museum of Modern Art, he established the film program at the Walker Arts Center, and in 1974 became Curator and Head of the Film Department at the Whitney Museum of American Art. In 1996 he was named Senior Curator of Film and the Media Arts at the Guggenheim Museum. His books include *The Worlds of Nam June Paik*, and *Video Culture: A Critical Investigation.*

Chris Lacinak

Chris Lacinak, founder of the New York based consulting firm AudioVisual Preservation Solutions (AVPS), has spent years consulting with Corporate, Government, University and nonprofit moving image and sound archives on a wide array of preservation and access issues. Recent clients include the United Nations, Library of Congress, Museum of Modern Art, Corporation for Public Broadcasting, Stanford University and WITNESS. Chris has been an Adjunct Professor for the NYU Moving Image Archiving and Preservation Masters Program since 2005, and has co-developed and taught courses including Basic Training for Moving Image and Sound Preservation, Digital Preservation, Video Preservation and a Directed Internships course. Chris also lectures, sits on advisory boards, chairs committees and is active in standards forming and relevant organizations including the Association for Moving Image Archivists (AMIA), International Organization for Standardization (ISO), Society for Motion Picture and Television Engineers (SMPTE), Audio Engineering Society (AES) and the International Association of Sound Archives (IASA). He is a contributor to published documents including the Sound Directions Publication, The National Recording Preservation Board Engineers Round Table Study and Digital Audio Task Force, emerging AES audio metadata standards, and international standards on the care, handling and storage of moving image and sound media.

Andrew Lampert

As Archivist of Anthology Film Archives (NYC) Andrew Lampert is responsible for the daily management and ongoing preservation of the moving image and audio collections. He has archivally preserved nearly 150 movies by artists including Stan Brakhage, Bruce Conner, Tony Conrad, Marie Menken, Maya Deren, Carolee Schneemann, Paul Sharits, Michael Snow, Wallace Berman, Robert Breer and many others. Lampert also continues regular programming and special series to

Anthology's quarterly calendar. As an artist, Lampert has widely exhibited at venues including the Whitney Museum of American Art, The Getty Museum, The British Film Institute, The New York Film Festival and elsewhere. He is available for parties.

Richard McCoy

Richard McCoy is Associate Conservator of Objects & Variable Art at the Indianapolis Museum of Art, where he conserves artworks across all areas of the collection. McCoy's research extends beyond the technology and structure of artworks to include artistic intent and execution as it relates to the preservation of contemporary art. His current research includes the examination of interior channels in African Songye power figures, finding new ways to document conservation projects, and raising awareness for conservation projects through the use of web-based technologies. A former Fulbright Scholar to Spain, McCoy studied journalism and political science at Indiana University, Bloomington, and received his MA from NYU's Institute of Fine Arts Conservation Center. He received a Samuel H. Kress fellowship to work at the IMA prior to joining the conservation department staff in 2005. He writes a monthly column for Art 21's Blog entitled "No Preservatives: Conversations about Conservation." No Preservatives seeks to define the conservator's role in the conservation of art in the twenty-first century. Current issues, approaches, and decisions are discussed with a wide variety of cultural leaders.

John Passmore

John Passmore is an archivist and preservationist living in Brooklyn, NY. He holds an MA in Moving Image Archiving and Preservation from New York University, and is currently a Project Archivist at Anthology Film Archives, where he is undertaking the restoration and conservation of a series of 16mm 1970s multi-projector film installations of the artist Paul Sharits. Passmore worked for several years at Smithsonian Folkways Recordings, was a film programmer and festival director at James Madison University, and returns annually to the Telluride Film Festival, where he serves as video inspector and film handler.

Jill Sterrett

Jill Sterrett is Director of Collections & Conservation at SFMOMA, where she has worked since 1990. Jill has also worked at the Fine Arts Museums of San Francisco, the Library of Congress, Philadelphia Museum of Art, and National Library of Australia. She is interested in how collecting and preserving contemporary art calls into question fundamental assumptions underlying traditions of fine art

stewardship, and is committed to the vital collaborations between artists, curators, technical experts, registrars, and conservators that underpin contemporary art conservation practice. Jill has published and taught on the subject of museums, conservation and contemporary art, including as a Fulbright scholar in Portugal.

Ivo van Stiphout

Ivo van Stiphout, lives and works in Amsterdam, the Netherlands. Initially a video artist, he currently works as a video technology specialist in art world. For twelve years, he worked at Montevideo Time-Based Arts (now called The Netherlands Media Institute) on numerous video art productions, as well as traveling exhibitions including "Imago" and "The Second." Ivo was also part of a research team on the preservation of major video art collections in The Netherlands as part of a national project. He teaches at the Sandberg Institute (MA course of the Rietveld Academy in Amsterdam.) Ivo now works as a independent technician and adviser for museums and artists worldwide.

Glenn Wharton

Glenn Wharton holds dual positions at the Museum of Modern Art (MoMA) in New York and New York University. At MoMA he serves as Time-Based Media Conservator, where he cares for video, performance, and electronic collections. He is a Research Scholar in Museum Studies at NYU where he teaches graduate courses on the conservation of contemporary art with a focus on media installations. In addition, Dr. Wharton serves as Executive Director of INCCA-NA, the North American group of the International Network for the Conservation of Contemporary Art. He received his M.A. in Conservation from the Cooperstown Graduate Programs in 1981 and his Ph.D. in Conservation from the Institute of Archaeology, University College London in 2005. He is a Fellow of the International Institute for Conservation and the American Institute for Conservation.