

## Interview with Glenn Wharton

Glenn Wharton is a Clinical Associate Professor in Museum Studies at New York University. From 2007-2013 he served as Conservator at the Museum of Modern Art in New York, where he established the time-based media conservation program for video, performance, and software-based collections. He founded the North American group of the International Network for the Conservation of Contemporary Art (INCCA-NA) in 2006, and served as its first executive director until 2010. His current research is on the life of complex artworks in museums in which he engages contemporary debates around object biographies, intentionality, authorship, and authenticity. Dr. Wharton received his Ph.D. in Conservation from the Institute of Archaeology, University College London, and his M.A. in Conservation from the Cooperstown Graduate Program in New York.

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Interviewers: Crystal Sanchez and James Smith

*Please describe your experience working in the field of time-based and digital art preservation.*

I was not trained to do this; I was trained in archaeological and sculpture conservation. I worked for 25 years in the field before MoMA invited me to perform a survey of the media collections in 2005. When they created the position of Media Conservator in 2007, I was already hooked on this emerging field. The technical and conceptual challenges were fascinating. When they offered me the position I jumped at the opportunity. Back in 2007 there weren't any conservators in the US specializing in media; that has changed to some extent over the last seven years. Now, there are people. I feel like I was grandfathered in to the profession at a moment just before young professionals trained to do this were coming into the field.

*That is a story we have heard from other electronic-media conservators who say that they entered this field having been trained in programs that are more traditional. Do you think there is a need for more formal training in this area?*

There is definitely a need for more formal training in this area. I have thought a lot about this because I am also a professor in Museum Studies at New York University. I will be leaving MoMA in June to accept a full-time professorship there. Training the next generation of conservators is very much on my mind. Unfortunately, in the United States, there are no graduate programs to train media conservators. There are three graduate fine arts conservation programs and there are several media archive preservation programs,

neither of which completely trains their students in the skills and knowledge of media conservation. We are getting closer, but I think what each of these types of programs is doing needs to merge. Four graduate programs in Europe exist that are training media conservators.

What I find lacking in media archive preservation programs, such as MIAP at NYU, are courses on the principles, ethics, history, and theory of art conservation. I don't think there are any core courses on what art conservation is as a field and the approach that a conservator has towards an artwork, which is an approach with a strong ethical base of respecting the integrity of artwork based on the principles that are spelled out in the AIC code of ethics, and then applying them to new forms of art—variable art, performance art, media art. Because they do need to be adapted. They were constructed for object-based works, but they are also constructed in a way that they could be adapted; they are expected to be adapted. I'm not saying that the graduates of media preservation programs are unethical, but they may not have been exposed to over a century of writing in the field of art conservation; whereas the fine arts conservation programs are good at that. However, the students in these programs are not learning about the technology of media. There is one course now offered in media conservation at the Institute of Fine Arts at NYU; I don't think the Buffalo or the Winterthur program have anything more than a few guest speakers come in. There are still no courses in the US that systematically train students in media technology, archiving, and media art conservation practices.

*How hard is it to pick up the technical side on the fly, as I assume you had to do in the beginning?*

It's hard. I spent a lot of time learning. Having said that, it is a life-long learning process in any division of the field of art conservation – especially contemporary art since artists are always using new technologies. Every day is different, and we are continually confronted by new materials, whether it is a new synthetic textile fiber, paint medium, or video format. As a field, we need to stay current with new technologies. In just the short period of time that I have been doing this, it has all changed [laughter]. When I finally became comfortable with standard definition video, all of a sudden HD video and born digital works started to come in to the collections and now software-based and web-based works are coming in. No one could have been trained in these new media technologies because they were invented within the last few years. Now it is important to get the core understanding of, let's say, broadcast technology history and approaches to conserving analog works as well as digital works. You acquire that understanding through lectures and lab practice in a graduate program in a way that is different from having to learn it on-the-job.

*What are the resources that you find most valuable to the work that you do?*

Most things are available on the web. There are very few textbooks, although there are a few books coming out now about media art conservation, specifically Preserving and Exhibiting Media Art and The Compendium of Image Errors in Analogue Video.<sup>1</sup> A lot of it is developed through projects where people come together with funding and create best practices or guidelines for emerging practices on the web, and then those people disperse, but the websites remain. I'm thinking of websites like DOCAM, Matters in Media Art, Electronic Intermix Preservation, and IMAP Preservation 101. These websites are invaluable, even though their contents become outdated if they are not maintained. And the list goes on, the NIMk in Amsterdam, which is now LIMA, NeCCAR, Inside Installations, and INCCA all have great websites. Now INCCA-North America has a website as well. Those are some of the organizations that I would look to for good content online.

*Could you talk about best practices, guidelines, and standards in sculpture conservation and how they compare to best practices, guidelines, and standards for time-based media art conservation?*

As a profession, art conservation and its professional associations develop guidelines for practice. I mentioned the AIC Code of Ethics for Guidelines for Practice, which at best are meant to be guidelines. I am involved in the Matters in Media Art project and we're calling our new materials on software-based work "emerging" practices, rather than "best" practices. I'm not sure it is so different for sculpture conservation. Standards are agreed upon and regulations are developed. They sometimes come from government agencies and industries where groups of professions assemble to develop something that is supposed to be somewhat rigid, such as OASIS. In sculpture conservation we might think of standards for metal alloys or paint systems. They don't necessarily come out of the conservation community. Since we are dealing with artworks that vary, it is hard to develop strict standards that we can comply with. Like with sculpture, each artwork has different technical and conceptual concerns.

*At MoMA, have you been able to identify classes of works—or classes of components of works—in order to make best practices for them, or to standardize your processes?  
At what point does an artwork need individualized attention?*

We have done this in several ways. First, we created MoMA's Media Working Group, which includes representatives from curatorial, registrar, conservation, exhibition design, and AV

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<sup>1</sup> Julia Noordergraaf, Cosetta G. Saba, Barbara Le Maître, Vinzenz Hediger (eds.), Preserving and Exhibiting Media Art. Challenges and Perspectives, Amsterdam University Press, Amsterdam, 2013.

Johannes Gfeller; Agathe Jarczyk; Joanna Phillips (author), Kompendium der Bildstörungen beim analogen Video/ Compendium of Image Errors in Analogue Video (KUNSTmaterial, Band 2), Scheidegger & Spiess, Zürich, 2013.

departments. The group meets monthly to discuss the processes of acquiring and managing media art. Since 2007 we established two additional media conservation positions and hired Peter Oleksik and Ben Fino-Radin. They compliment my knowledge and skills. The three of us meet individually with curatorial departments on specific works that come in. We have developed guidelines for formats, as I alluded to before, that worked really well for standard definition and analog works. It is easier for us to set standards for archival formats for, say, digitizing an analog tape, whether it is audio or video, or even scanning 35 mm slides. It is harder to develop standards for HD because new formats are still being developed; the industry has not settled yet. We have been making efforts, but we are constantly revisiting and revising them for HD formats.

One of the big projects that we are steering is the development of a trusted digital repository. In 2007-2008 we looked for repository models at other museums but couldn't find any. That is when I was introduced to the library and archive community where I learned about trusted digital repositories and OAIS standards. I read a lot about this and worked with several consultants. We now have all of our digital collections on a server that is backed up. We produce checksums when the works are uploaded. The program is still in development and should be fully established by the end of 2013. We are working with some open source software right now—Archivematica- to put in place micro-systems and micro-processes for creating the archival information packages and BagIt files with technical information about the uploaded files. We have an RFP out for software firms to develop a database that will be associated with the repository. We are adapting standards that have been developed by the archival community for museum needs.

*How have you had to adapt those standards? What major changes have you had to make for the specific needs of artworks?*

Artworks have their own special needs that large digital collections of archival material usually don't have. We can't, for instance, digitize 100,000 analog tapes by just putting them into a robotic digitization system. This is because each artist has their own vision for how the public should experience their work, and that could mean anything. We have to address not only the technology, but the artists' concerns for how the work should be displayed. With a software environment, for example, the artist could feel very strongly about the equipment and operating system dependencies. We need metadata fields and other ways to document this, and it continues with the ongoing life of the work in the museum as we make decisions and alter them. We need to have ways to track additional information that most archives would not be concerned with.

*In your work with the TDR are you noticing trends that could become more standardized?*

One thing that we have been aware of in developing what we are calling the DRMC, the Digital Repository for Museum Collections, is the need to develop a model that would make

sense for other museums. We have presented the model we are developing to the Tate and SFMOMA because they are our partners in the Matters in Media Art project, so they are very aware of what we are doing. We would welcome working with other institutions as well because any model would have a better chance of survival if adopted and adapted by other similar museums, for a whole host of reasons including information sharing across institutions. I wish that we were working with a dozen other museums to do this, but we decided that we just really need to move ahead quickly, as we are in desperate need; we have hundreds of digital artworks that need archival storage, from tiff files to very complex software-based works.

*Do you find that there are larger trends with certain complex software-based works, for example all Max based works (a software program), or do you find that each one you have to treat individually?*

No, it just doesn't work that way. Even with Max, the programmers are using software in very different ways. Some of them create library dependent works while others are self-contained. We need digital repositories and standardized formats for archiving and exhibiting, if nothing else for practical reasons so that we can use the same playback devices for multiple works and so on. Yet while doing this, we always have to pay attention to the needs of each individual work.

*Do you think that there are organizations that could support standards and/or guidelines for the field—and what organizations would be appropriate to do so?*

That's a good question. I certainly think that the Smithsonian could play a role; we would all welcome that. Obviously, the federal government and its institutions could have an important impact if it takes the initiative, the American Institute for Conservation (AIC) could also play a role as the largest professional organization for conservators, and within AIC, the Electronic Media Group (EMG) could help establish standards for the field.

*What role could an organization like the American Alliance of Museums (AAM) play?*

AAM is an important allied organization. Conservators haven't traditionally been involved with AAM, although the AIC was originally part of the AAM. A number of years ago it separated and became its own independent organization. Therefore AAM doesn't typically focus on technical conservation problems. However, AAM is important for us politically, since curators, museum directors, registrars and other allied professionals attend its meetings and read its literature. It is a good distribution organization for circulating information about caring for media art at a non-technical level. I wouldn't look to AAM to develop standards, but as a mechanism for communicating the importance of repositories for digital collections.

## Smithsonian Institution Time-Based and Digital Art Working Group: Interview Project

*On another note, in your role as a Museum Studies professor at NYU, in your work with future arts administrators, etc., do you talk about the needs of media artworks with them?*

I do. Various students take my courses. Museum Studies students go into many allied professions, including collection management, museum education, curatorial work, exhibition design, and development. Hopefully, once they graduate, they carry their exposure to collection management and conservation with them. Some of the students who take my classes are in training to become conservators or art historians at the Institute of Fine Arts.

*The Working Group is very interested in technical training- not only for conservators, but also for other professionals who deal with media art across the Museums, so that we can all speak the same language and target the same risks.*

We have noticed in the Media Working Group at MoMA that we have a lot to talk about, and that media art forces collaboration. In the Group, I work with registrars, curators, and exhibition designers in ways that I never have before. For instance, we have recently been talking about the documentation of decisions that are made when a museum installs an artwork. During installation, the curator, registrar, exhibition designer, and conservator, and maybe even the artist, come together to discuss how the work will be shown. With variable artwork, it varies with each installation. It is very important that we document these discussions and decisions so that the next generation of museum staff can draw on that documentation to decide, or at least know, how it has been installed at different points in history. Our documentation will inform their decisions about how it can be installed. We are not always very good at documenting these decisions. We should be recording the artist's statements; we should have a recorder handy to record when a decision is made, we should be taking notes, and be taking more photographs. We should make sure that we retain the exhibition floor plans and record all the details about the installation, including wall surfaces, types of paint or carpet, light levels, audio levels, and room size. We should know where we are going to put this information in our collections management database. This is something we are addressing right now and it is definitely a cross-professional effort.

*Could that kind of documentation be turned into a template that could be generically standardized for different works, to some extent?*

I think so. We have developed templates and forms for doing so. We are also finding ways to integrate the information into our collections management database. A good form that I have become aware of recently was developed by Joanna Phillips' at the Guggenheim. She posted it on the Guggenheim website. It closely follows the fields that we have developed as well.

*There is a fear that, with standards, everybody thinks they are a good idea but nobody wants to use somebody else's. I bring this up because you mentioned that the Guggenheim has a form that is pretty good—is it something that MoMA would or can adopt? Do you think there is an opportunity to develop something that is more cross-institutional?*

I think that each institution is different; we have different collections, artworks, curatorial areas of interest and expertise, exhibition policies, and institutional cultures; we define the duties of departments differently, sometimes a department might not even exist in an institution. For example, media conservation at the Tate is responsible for all the technical documentation for acquisitions, cataloging in the collections management database, carrying out all the documentation, including artists' interviews, managing the media, creating the exhibition copies for installation, choosing the equipment for installing it, maintaining the equipment, installing it, and maintaining it while it is installed. At the Tate, the media conservators do everything from A to Z. These responsibilities are shared by a number of departments at MoMA, and it is different again at SFMOMA. So, even within these three institutions that I know best, which have similar collections, we do things very differently.

*Do you think that one way is preferable? Or do you think that institutions are just too different based on their histories, collections, available resources, staff, etc.?*

What I think is most helpful is for us to share practices. My knowledge of what Joanna Phillips is doing at the Guggenheim will certainly influence what I try to develop at MoMA, so I think sharing practices cross-institutionally is enormously beneficial. I have performed a few media conservation surveys for other museums, by reviewing their policies and procedures for acquiring and managing media art. Inevitably, I leave enriched with new ideas for MoMA. I believe the emphasis should be on sharing; I don't think it is about developing standards that are implemented exactly the same at all museums. I've been around long enough to know that all museum systems are in a constant state of evolution. Each new staff member and each new art technology instigates change. As needs change, practices change.

MoMA is unique in that there are six curatorial departments and they all collect media—they collect other artforms such as prints, drawings, photographs, paintings, sculpture, and design objects—but there is media in every department. For example, in the Film department, we are now digitizing film or acquiring born-digital film. In the Media and Performance Art department we are acquiring video and complex media installations. The Architecture and Design (A&D) department acquires digital fonts, websites, and video games. Painting and Sculpture acquires complex media installations. The Prints and Drawings department has a collection of Fluxus art that has about 450 media elements in it. Each one of these curatorial departments has their own culture and their own systems of

processing art, even though they use a common collections management database and work under common collections management policies. Some have a preparator or cataloger on staff and others do not. So, even within MoMA there are six different systems of managing media art. The MoMA Media Working Group is pan-museum; there are representatives from each curatorial department. We typically don't address concerns of individual departments, but we do address broad issues of how to acquire and manage media art. The media conservators meet with each curatorial department to develop strategies for works that they are acquiring. We discuss media formats, exhibition equipment, and technical dependencies of new acquisitions. We also develop projected maintenance budgets for complex media installations. We are working right now with the A&D department because they are acquiring 40 video games. We are developing systems for acquiring and documenting technical information about the games. The Media Working Group doesn't get into preservation issues at this level. We discuss concerns at a higher level, such as the development of our digital repository, format standards, and documentation methods.

Just like I described for different museums, each department at MoMA has grown out of a collection tradition. Paintings and Sculptures originally collected paintings and sculptures, and Film collected film. Back in the good-old-days you knew what you would find in each curatorial department, but that is not true anymore. The traditional divisions are merging, which is very interesting. One might even ask whether in the future these curatorial divisions will last or serve any function if artists continue to produce multi-media works. Maybe there should just be one multi-media department, or one contemporary art department at MoMA. Of course this is all being discussed within the museum. Because of these historical collecting practices, there are deep areas of knowledge within each department. This expertise is increasingly being shared as more exhibitions are co-produced by curators from different departments.

*Are the works from the different departments going into the same digital repository?*

Yes.

*That must have been a fascinating process. What parts of creating the digital repository did you find different for the different departments? Was there something that you could identify as being unique?*

Mostly no. One department that does stand out from the rest is Architecture and Design because it is not just acquiring art. It is acquiring digital forms of design and digital documentation from architectural practice. Some of their works are commercial, so we are not working with an individual artist, but with firms, such as Nintendo, which is a large international firm. They are not as excited about being acquired by MoMA as an individual

artist might be [laughter]. Architects, designers, and large commercial firms typically have different concerns about rights and exhibition practices than individual artists.

Therefore we work with each department to develop specific policies for acquiring works. We perform our condition assessments and develop our documentation based on the concerns of those who produced the work and the curators who acquire it. The media formats might be the same, but the knowledge we build around the technology might be very different. For instance, the Prints and Drawings department has works on CDs, and the department staff are not used to thinking about archival capacities of CDs. They do not all know that optical disks are not stable media carriers, whereas the curators in the Media and Performance Art department are very knowledgeable about these concerns. Of course the media curators are less knowledgeable about acid-free matting and damage caused by ultraviolet light to fugitive water colors. Since the knowledge base among the departments is different, we work with each one to suit their needs.

*In looking at setting up your digital repository and some of the standards that are out there (TRAC, OAIS, PREMIS), could you speak a little to the specifics in these standards that were helpful or those that needed to be more specific for the needs of artworks... Were these established standards good guides for you?*

Yes, they are very helpful. We won't alter them much since they are designed at a very high level. Our repository will fit well within the broad scope of their standards. We are developing specific metadata fields and structuring our database according to the needs of artworks, which are different from the needs of digital archives. As I mentioned, MoMA staff will begin communicating about our DRMC model soon. Right now we are doing the hard work of development. Coming soon!