

## **Time-Based Media Art Working Group**

### **Interview**

**Alex Cooper**, Exhibits Designer, National Portrait Gallery  
Interviewed by **Olivia Fagon**, Time-Based Media Art Intern

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26 min, 42 sec

**Olivia Fagon:** This is Olivia Fagon, Project Intern for the Time-Based Media Art Group initiative at the Smithsonian. I'm sitting down with Alex Cooper at the National Portrait Gallery to talk a little bit about his work.

I'd like to take your job and your responsibilities here and just use them as kind of a template to talk about some of the issues that the group is trying to work through.

So, what do you do at the Portrait Gallery?

**Alex Cooper:** I do a number of things, but in relation to time-based media art, I actually work in the Design and Production office. Prior to the formation of the DAGR group (the Digital Art Group Roundtable), my duties were pretty much exclusively working with time-based media art for exhibition purposes. So, working with artists or incoming loans of time-based media art. It was very much something I did in kind of ignorance of this larger concern, and it wasn't really until members of the Portrait Gallery decided to come together in this roundtable format that I knew how what I had learned in the six years I've been doing it was applicable to the larger issues of preservation [and] acquisition of this kind of work. So I was sort of accidentally learning a lot of the tools I needed.

And I don't know that that's uncommon. My understanding is a lot of the larger institutions that collect this come at the issues of – preservation specifically but also acquisition and exhibition – in a sort of committee format. There aren't many people who are being trained specifically to handle this kind of work. So, it's something that's approached from all sides. We kind of make up one – the expertise of one person through our many individual responsibilities. I was very much getting to know the artists' work and getting to know the best way of showing it. So I developed a good instinct for how one display technology versus another might suit one kind of work versus another. This is in the case of, generally, born-digital work where sometimes the manner in which its shown isn't set in stone, so there's often a lot for someone like me to do at the museum staff side.

**O.F.:** It seems like – having sat in on a couple of those meetings now – that you bring quite a lot of the technical expertise.

**A.C.:** Yeah – more than anything else, I can help bridge conversations. I can help a curator and a registrar have a productive conversation about work like this by translating acronyms. But, I'm good at speaking in common goals rather than getting too grounded in technobabble. There's a time and place for that stuff, for that kind of jargon. I think that is one of the things that has prevented this conversation from proceeding. Those who have technologically-based knowledge are only capable of expressing it in terms of jargon, and then you have a curatorial – or people with a more aesthetic role, who are trying to understand the technical side of what they do, but there's a language barrier. Working in design and production is actually a really good – or, in an exhibit design kind of role – is a really good way of bridging that. So I think I am in a unique position there. Because we work with the work in both ways: both visually, but also technically. So, it was a good – it was kind of a natural pairing. I wouldn't say that I'm the most – you know, I'd say that we're all kind of equally motivated here at the Portrait Gallery, but I think I do have an opportunity to push conversations. Keep them rolling.

**O.F.:** I want to start a little bit with a discussion about – part of this group's initiative or end goal is to have some sort of best practices, focusing on collections. What does the Portrait Gallery do in terms of collection strategies right now?

**A.C.:** There's a couple dimensions to that. One is making sure that when we acquire works, we're doing it in the best way possible, and that is essentially arming the museum with the information it needs to show the work and preserve it. So, on the one hand we want to make sure that we create a series of guidelines that helps guide not just current staff, but future staff in the acquisition process. It's so critical. If you don't acquire the work – if you're not smart about how you acquire the work, you are fighting a losing battle in terms of preservation down the road. And the preservation issues hit you almost immediately once you have it. Once you've actually managed to acquire the work, it's probably already out of date in terms of technology. Making sure we document the acquisition, and we document artist intent, and we really look at what the technical requirements of the work are for the museum. Looking at all that ahead of time, understanding what parts of the acquisition are vulnerable, and how much work is going to be consumed by the staff in keeping everything current is something that we now do prior to actually getting the work. We go through that conversation – or at least our intent is to. Acquisition is very much a part of that conversation, and formalizing the acquisition process is a major goal of the DAGR group.

On the other side of that, establishing a series of standards for preservation is also a major goal of the DAGR group. Initially, we started by looking at this notion of digital repositories: what was a good vault for born-digital work. And I should say that almost everything we've looked at so far has been born-digital. We're in a very funny place entering this conversation in 2004, 2005. Relatively recently. Born-digital has been at the forefront of what we're looking at, and the question of a digital repository was naïvely the first thing we thought we needed to answer. What's a safe way of storing it? We looked at a lot of the different repository options out there, and we found out quite quickly that what distinguishes one repository from another is less a matter of storage technology – meaning, is it a tape-based archive or is it a spinning disc-based archive – more about the software that manages the repository and the kind of metadata that's encapsulated. So, it very quickly turned into an exercise in understanding metadata standards. How our colleagues in the archives have approached this question, although, our needs are very different – well, our needs are a little different. The kinds of standards we worked on honing were really metadata standards. We were very fortunate to have a very good IT infrastructure here at the Smithsonian, a centralized one. So, getting to know the digital asset management system and understanding what role it could play in this –

**O.F.:** Alongside TMS, or – ?

**A.C.:** Alongside TMS. So essentially we consider the DAMS our digital vault. We do that for a number of reasons, but the primary one is that it has a good metadata model for video. And it has a good way of distributing video, which is ironically kind of the last thing you want in a repository. But, it has some good preservation tools. It's also extensible, and there is a whole department at the Smithsonian that is willing to work with us to customize it to suit our storage needs. And it's also built into the storage area network of the Smithsonian. All of the enterprise-level backups of data at the Smithsonian are also built into the DAMS, as well as the staff of admin – the admin staff that manages it. So there's a lot of personnel and IT-based infrastructure at our disposal.

TMS is really just a collections database, and born-digital work is really a tiny part of the Smithsonian's permanent collection. But, it still needs to be documented and described in TMS, and other more technical aspects of the work also need to be documented and described in the DAMS – and there's some cross-over. So, once we had looked at repositories and once we had decided that we wanted to commit to the Digital Asset Management System, really the next question was: how do we want to describe the data, what are the metadata standards we want to use with these two systems, and then how do we handle where those metadata models overlap?

Part of that was a technical question: what are the metadata standards for these two systems? Well, that was known by different staff, and then we brought these staff into the conversation –

and banged our heads against the wall and tried to pretend like we didn't do it. [laughs] But we made it through that. And then the next question is: where the metadata did overlap, how did we – and this is really a staffing issue – how did we want to structure these art ingests in DAMS so that we're minimizing the amount of upkeep required, in terms of metadata? Because the metadata fields can be very vast. We have a lot of staff who are familiar with TMS, and many fewer who are familiar with the DAMS. Information in TMS changes frequently. Not critical information, but things like location; where works are stored; and in the case of born-digital work, as different iterations of the work are made (exhibition copies and things like that), that needs to be updated and catalogued in both systems.

So, again, we didn't want to create a giant burden for staff at the NPG to manage information in both systems. Conceiving of the DAMS-TMS bridge was the next step. What fields need to be – need to overlap? And you're dealing with two different metadata models and two different kinds of vocabularies, so we needed to kind of come to an agreement about what we felt each of these fields could represent. Because it's not set in stone, really. Notions of an accession number, a media rendition number, things like – terminology that TMS uses – doesn't have as natural a pairing in the DAMS. We just needed to sit down and commit to it. So it's kind of a tedious list-like process, where you just sort of list out fields and what they mean to you and then document it. And hope that no one at that meeting is accidentally killed on the way home, because then before it gets put in the notes, no one's going to remember. So that was kind of the next step. And in doing all of this very technical stuff it really forced us to think about how the works we'd acquired fit into these models. In some cases the fit was sort of natural, and in some cases it was a lot less so and we had to sort of re-think the models.

What we're talking about right now is how to *properly* catalog a time-based media work in TMS, and it's an active debate. There are some who believe that the archival copy of the work is really the thing that should be given the most consideration in TMS, and everything else – other versions of it – should be treated as sort of derivatives or components of the work. And then, people might argue just as forcefully that every component of the work – if the preservation burden is the same, if we're accepting the same preservation burden for the exhibition copies as we are for the archival copies as we are for the original acquisition copies – it should all be described in TMS the same way.

So, that's kind of where we are now, we've come a little bit full circle. Considering the DAMS work we've done to be a good model and moving back to TMS. So, that's DAMS and TMS in a giant nutshell.

**O.F.:** Talking a little bit about format: so when you get a piece of work there's going to be an archival copy, a preservation copy, a dissemination copy.

**A.C.:** This is where we draw from a model that archivists use, the OAIS model. It's a very extensive model, and we're only borrowing small pieces of it, but the notion is: born-digital works have different lives. There's the thing you get from the artist that is the original acquisition copy – and I should back up and say, all of these different versions that I'm about to talk about are what people call the “digital essence” of the work. We're not talking about the “carrier.” Meaning, is it given to us on a thumb drive, or a DVD disc, or an FTP download. That's just a means of transporting the digital essence, which is all of the ones and zeros.

**O.F.:** But that would play into preservation.

**A.C.:** Well, yes and no. And again, we don't all visualize this the same way in the DAGR group. But, I see the digital essence as its own notion, and I see what it is residing on – whether it's a flash drive, or USB thumb drive – as something completely different, as simply just a carrier. And there can be multiple copies of this thing, it's simply just a different location. It's a little hard to describe, but I see the digital essence as an intellectual notion divorced from any physical thing. So when I talk about an exhibition copy, I'm talking about patterns of ones and zeros. And that pattern can exist in multiple spots. And it's a different pattern from the archival copy, and it's a different pattern from the original acquisition copy. Your original acquisition copy is what you get from the artist's studio, so it's whatever video and audio streams are muxed and built into a container format. There's an instance of it that you get from the artist, and then you may copy it into your repository and have a second instance of it. But it's the same notion; it's the same pattern of ones and zeros. A museum may choose to demux that video stream and remux it in a preservation format. And there are some standards for that, or emerging standards for that. That may or may not include changing the codec. Changing the container format doesn't change the visible appearance of something. Changing the codec may.

An artist, depending on their level of sophistication or how much they care, may give you a format that's old or new or unusual, hard to play. You kind of get what you get, unless you're very clever at the acquisition phase and you ask for something. But you don't always get what you ask for, so you get what you get. And then if you're smart about how you structure the acquisition, if you put the language in that enables you to do this, you can then put this probably very fugitive object into a more stable format, that's the preservation format. What makes it a preservation format? Well, really just that large institutions have agreed to use it, so there some sense of institutional safety. And often there's a lot of metadata built into the container, so these are files that describe themselves. Another aspect of the preservation format is often that if you're dealing with uncompressed video that you're using a codec that is lossless, or not very lossy – lossless is a misnomer. So that's acquisition preservation.

We also have exhibition formats: what makes the most sense to view it? That's a different set of questions entirely. That's something I've worked with a lot. If you are in a position where you're working with an artist and you're specifying a different display technology, or if a work isn't grounded in any particular display technology: what looks right? How red is red, how blue is blue? Those are questions that the display often defines, but also the way the data is encoded will also define. Really what you care about is the end product. Exhibition copies need to sort of be fast, and lightweight, and easy to play. They run ten, ten-and-a-half hours a day. It's a different kind of concern. So that can often be a different format from the other three.

And then a dissemination format is a term we use to describe the artist-approved, sort of low-res thumbnail, if you will, version of the work that is used – given out to press, or for websites, things like that. It's often not practical to use the acquisition copy or the preservation copy for that, particularly for the web. Artists like to have their stuff out there, so we try to be very clear: this isn't the work you're seeing; it's an excerpt from it. In the case of generative works, which don't really have a clear beginning, middle, and end, you do need something you can often put on a website. So, it's smart to involve the artist in that, and have them look at it and say, "Yes, for this purpose, I think this is great." Just so they don't Google themselves one day and find [laughs] – not that they'd do that, but – and find the Portrait Gallery showing something they don't think represents them well. It makes museums a lot less nervous, particularly with living artists, to do that.

So, those are the four basic kinds of formats. That's what we try to generate over time, or in some cases, what we have at our disposal with an acquisition if we're really smart. And that's what we build into and store in the DAMS. Along with a whole bunch of other information that describes the work and how it's been shown – the kinds of stuff someone might want to know if they have to understand what it looked like ten, fifteen years ago, twenty years ago. When the technology curve eclipses the work, someone's going to have to transcode it. They might want to know what it's supposed to look like. So the goal is to give that person, that future person, as much information as they could possibly need to make the smartest decision they can. It's a lot of information: what can a person possibly need to know? Well, everything. But there's a limit to how much you can put together. The archival package, which is the term we use to describe all of that information, is pretty vast. We've put together a good template for it, but is it something that we can do easily or regularly? I don't know, until we do more of it. My gut tells me that, without a lot more staff, it will probably end up getting economized by whoever does it. But, still, the principles remain. You get what you can get.

**O.F.:** Segueing a little bit back to exhibitions, how much do you think the museum makes it a priority to keep equipment?

**A.C.:** If we acquire a work, and there is equipment that is part of that acquisition –

**O.F.:** Or software.

**A.C.:** – or software, it's a high priority. It's handled by the registrar's office. It's stored with the work in some fashion, or it's stored in collections storage, and it's not repurposed. Other than that, we keep a pool of equipment that we reuse for multiple purposes, and that stuff is stored or surplused as it is useful. We don't keep a lot of plasma displays. They don't last very long; they're not very suited for museum use, and they have a very limited life. But, if we acquired a work and it required this particular plasma display, we would keep it and we would not use it for anything else, and we would probably look very hard to find as many other versions of it out there.

But we would work equally hard to work with the artist and try to get them to explore and accept what other possible replacements they would find acceptable. Because one day, all the technology is going to go away. You can't tie anything to technology. It's just not going to last. It's untenable. For as much as we will preserve specific equipment, if we need to – as we must – we're going to work equally hard to try and understand what reasonable alternatives are. Because someone's going to have to handle that, and it is better than letting the work go away.

**O.F.:** So at some point there will be some huge tension between the artistic intent, or the original one, and preserving the piece.

**A.C.:** Right. And when we no longer have the artist at our disposal – which is an artist's lifetime away, however long that is – someone's going to have to make that informed decision. So this is where we go back to the value of the archival package. They will have, hopefully, a lot of information they can look at to understand what it's supposed to look like, what the goal is.

It's often a very slippery notion. Video art is very ephemeral. It's very experience-based. It does its best to defy that description. [laughs] But, so, each work is going to have a different strategy – you're going to have to employ a different strategy to document each work. This is why I try to keep our conversations in the DAGR group based on guidelines and not: "Here's the form that you fill out." Because there's no form you're going to make. You can't make a form that will make any sense long-term. A principle and a practice that someone interprets, yes. But a form, no. I don't think, personally. Now on the other hand, we do have to write these standards down.

**O.F.:** Would that be a next step, then?

**A.C.:** Well, yeah. We have minutes from all of our meetings. We have the beginnings of a full practices guide. We just really need to sit down in this group and agree on how we want to structure it, exactly what we feel needs to be in there, and just sort of make sure that we are all in agreement. Some of the things we talk about we consider principles, versus just a way of handling a specific example.

So, yeah, I do see that as what I'd like us to do in the next year. We've had these really good year-long goals. We've been pretty good about getting through them. The first was understanding storage environments. The second was putting together a best practices and a test ingest. We've done that. And the third is I think documenting everything that we've agreed to. Busy, busy, busy.