Digital Storytelling

By Ben Davis

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Open meetings of competitive film studios, academics, and scientists are rare. On May 12, 2000, Razorfish, UCLA, and Warner Brothers collaborated to bring together Dreamworks, Disney, Fox, Paramount, Universal, Technicolor, THX LucasFilm, Sony, New Line Cinema, Laser Pacific Media, the Directors Guild, the Academy of Motion Picture Arts and Sciences, The Getty, and the UCLA Center for Digital Arts, School of Theater, Film, and Television, Information Studies, Electrical Engineering, and Computer Science Departments for an informal meeting to talk about the digital future of filmmaking through a look into how films are preserved. What follows are some insights from that meeting.

> **"The new digital products defy the ability to capture them on film."**
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> **-Howard Besser**

If movies are digital from start to finish what does that mean to the history of filmmaking as the most powerful medium for storytelling?

Certainly it will mean that movies as we have known them will be in dire need of preserving as faithfully as possible because the film stocks and machinery to show them will no longer be made.

Michael Friend, Academy of Motion Picture Arts and Sciences: "What we need to do is develop a system whereby we can scan all of the data out of that original film into a computer, make whatever corrections we feel are justified and render that back to film with no loss of data and entirely, transparently, and in a context with respect to the original, historical look. That's the problem with film preservation today and for the rest of time because film is increasingly going to be an antiquarian exercise… That is going to involve a lot of investigation into the aesthetics of these physical materials and how we capture those and how we build an on-going context for how something originally looked."

Stories are told now with highly sophisticated digital special effects and then committed to film – **in a sense, we are seeing new forms of digital content through the old form of film**. And **that old, romantic analog view will soon vanish in favor of something else, something we are barely acquainted with –bits**.

If we set aside the debate over whether digital movies will ever be as aesthetically pleasing as film, set aside the debate over whether films will be streamed rather than shipped in cans, set aside all the debates over whether digital technology will replace analog – we have a whole new set of issues that are not in the future at all – they are right here, now. **Digital change management for film means something very fundamental.**

Storytelling is the mechanism for preserving our collective memory as well as an the communication tool of the imagination. For more than one hundred years, movies have been the merging of storytelling and communication technology. Now, in a matter of only a few years, digital technology has revolutionized production and very quickly will change distribution as well. By looking at film preservation, however, we can get a very powerful view of what this will mean. **Film preservation is the place where the future is the main attraction.** In a digital world it may be the place where asset management rules.

> **"Preservation is good and as intellectuals we believe in it, but for business practice, it's always digital asset management."**
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> **-Studio Executive**

There have been a lot of serious mistakes in preserving film assets. For instance, transferring film to video as way of preserving it was once thought to be economical, reliable, compact and an easily retrievable way to keep film assets. For some archives, the notion of making a copy and throwing

But was Rome rendered in a day?

Digitally created scene from Gladiator, copyright Dreamworks, LLC & Universal Pictures. Reprinted with permission from Dreamworks.

out the original was a good idea. In the case of silent movies, original nitrate film stock was copied to celluloid stock and the original tossed. The nitrate was, after all, dangerous to have around. The resulting copy, although not as sharp, was considered a good trade-off. When film technology improved, however, the old nitrate film was gone when an even better copy was possible.

"Every single time 'digital' comes up, the word 'archive' comes up."
-Studio Executive

Another big mistake was not thinking comprehensively about the preservation of filmmaking as opposed to just the film. In other words, the whole realm of caring for the artifacts of a movie – the script, the posters, the costumes, the out-takes, that make up the context of filmmaking were often neglected. And finally what may be the biggest mistake of all – thinking that the film assets had only one life – that when sound came into movies no one would want to ever see silent films again. The whole concept of re-purposing and re-issuing film assets was not considered.

Robert Rosen, Dean, UCLA Theater, Film, and Television: "**In 2100, people will be looking back at us.** We've looked back at the first 100 years, but a 100 years from now, they're going to be looking back at us and saying, '**Did they do the right thing?**' Or will they have a similar litany of mistakes and problems and issues, maybe somewhat similar in terms of technological quick fixes and in terms of a lack of holistic planning and preservation. The specific problem, the thing that's different now, so we can't totally rely on precedents in the past, has to do with the digital revolution. With digital films, what is the master? What form, format, and media will it be in? Digital production and distribution are coming very quickly. How do we imagine we will keep, retrieve, and re-use content committed to digital media?"

Howard Besser, UCLA Information Studies: "If we think of the direction that we're moving with new products, those new digital products defy the ability to capture them on film. When we think of these new products that will be multi-faceted, have interactive pieces to them, and you think about transferring those to film, it doesn't work. You can transfer the pieces to film, but what you end up with is something that's far less than the original."

Digital preservation has to involve encoding information so that data can be found easily and so that it can be translated by ever-newer mechanisms. Automation of these processes may be the key to keeping something digital around.

Studio Executive: "I think the move towards digital challenges not just the preservation of the media itself, but the context in which the media exists. We have these different graphic files of still images, moving images, audio and video files, and the navigation, the interactivity itself, none of which has a common syntax or descriptive language or the equivalent of an Edit Decision List (EDL) that is used in video production. There seems to be no overarching language that digital pieces could be retrieved with. So I think that part of the issue is not only media, but to understand how to find ways to create descriptive languages like the EDL for digital…. **We need format conversion systems that can transcode digital files and we need a way to understand what that means**."

And when we realize that current film stocks last longer than current digital media how will we permanently store digital data, whether it is motion, still, text, or graphics?

Michael Friend: "Somebody is going to come out of the woodwork with bubble or photographic memory or ion etched ports and say here it is, **it packs seven quadrillion bits into one nanometer of space** here. And it lasts forever unless you drop an H-bomb on it in which case some of the information may not be recoverable. So you know, somebody up there is going to solve the digital storage problem for us and we will take advantage of it as soon as it drops down to a level where it's price effective. "

Asset management may be the common language for preservation and business. It makes sense for the archivist and for business to create common standards. Good practice in asset management – and that includes demands for long term digital media, automated updating and file translation schemes, standard file formats, and standard search and retrieval metadata --may be key to preserving storytelling in the digital age.

Studio Executive: "Well, what I was going to say is that in fact if you look historically, the great influx of money for preservation in the last 20, 30 years occurred when we recognized that assets be managed for video. So the first wave was with video. And today, it's the Internet. It's the idea of re-purposing that comes of post-modernism, but in fact it's what the Web is about. And if you frame this as managing digital assets rather than as preservation, at least in our world, we can make that appealing as a business practice. Preservation is good and as intellectuals we believe in it --but for business practice, it's always digital asset management. And it sounds good because there's a market."

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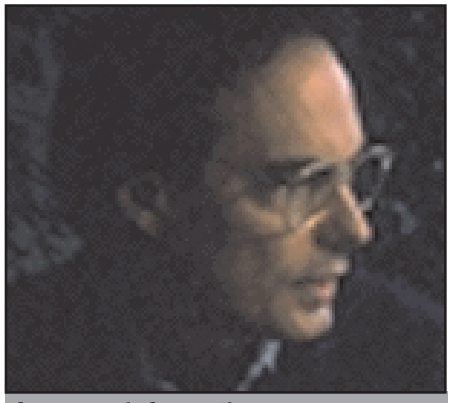

for more information:

Transcript of meeting
http://reports.razorfish.com/reports/rr024_film_transcript.pdf

Time and Bits: Managing Digital Continuity
http://www.longnow.com/10klibrary/TimeBitsDisc/index.html

Association of Motion Image Archivists
http://www.amianet.org

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