

Sceening the Future 2013

London, 7-8 May 2013 January 2012

About the event

From 7 to 8 May 2013 the 3rd annual conference “Screening the Future”, organised by PrestoCentre and focusing on the latest trends in audio-visual preservation took place at the Tate Modern in London. It covered topics related to digitisation and digital preservation in the creative and cultural industries including broadcast, post-production, motion picture, sound and music recording, visual and performing arts. The programme can be found at <https://prestocentre.org/calendar/screening-future-2013-conference>. This conference focused on strategies of preserving audio-visual materials for stakeholders from different backgrounds, also discussing some technological issues. It is worth noting that in audio-visual materials the term “digital preservation” is used more broadly than in other sectors of the digital preservation community. It includes the digitisation, which leads to the production of digital materials and mixes curation and digital preservation issues more than elsewhere. Angela Dappert represented the DPC; DPC members from the BBC, the British Library, Jisc, Kings College London, the National Archives and the Tate were present in their own right. These notes are intended to provide an informal briefing for members of the DPC not able to attend the event. For an authoritative and comprehensive report readers are encouraged to contact the organisers of the event and the speakers directly.

Presentations and discussion

Presentations:

Mark Schubin from the New York Metropolitan Opera media department narrated the history of the recording of opera over time, showing the evolution of technology, but also the evolution of user response and user requests. User response is acculturated and new technologies have a different effect on users than accustomed technologies do. Early consumers judged the experience of consumption of a recording to be “just like being there”, in spite of the fact that recordings had distortions and that essential parts of the whole experience are missing: Librettos provide only the text, audio recordings provide a changed experience of the actual music, whereas the stage settings, the presence of the audience, and the acting and actors were wholly missing. For example, early listeners of recorded sound, in the dark, could not tell the difference between a recording and live production since they had not developed a notion of the qualities of recorded sound. The users’ requests with respect to technical features and preserved features change over time. For example requirements of colour (black and white, 3-colour- primaries recording systems; full colourations), resolution, and high definition needs have changed over time. Some of the recommended settings are based on visual acuity tests (Smelling) – but young people have actually better than 20/20 vision and benefit from richer settings than the theoretical values suggest. The slides for the presentation are available at bit.ly/stf13schubin.

Neal Beagrie, Charles Beagrie Ltd., discussed how multi-media content is permeating previously existing organisational or regional boundaries. He illustrated this by showing the great diversity of

DPC members' sectors and the fact that information provided by the DPC, such as the tech-watch reports, are being consumed widely by audiences that go far beyond the traditional ones. These changes cause organisations to have to respond in new ways, by forming alliances and partnerships, by creating shared services, by outsourcing (JISC, MIMAS, EDINA for UK HE/FE), by offering cloud services for preservation and by performing mergers for storage, skills and cost savings (Canada, Netherlands, New Zealand). There were questions from the audience on how to vet suppliers of services if your organisation has an obligation to ensure content preservation. There also were questions about in how far alliances are actually creating technical solutions. It was remarked that organisations' remit changes over time, but also varies from country to country, and is not necessarily clear to the outside public; it is not clear, for example, whether the BBC's role encompasses archiving.

Michael Moon from GISTICS presented on "Beyond cost-based preservation strategies". When preserving assets for a future world in which things are many times faster and cheaper than now there is a likelihood of missing emergent opportunities because of lacking observations. Michael asserted that our model of planning for the future has become obsolete since we cannot even imagine the future. Instead, he proposes to step into pure imagination of the future and describe how we got there. He uses the "red dot" procedure described in his book. Michael made three underlying observations.

1) A business case takes place in the context of an organisation. It is an investment analysis to justify a decision. The conscious business case tries to achieve ROI. The motivation of the corporate political game (of not looking bad) is somewhat less conscious but has greater impact. The business model of how to make money is even less conscious but has even greater impact; and, finally, the very unconscious cultural norms of criteria, beliefs and values have an even bigger impact on the purchase decision than the previous elements. When you want to derive a business plan it is important to talk to the culturally-experienced person in the organisation who knows the organisation and history.

2) Arguments vary in how much they convince management. Starting with the most strategic and powerful and in decreasing order they are share prices; balance sheet improvement; increased revenue; cost reduction; process improvement; and finally intangible opportunity. Those latter tactical arguments are the weakest. One must target one's value proposition through the top-level, strategic arguments, rather than through lower-level, tactical arguments.

3) Brand loyalty has a similar model to the first point: Rationalisation of decisions is a conscious approach but has lower impact on purchase decisions. Fads and then trends are less conscious, but have even higher impact. The unconscious, but high-impact self-identity that is fuelled by brands as "the tribal mind that lives in the limbic system" is the most powerful motivator of them. Brands invite you into a desirable tribe. Digital preservation activities should strive to create brands.

Based on these three arguments, Michael suggests an approach for transmediation. Transmediation focuses on output – for example, how do you take something from a film and transmediated it into a 3d entertainment object? In the process of transmediation metadata is added to the dark, undescribed initial object, including provenance and storage. When you add policy-managed routes and storage governance it becomes a collaborative object. A mastered object is vetted, packaged for provision and linked to CRM, DRM and ERP and finally made into a digital cultural asset. Metadata are crucial in order to enable transmediation. In this view, content is just attached to the metadata, which is the primary object of our creation and curation. Neuro-computational imaging provides

real-time feedback on how we experience the world. When we transmediate we can create the raw materials that “fuel the dream factories”. A lot of audio-visual preservation has been sold as business case –without much success. But cultural assets play a pivotal role in creating place plans and public diplomacy, which drive exports, investments, tourism and hospitality. Audio-visual preservation is about how our collections contribute to cultural heritage and self-identity (branding). We need to aim for transmediation into objects that we cannot even imagine yet. Part of this is to bring the essence of humanity into the hyper-reality world.

David Giarretta, STFC spoke about “Psychology and Digital Preservation”. Digital preservation is motivated by fear of loss of items that are special, personally or societally. This is partially hoarding behaviour, but the material can also be very useful (“data is the new gold”, but unlike gold neither rare nor non-reactive). Maslow’s hierarchy of needs, in which physiological needs are the basis, followed by the satisfaction of safety, the need for love and belonging, esteem and self-actualisation, had self-transcendence added at a later point. This is where digital preservation fits. Future generations cannot vote or pay taxes at this point and would not have any claims for representation without self-transcendence. When things change we need to, amongst other things, know what has changed, identify the implications, hand over to another repository, and ensure that the material remains usable. Digital Preservation requires reliance on others (trust). Trust applies when we do not have certainty, can be altered by hormones and is affected by the presence of technology. Our understanding of risk is not sufficiently based on the understanding of likelihoods. Our perception varies from reality: Experts are particularly prone to self-perception; we detect patterns where there are none; we are overly optimistic; and don’t react to non-immediate risks. One question is whom we trust. We have an innate sense of fairness and reciprocate others’ behaviour. When we need to rely on others’ judgement, factors that matter are authenticity, curation by others, audits and the certification of auditors. Over time digital materials become unfamiliar to societies and the capture of tacit knowledge is important. An interesting audience question was whether one might apply psychometric tests to ensure that people given the responsibility for valuable information have the personality and proper attitude to care about things that go beyond their time and employment. If not, how can one instil the right values during training?

Richard Wright as one of the driving forces behind the PrestoCentre spoke about understanding why different communities need different digital preservation approaches. The digital problem is rooted in the fact that digital data storage has enormous information density and very short data carrier stability. As storage capacity increases more information is being produced. Network services that are out of our control are the latest response to increase storage availability. With them, storage is a service, a file is a performance, and media is stored without media concerns by utilising managed services. One possible traditional taxonomy of communication technology is a matrix of media (real-time and non-real-time) against one-to-one or one-to-many scenarios. Digital technology breaks this matrix. But breaking out from the box also provides new opportunities. Digital objects require different institutional responses. For example, we now use different access approaches via streaming, without scheduled programming, in non-real-time. This is a process of publishing rather than broadcasting. The archives become the centre of a TV organisation; the rest of the organisation just produces for the archive. In the remainder Richard analysed the different organisational responses for different communities. Video and post production communities are a service industry

for broadcasting, cinema and advertising. Capital investments are problematic if production is run as a project and does not include it. They need to respond to the technology change of having to hold files and provide mass storage. Files now become assets. Film collections and film makers are at both ends of the business life-cycle. They depend on subsidies. Their technology changes are also manifested through the disappearance of film. Richard thinks that all film will have to be digitised requiring the purchase of more and more storage. For sound and music archives, unlike for video, there are very clear audio standards. The technological change is a great opportunity for independents. Sound and music archives' mission is to support research. They collect published items, research items, and also do their own recordings as part of their collection. Their holdings will have to be digitised. Access for audio is more difficult since you cannot subtitle it. Metadata to deal with this is an unsolved problem. Digital Preservation of Personal Collections are, amongst others, addressed by the Library of Congress. They intersect with Genealogy as a stakeholder. Richard does not see a digital black hole, but opportunities.

Kara van Malsen, from AV Preservation Solutions, spoke about disaster response to hurricane Sandy's flooding at Eyebeam, a non-profit art and technology centre dedicated to exposing broad and diverse audiences to new technologies and media arts, while simultaneously establishing and demonstrating new media as a significant genre of cultural production. Kara illustrated and described the salvage of digital data carriers from salt waters by organising volunteers through social media. In the absence of power, they had to establish workflows and non-destructive procedures for cleaning a mix of 1500 items of all types of data carriers. This included such concerns as ensuring that containers and media were kept together and records of the workflow steps were kept (in a shareable fashion on Google spread sheets). A positive side-effect was that a catalogue was created to manage the materials, which introduced archival processes for the organisation. A paper was written about the recovery details of the cleaning procedures, supplies, supervision, and working with volunteers and can be found at <http://bit.ly/11F3vuO>. This was accompanied by a video by Jonathan Minard <http://eyebeam.org/press/media/videos/recovering-eyebeams-archive-as-told-by-resident-jonathan-minard>.

In the second half of the presentation Kara addressed the issue of using Return on Investment for motivating investing in digital preservation. Kara's team believes that the ROI argument is not effective and, instead suggests a COI: cost of inaction metric. They have developed a Google doc spread sheet on avpreserve.com to calculate the COI based on collection size, investment on the media to date, annual cost per year, how long you had the content, etc. to calculate the rough investment to date. This offsets the digital preservation cost against the on-going investments saved. Inspired by the book: Files that last – self-published – April 2013 by Gary McGrath, Kara states that only instantaneous disasters provoke an immediate (heroic) response, but that slow deterioration and obsolescence have the same effect and do not elicit the same visceral response. In disaster recovery it is important not to get hung up on detail. The COI calculator has the same goal. There was some criticism that COI does only contain cost of digitisation and not the cost of digital preservation.

Pannels:

The afternoons were taken up by 2 panel discussions each on practical aspects of AV preservation. The following descriptions are taken from the conference website
<https://prestocentre.org/calendar/screening-future-2013-conference>:

- **Preserving Objects, Telling Stories**

This session concentrates on the transmediation of cultural, commercial, and personal narratives and its impact on multimedia preservation. The session will make a case for preserving the potential of transmediated narratives, i.e. exploit the creative potentials of anyone medium and media format.

- **Making it Now, Keeping it Forever**

Media production, from broadcasting and advertising to computer games to feature films, is a high-pressure environment. Decisions and processing during production determine the quality -- or possibility -- of the preservation and reuse of content. How can production processes be made 'preservation ready'?

- **Understanding Differences, Discovering Similarities**

This session draws upon case studies to examine the business case for the development of in-house solutions and asks when and what to outsource. The session looks at different types of scenario, considers the potential for greater collaboration and asks whether the trend is away from the development of bespoke solutions? It addresses different preservation solutions being developed for audio visual material and asks what is the impact of scale and mission on these key decisions? How do we manage cost? What are the appropriate solutions for different environments?

- **Developing Solutions, Building Value**

This session identifies the changing business models which are affecting product development for digital audiovisual preservation and asks how is this impacting archives' IT infrastructure and research and development. The session will explore which AV sub-sectors are attracted to open source solutions and why. And what types of services or models provide viable value chains for preservation vendors.

Vendor presentations:

In addition there were a number of very informative small and large groups vendor presentations from Memnon Archiving Services, Cambridge Imaging Systems, Oracle, and many others

About this document

Version 1	Written on day	10/05/2013	AD
Version 2	Distributed	13/05/2013	To DPC members