

Klingenberg Cinema**08:30 Coffee****09:00****Mathew Addis**

BBC

London,

UK

Long term data integrity for large Audiovisual archives

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In the broadcast and wider AV industry, digital file-based audiovisual archives are rapidly becoming embedded services within networked infrastructures and content-centric production and distribution processes. Online (network accessible) and long-term storage of digital content based on commodity IT technology (e.g. disk-servers and tape-robots) is an increasingly common approach, including conventional IT solutions for safety, e.g. backup and disaster recovery.

But are these solutions safe? Can they assure the data integrity needed for long-term preservation of Petabyte volumes of data? The answer is no. Field studies, e.g. by CERN[3] and NetApp[4], reveal that data corruption can take place silently without detection or correction including in 'enterprise class' systems explicitly designed to prevent data loss. We address this problem in the UK TSB supported AVATAR-m[1] and EC supported PrestoPrime[2] projects.

09:25**Philippe Gerrier,**

Head of preservation

INA, Institut national de l'audiovisuel

France**HD in the archive domain.**

More and more televisions are producing and broadcasting HDTV. The ratio of HD programs versus SD programs is increasing rapidly and archivists must face and manage 2 new challenges:

- 1) How to collect store and make accessible these new HD digital programmes?
 - What are the best file formats to archive HD?
 - What is the impact of HD on IT systems?
 - How to manage sound associated to HD programs?

2) How could SD archives be re-used in a HD environment?

- What display and aspect ratio policies to adopt for 4/3 pictures into 16/9 programs
- Quality requirements: importance of quality of up conversion and requirements
- About film programs re use: in which cases a new film transfer is required, in what cases upconverted SD film transfer is sufficient? (subjective and objective comparisons results)
- Digital restoration in an HD environment: tools and performance?

09:50

James M. Turner

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Canada

Audio description adapted to individual needs

Audio description is a special voice track added to audiovisual productions, which describes the image, in order to help users who are blind or vision impaired to understand the action in movies and television productions. Over the last several years, we have worked on a number of projects to study how audio description text can be matched to individual shots and sequences to index them for purposes of storage and retrieval in information systems. We presented one such project at JTS 2007 in Toronto. In the course of our work, we have discovered that blind and vision impaired users have a great variety of needs. Some prefer a minimum of description, others need much more. In addition, some need to hear only certain types of information in order to interpret the action, while others want to hear everything that is described. In our most recent project, with the E-Inclusion Research Network, we studied the question of allowing users to set certain parameters to adjust the quantity and type of description to their individual needs. To build a system that can manage this, our partners in the research network developed methods of detecting settings and characters automatically. The system is told once the name of each setting and each character, then a synthesized voice gives this information to users as settings change and as characters appear during viewing. Scenes in the productions we used were described by humans as well. Another component of the system is a player that allows users to set different levels of description and to choose types of information they wish to hear during viewing. This tool can also be used to assist describers in formulating the text they will recite as audio description. The player was installed online, and users were invited to try it and to evaluate the various kinds of description available. In addition, we organized two viewing sessions with participants who were completely blind, and a third session with vision impaired participants, in order to collect more detailed data from them on their experiences with the player. This presentation will describe the results of this research, and indicate what aspects should be worked on next in order to improve the tool.

10:15

Johan Oomen

Johan Oomen, Lotte Belice Balthussen
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Emerging practices in the cultural heritage domain: engaging users on a large scale, collaboratively

Keywords: Video Labelling, Crowdsourcing, Data Analyses

The web has made it easy to make digitized objects from heritage collections available. Users and institutions are beginning to inhabit the same, shared information space. This is an exciting prospect, as we are now witnessing new paradigms for engaging with our shared heritage. 'Netizens' are using technological advances, offered by cultural heritage institutions, publishers and other commercial entities, as well as objects from a great variety of sources to shape this information space. With new techniques, new knowledge (from experts and non-experts) is being built on top of existing knowledge. The new paradigms imply, in many cases, the need for profound change in institutional practice. This paper investigates emerging institutional practices, which are mapped and clustered according to specific dimensions. The specific goal of this paper is to present results from a large scale pilot; the Waisda? Video Labeling Game, that uses the concept of crowdsourcing to improve access to video archives. In this pilot project, different aspects of both institutional and user involvement in the abovementioned 'shared information space' are explored.

The first part of the presentation introduces the variety of initiatives currently undertaken in the heritage domain. The model looks at [1] the organizational model behind the service. For instance, initiatives can be driven by the institutions, be the result of public/private partnership or (at the other end) driven by the communities themselves [2] how the target audience uses the services and how data is reused. The model shows the various ways in which cultural heritage organizations are currently engaging with their constituents online.

To explore this further, a large-scale pilot was developed by the Netherlands Institute for Sound and Vision (largest audiovisual archive in the Netherlands), the Vrije Universiteit Amsterdam and KRO Broadcasting. Inspired by examples such as steve.museum and Flickr the Commons, Games With A Purpose, the Waisda? Video Labeling game was developed. The game, the first video labeling game in use audiovisual archive, was launched



in May 2009. It invites users to tag what they see and hear and receive points for a tag if it matches a tag that their opponent has typed in. The underlying assumption is that tags are probably valid if there's mutual agreement. The project was played by hundreds of people and within 7 months, over 350k items have been added to over 600 items from the archive. A thorough evaluation of the pilot was carried out, that included an quantitative and qualitative analysis of the tags, as well as a usability study of the game environment and a study into the incentives for people to use the environment. The pilot results show that crowdsourcing video annotation in a Serious, Social game setting is beneficial for both the institution and user engagement with heritage institutions.

10:40 Coffee

11.00

Svetla Boytcheva,

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Semantically Enhanced Audio-Visual Repository

Growing amount of stored digital audio and video data requires development of new techniques for semantically enhanced maintenance of such data. Semantic web, information extraction and information retrieval from texts are widely used nowadays, while technologies for capturing semantic information from audio and video data are making their first steps. Rich metadata descriptions of such data are usually time and effort consuming tasks. This paper discusses some of the most promising approaches of semantic web analyses and how they can be modified to be suitable for processing of audio and video data. This task is challenging because most of the approaches are specifically tuned for textual data. Although the basic approach would remain the same, audio and video data semantic extraction techniques require a significant modification, due to the variety of formats in which those data are stored and the multi-level representation of information. The presented approach will be illustrated with application for digital repository with educational video materials and for small collection of audio records containing minutes of scientific projects' meetings.

11:25

Hermann Lewetz

Austrian Mediathek
Austria

Long Term Preservation: The Time after

In this presentation I want to describe the storage installation and routines at the Austrian Mediathek compared to the requirements of the OAIS-model. Reasons of matches and possible mismatches will be discussed.

The aim of this paper is to focus our intention at the situation, when we have to deal with a huge amount of digital data. How to keep it and how even to be sure that we still have it. Migration will become a necessarily often practised routine, which therefore should be fulfilled by transparent and easy to handle processes.

For our second migration of digital files since the last 10 years, the Austrian Mediathek wrote a simple linux script to handle this task. This script shows to be a perfect tool also for the checking task.

The open solution at the Austrian Mediathek aims to fulfil the same tasks with the same trustiness as do proprietary and expensive dam (digital asst management) systems.

12:10

Paolo Cherchi Usai

Haghefilm Foundation,
Amsterdam
The Netherlands

Teaching Digital Preservation

The paradigm shift from analog to digital is affecting not only the acquisition, preservation and access policies of collecting institutions, but also the way in which moving image preservation is taught in academic and certificate programs worldwide. Initially regarded as a sidebar component of training curricula, digital restoration is now emerging as a basic feature of any educational activity in the field.

This predictable and yet dramatic change comes with new and exciting professional opportunities but also with a whole set of challenges, both for the students and for the instructors. Explaining the art and technique of digital restoration requires a complex and expensive equipment, as well as the expertise necessary to handle it. Moreover, no digital restoration of a photochemical or digital-born film can be entirely successful without an adequate knowledge of the distinctive look and feel of the two kinds of images to be protected and made accessible for posterity.

How can an educational program in film preservation address these questions without compromising its rationale and intellectual focus? Is there a way to achieve a meaningful and productive integration of analog and digital teaching modules? Doing so will require a strategic approach involving a mutual commitment of digital and analog preservationists to engage in an ongoing dialog at the scientific and curatorial level. To this end, a set of training policies, procedures and protocols will be proposed for discussion, together with some reflections on the financial aspects of their implementation.

12:30 Open Microphone

13:00

END OF JTS 2010