

## Conference Review

MIT6 Conference, Stone and Papyrus: Storage and Transmission, 24–26 April 2009, Boston, USA

The founding fathers of this long running series include the current directors David Thorburn, William Uricchio and Henry Jenkins, who have spent many years at MIT – which incidentally is about to celebrate 150 years as a hub of Science and Technology and an engine of American innovation. Earlier biennial conferences in the series – entitled ‘Media in Transition’ (1999); ‘Globalization and Convergence’ (2002); ‘Television’ (2003); ‘The Work of Stories’ (2005); ‘Creativity, Ownership and Globalization in the Digital Age’ (2007) – have led up to this 2009 conference on archiving issues across a wide range of media.

Archival management of records and archives as places distinct from libraries underpinned much of the scholarship throughout the conference. Several researchers spoke of strong parallels between ancient oral traditions and the emerging internet culture. As affirmed by the call for papers, whether they are recorded on stone, clay, paper, recording tape or film, physical archives have, since ancient times, been a primary source material for recorded history. The major questions posed by the conference include: how might the switch to widely distributed and digital media change not just archives, but history itself, and how might new media tools enable a new kind of civic/public culture?

At this moment of transition, experts suggest that the very notion of an archive is contestable as we face various choices, from dealing with the almost insurmountable difficulty of redundancy and maintaining duplicate systems, to all-out conversion onto digital formats. For instance the huge attrition rate of websites leads to questioning what to archive in the first place. For a decade now, over one-third of all websites have disappeared without a trace within a year of completion. This chaotic level of redundancy informed much of the discussion and delegates tried to tease out strategies that at the same time made sense for archiving across the range of new media output, as we look into the future. At the outset, it would appear that there is no completely satisfactory model for archiving as of yet in the new media/Web 2.0 domain.

The multifarious contributions to this wide ranging conference at MIT can be arbitrarily broken down into five broad areas of intersecting research: digital media; education, literacy and TV archiving; journalism and new media; oral/book culture; and revolutionary sites such as Second Life alongside YouTube.<sup>1</sup> All of these sub-sections in themselves have particular key issues to engage with and rehearse specific archival scenarios for the future.

## Digital Media

Rick Prelinger who gave a keynote address at the archive media conference in Sunderland, hosted by *Convergence*,<sup>2</sup> spoke of the freedom to remix, download and allow open access, while questioning what archives must do to serve new and expanded audiences and remain both durable and portable. Digital material of course is no longer linear, nor for that matter specifically unique. Access, he affirmed is not our core mission like in public libraries, but rather preservation of materials. Like so many speakers at the conference, Prelinger spoke of the phenomenal rise of YouTube as changing the ground rules, with access now driving the funding model and increasing public expectations of what an archive should look like and evolve into in the future. Proprietary ownership as opposed to open source remains the major area of discussion and debate. He spoke also of the 95/5 per cent rule that predicts collectors and visitors will only access and use 5 per cent of the total material in an archive. YouTube most radically reverses this model, with the public using almost 95 per cent of the material, in turn leading to much greater expectations of archives for the future.

Such a dramatically positive new model presents a major challenge for archivists and their presumptions regarding usage. At a European level, three archivists from Britain (BBC), France (INA) and Sweden presented papers, which I attended, and all spoke of their institutions as gatekeepers to our collective memory and the best guarantee for the preservation of and access to our growing audio/visual archives. Claude Mussou spoke of the memory and heritage policy, which was initiated in 1974 in France and facilitated the collection of over 4 million hours of broadcasting programmes. Like the spectre of YouTube, many delegates also spoke of the dangers of a Google monopoly and the general public's increasing expectations. In drawing historical comparisons, Mussou noted how many silent movies were in the past intentionally destroyed when the talkies came out. Essentially, the studios needed vault space and this was the price that had to be paid. Furthermore, while search engines like Google are not meant to be permanent archives, nonetheless it would appear that in America, alongside other non-public service broadcasting (PBS) nations, where there is little or no investment in archiving outside of narrow commercial based demands, commercial search engines are becoming the default global archive.

Pelle Snickars from the Swedish archive spoke of how they have over 7 million hours of media material archived since the mid 1970s and that digital has become the default medium for the archive. While Richard Wright from the BBC spoke of how, in a post-analogue world, what should be kept and preserved remains the abiding issue and a contentious debate. Already the BBC has over 100 km of shelves filled with material and 650,000 hours of video. The most important value of such material to the BBC lies of course in its reuse for current programmes, hence the organization can justify – beyond their PBS remit – employing over 450 archivists. Somewhat surprisingly however, they don't archive non-BBC material, while France and Sweden actively appear to do so.

In crude terms, the economic-driven archiving model suggests that as digital storage gets cheaper, it consequently gets more risky for safe storage. Hence, the BBC avoids getting rid of old analogue tape as secure backup. As a rule of thumb, each change in the technology gets 1000 times cheaper, but lasts only one-tenth as long. The solution for most of the archivists present involves industrialized automation processes for copying

material to keep up with demands. All spoke of the need for better social tagging and improving metadata, while placing material out on the web, as evidenced in the Internet Archive (2001) project for example. Web 2.0 participation is essential it appears while archives remain bound within traditions of cultural centrality. The ever-present future dilemma is how to access easily specific material from gigantic digital databases, as effectively demonstrated by the YouTube/Google models. How to guarantee that new media can be searched in a meaningful way, so that people can find what they are looking for, involves continuing research into new protocols for cataloguing, tagging and coding metadata.

## Education, Literacy and TV Archiving

Media literacy around archiving has also become a major preoccupation, while trying to teach audiences and consumers to engage with audio-visual material, beyond for example, at one extreme, simply mashing-up bytes to make music videos. Mary Leigh Morbey spoke of how the use and popularity of meta-media platforms in higher education is growing and in turn is helping to create, analyse and synthesize data, artefacts, epistemologies and vocabularies within these platforms. Transdisciplinarity is key, she believes, while citing seminal studies including Pierre Levy's *Becoming Virtual* (1998) and Andrea DiSessa's *Changing Minds* (2000), alongside Henry Jenkins' 'White Paper' on new media literacy in 2006.<sup>3</sup>

Many scholars spoke of how every human is hardwired to eventually build a personal history and how a narrative/storytelling drive permeates all cultures. Audio-visual archives in particular can facilitate and promote this pervasive human enterprise. Others talked of the pedagogic benefits of creating personal archives through narratives of wish fulfilment and displacement, with various minority groups able to articulate their unique voice. New media can certainly assist in this social justice project, as exemplified for instance by MIT's Media Lab research and their long-term preoccupation with digital and archival storytelling, which incidentally developed at a pace in Ireland (and India) for a number of years.

For some cultural and media historians like Máire Messenger-Davies, histories must come from the bottom up, while affirming that many records will be preserved by audiences or they will not be preserved at all. She spoke of the difficulty of not having archives of televisual flow/schedules, with such material being regarded as too ephemeral. Yet mass audiences remain preoccupied with their own collections of VHS, many of which have subsequently been taped over, while some collections have simply been discarded and replaced by DVDs. Box set DVDs have become the new criterion of permanence, unlike the ephemeral shape of the schedule and varying historical forms of consumption habits, which are not captured on DVD add-ons for instance. Consequently, it is very unlikely a professional/institutional archive will want televisual ephemera for storage and who in any case will pay for the cost of labelling, storage and transfer onto digital platforms. In general such memories and archives are left to a bottom-up, fan-based culture to fill in the gaps. While assessing extrinsic much less intrinsic value remains difficult, media and archivist scholars have to grapple with the relative historical importance of huge back catalogues of televisual output, alongside many other resourcing decisions.

## Journalism and New Media

The Centre for Future Civic Media (MIT) suggests that 'old' investigative and what could be broadly categorized as 'public service' media is in decline, since they did not connect the dots by telling the general public, 'here's how you take action'. This form of direction, at least in the USA, was considered as being too partisan for journalists to engage in. Assisting or even telling people how to respond, inferred no independent agency for the public. But at the same time some scholars spoke of how this lack of direction did not provide a place for the public to go and engage with such provocative investigative journalism. At the other end of the spectrum, one wonders if citizen-based, e-journalism and blogging is as radically proactive and participatory as some appear to imply.

Nonetheless, there remain numerous examples of technological innovations in the journalist sphere, which take time to be codified within the print/broadcasting environment, much less aided and legitimated by a coherent archiving policy. Most agree new habits of media usage inform process, choice, creation and collaboration with one another. Big public service media organizations like NBC for example in the USA – as also mentioned at the Sunderland conference – tried to fight back against the perceived threat to journalistic practice with new forms of 'viral transmission', using Citizen Tube, which was launched in 2007. This site sought to hail audiences as active participants in media creation. Furthermore, several NGOs for instance have also sought to engage members of the public as active witnesses in atrocities such as Darfur in Africa. Or taking on board the burgeoning 'green agenda', multiplatform media productions such as the film *An Inconvenient Truth* (2006) have been successful in creating new formats using archives in an innovative way to speak to new audiences and cultures.

See also 'Future of Public Media' discussion ([centerforsocialmedia.org](http://centerforsocialmedia.org), 2010) and [clickfix.com](http://clickfix.com) (n.d.) which help to create a citizen environment at grass-roots level. In the USA such web archive sites are used to gather instances of local social problems, like potholes in the street, rather than relying on endless phone calls to City Hall to complain. Whereas for example the post-9/11 'see something say something' campaign in New York created a toxic atmosphere, [heroreports.org](http://heroreports.org) (n.d.) strives to promote more positive images and attitudinal civic-minded change, as also evidenced in [www.spot.us](http://www.spot.us) (n.d.). For instance, it was suggested that there were more reports from deprived areas of New York with evidence of good deeds done that deserve noting. Such an online model of public citizenship provides opportunities for creativity and encourages participation that feeds into the utopic potentiality of new media civic interactivity.

Media access and debates around literacy have become more vital as agency and responsibility have shifted. One hopes there is an increasing desire to become part of a public sphere rather than remaining isolated and promoting passive outsiders. Consequently some contributors affirmed that serious (investigative) journalism essentially needs support both culturally and financially to do its job properly and new media together with archiving capacity can play their part.

Yet many at the conference still wondered why citizen media had not revolutionized the world yet. Jay Rosen tried to assert that blogging as opposed to more traditional journalism would eventually succeed in this radical project, while pontificating that the conventional advertising-dominated mass media model is over in the USA and elsewhere. Even if one had issues with such an assertion, it was interesting to note that while there

is a major growth in mainstream media blogs focused around national politics and technical/information media sites, very few new genres or themes have been developed through such innovative media formats. Hence a zero sum gain effect can be detected with the proliferation of new media formats and outlets but with no corresponding increase in original story-lines or content.

## Oral/Book Culture

One of the greatest challenges facing e-books is that adopters are largely required to choose between print and electronic versions, or to pay for both, which is reminiscent of the dilemma archivists face on a larger scale. One wonders if e-books are changing existing business models and what will it take for e-books to succeed in the open marketplace.

John Foley spoke of the oral tradition and how it has continued to survive into the digital age. He affirmed that oral communication 'technology' is older than writing, which is a relatively recent invention. Using the abstracted timeline of a year to represent the evolution of mass media in world history, one can assert that Egyptian scripts were invented on 10 December, the Gutenberg Press on 27 December and the internet just 16 seconds before the end of the year. The Greek writer Homer talked of Bards as knowing the 'pathways' to knowledge and how to get there, while not necessarily having great memories themselves. Such an analogy can also be used to explain the power of digital archives and databases and their ability to provide navigation pathways through computer networks. As there is no single author attributed to the oral tradition, which remains performance driven, so too Foley believes the internet, and databases in general, enables cultural memory to be kept alive. New media continues to promise new possibilities around presentation and access to the past.

Andrew Piper spoke in broad terms of the bibliographic imagination in the Romantic age and how 'humanism' came to an end, as the world became dominated by mass media. Books help to 'keep us human' and also serve as a medium of both knowledge and creativity. Rethinking the place of the book for the future, Annika Olsson extends this debate, quoting Francis Bacon who suggested how some books can be tasted, some swallowed, or chewed and others digested. Citing Harold Bloom's polemic that reading is in horrible trouble reminds me of Neil Postman's critique of an 'electronic' as opposed to a more 'progressive literary' age in *Amusing Ourselves to Death* (1985). Meanwhile Joanne McNeil more positively noted that the sale of young adult novels is still going strong. Teenagers apparently in the USA at least, read a lot and want authorities to look up to. In literature, unlike the de-authored cyber-space of new media, an author's voice remains clear and consistent, if only as an escape from the constant stream of technological intervention. Many teenagers apparently crave a form of linearity – rather than the iPhone and text messaging, which dominate their mediated lives – and maybe, McNeil concludes, this is the reason why such new interactive technologies are not included in many contemporary novels. Yet surprisingly no mention was made of Twitter, which is becoming important as a new medium for books. It was all but suggested that literary studies might find its disciplinary home in media studies, a cross-disciplinary debate which has a long history in Britain for instance, as personified by the Len Masterman and David Buckingham spats in the early days of media studies (Masterman, 1986).

## Second Life and YouTube

Archivists remain fully aware of the dangers of targeting YouTube and Google as the bêtes noires of 'serious' engagement with cultural preservation. With over 24 million videos online, YouTube has become the world's default archive. Consequently many speakers teased out various benefits and potentialities of new technology for the world we live in. Some wondered, are there lessons to be learned from the likes of Facebook, YouTube and Flickr for our next generation of archivists or do they simply take the form of cautionary tales or laboratory experiments requiring close monitoring for more mainstream archival cultures?

Whole virtual worlds create an unrealized promise – unless Second Life becomes open source, as Ann Wolpert from the MIT library affirmed – keeping diaries on Facebook or Twitter or on email is certainly not a permanent record and much of the material will eventually be lost, she cautioned. Wolpert spoke anecdotally of her daughters' recent world tour and her growing audio-visual diary blog. Because the new media traveller did not keep up payments on her site, she lost everything. New media is so ephemeral and unstable, there is a risk of losing everything because it is recorded in media that is still unproven. This fearful attitude was humorously evident at a recent visual cultural conference – IVSA at the University of Cumbria 22–24 July 2009 – when a minute's silence was observed for the demise of Kodachrome, which was much loved by photographers across the world and further plays into academic fears around new media. How to keep and preserve digital bytes of information is a major challenge because, as mentioned earlier, digital formats are so cheap that we do not value them, unlike the older and expensive analogue media. Nonetheless, at an aesthetic level at least, such digital innovations – alongside the metaphor of the database, as theorized by Lev Manovich and others – are usefully informing new strategies for reading and collapsing discrete grammars and protocols between so-called old and new media.

While focusing on Second Life, Lori Landay examined interesting immersive ways of looking at and creating new prospects for storytelling; and Jason Zalinger outlined a pervasive internet email system – Gmail – as a narrative platform which can be harvested to create another format for a life-story. Meanwhile, Mary Hopper spoke of her creative experiments in digital worlds, reminding me of Glorianna Davenport's work in MIT's Media Lab in Ireland on narrative to create fascinating new digital worlds.

Jean Burges and Joshua Green have edited a new book – *YouTube: Online Video and Participatory Culture* (2009) – which was discussed in detail. The phenomenally successful audio-video website, whose spectre permeated the whole conference, was of course famously bought by Google in 2006 for US\$1.6bn and remains a very large site of participatory culture and user generated content, populated by popular cultural memories. Henry Jenkins helped to contextualize its development by speaking about what happened before YouTube. People were waiting for what the site would bring for a long time. Jenkins cited in particular Mark Davies who spoke of the rise of video-on-demand in 1997, the same year as Pierre Lévy's study *Collective Intelligence*, foretelling how it has now become an established, normal and predictable site. Yet what is remarkable about YouTube, according to Jenkins, is how ordinary it is. Jenkins also emphasized the importance of science fiction fan culture in helping to promote this new media participatory culture, while academics emphasize the lack of an *avant garde* practice on YouTube, displaying no real politics of participation.

There remains lots of tension in fan culture at present regarding the use of YouTube as the new media archive par excellence. Many question the contextualization of videos on the site, with many radical groups wanting to be able to control consumer usage of videos and in turn frame meaning. Of course YouTube is almost designed to be context free, as it proliferates and extends its range of often ultra-short bytes of audio-visual material for indiscriminate access and consumption. As academic researchers of course we need to think around how to spread and promote a deeper level of contextual knowledge within and around mediated texts. It would appear that many groups move on and utilize other internet platforms, as they become frustrated with YouTube in general.

John McMurria writes specifically on what is not there on YouTube, most notably he sees no blacks or minorities. Dominant tastes always move to the top and minorities stay underground and hence there is a recurrent danger with such a non-participatory culture being established and codified. Nevertheless, there is always the possibility of transformation at the same time with lots of downloads of Obama's speech on race for instance. The glib assertion that the best material will rise to the top remains however suspect to say the least; it depends on popular cultural fashions and from current evidence there is little evidence of real transformation. So, Jenkins concludes, there is no guarantee that participatory culture will be more democratic, which – coming from the world-renowned fan cultural theorist – is certainly worth taking note of.

## Final Observations

From an academic outsider's perspective, it remains difficult to pinpoint clearly defined and agreed convergences between archiving and new media. But as is often said, the very essence of convergence is about blurring of boundaries across technical, economic and disciplinary paradigms. Such research and examination involves scholars stepping out of the comfort zone of our immediate discipline to relate to archiving, as probably the most important long-term issue facing new media.

Many questions were posed by the conference, which remained somewhat biased towards the USA and its preoccupations. Nonetheless several of these issues will become more urgent and relevant for international scholarship across a wide disciplinary area well into the future. I would predict some questions posed by the call for papers will certainly inform and exercise future research including:

- How do social media tools offer the chance for the public to participate directly in defining and creating public media?
- How can deep archives of content and images be used to generate relevant, dynamic public media projects?
- How will online video practices become part of civic/public culture?
- What policies are needed to make a civic/public culture grow in the participatory era?
- How can new media be used to strengthen global citizenship?

In the initial call for papers, Harold Innis was cited together with his pupil Marshall McLuhan, who suggested that we drive into the future only with the benefit of a rear view mirror. How to theorize historical disjuncture beyond ceaseless spectacles of transition remains, according to Mary Bryson, an abiding academic tension, where apparently what counts as new historical record is encyclopaedic and even more malleable data.

What was especially useful in the conference was an openness to dialogue between such a wide range of disciplinary areas and this augurs well for the future of archiving and new media into the future.

Suggestions for MIT 7 include burgeoning topics like the environment or religion and media, either of which would make for an interesting consolidation of new media research of late. Overall, this was a very useful conference, which was financed with the aid of corporate sponsorship including MIT, and this meant there were no registration fees or enforced membership. However, this is not the norm for big international conferences in media and communications, which are becoming very expensive and unfortunately this often militates against a broad collegiate level of engagement for the future of our inter-disciplinary range of studies.

## Notes

- 1 I was able to attend only a small percentage of the papers presented. However, all abstracts and many full papers are online alongside papers from previous conferences. See MIT6 website (2009) <http://web.mit.edu/comm-forum/mit6/index.html>
- 2 See [www.futurehistories.net](http://www.futurehistories.net) for a review of the Sunderland conference (2007) and the papers presented. At that conference we heard of a lot of university projects and small independent archives in the UK and elsewhere, who needed greater networking to bring a range of expertise together and to prioritize long-term objectives around convergence, setting up data standards, common platforms and so on.
- 3 See the very useful 'Confronting the Challenges of Participatory Culture: Media Education for the 21st Century' online at [digitalllearning.macfound.org](http://digitalllearning.macfound.org) (n.d.).

## References

- Burges, Jean and Green, Joshua (2009) *YouTube: Online Video and Participatory Culture*. Cambridge, MA: MIT Press.
- centerforsocialmedia.org (2010) 'Future of Public Media' Forum. URL (accessed January 2010): [www.centerforsocialmedia.org](http://www.centerforsocialmedia.org)
- clickfix.com (n.d.) URL (accessed 27 January 2010): <http://seeclickfix.com/citizens>
- digitalllearning.macfound.org (n.d.) URL (accessed 20 November 2009): [http://digitalllearning.macfound.org/atf/cf/%7B7E45C7E0-A3E0-4B89-AC9C-E807E1B0AE4E%7D/JENKINS\\_WHITE\\_PAPER.PDF](http://digitalllearning.macfound.org/atf/cf/%7B7E45C7E0-A3E0-4B89-AC9C-E807E1B0AE4E%7D/JENKINS_WHITE_PAPER.PDF)
- DiSessa, Andrea (2000) *Changing Minds: Computers, Learning, and Literacy*. Cambridge, MA and London: MIT Press.
- heroreports.org (n.d.) URL (accessed 27 January 2010): <http://heroreports.org>
- Internet Archive (2001) URL (accessed 26 January 2010): [www.archive.org](http://www.archive.org)
- Lévy, Pierre (1997) *Collective Intelligence: Mankind's Emerging World in Cyberspace* (trans. Robert Bononno). Cambridge, MA: Perseus.
- Lévy, Pierre (1998) *Becoming Virtual: Reality in the Digital Age* (trans. Robert Bononno). New York and London: Plenum.
- Masterman, L. (1986) 'A Reply to David Buckingham', *Screen* 27(5): 96–103.
- MIT6 (2009) URL (accessed 26 January 2010): <http://web.mit.edu/comm-forum/mit6/index.html>
- Postman, Neil (1985) *Amusing Ourselves to Death*. Harmondsworth: Penguin.
- Sunderland conference (2007) URL (accessed 26 January 2010): [www.futurehistories.net](http://www.futurehistories.net)
- [www.spot.us](http://www.spot.us) (n.d.) URL (accessed 27 January 2010): [www.spot.us](http://www.spot.us)

Pat Brereton

Dublin City University, Ireland  
(email: [pat.brereton@dcu.ie](mailto:pat.brereton@dcu.ie))