Small voices in cyberspace: digitisation issues for research archives

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Abstract:
The paper examines how the challenges of new technology affect research archives holding audiovisual materials. It will examine issues of ethics in dissemination of recordings, resource implications, standardisation, and other issues pertinent to research archives. International projects and initiatives will be examined, with reference to the work of UNESCO and the International Association of Sound and Audiovisual Archives.

This paper will be an exploration of the Utopian expectations and Labyrinthine realities that small archives must face when they prepare to digitise their collections. I shall concentrate on audio recordings; however many of the principles enumerated can be applied to photographic and video collections as well. I shall examine some of the major issues involved in digitisation and dissemination of audiovisual materials as faced by archivists and shall show how these are being addressed both within Australia and overseas. Finally, I shall demonstrate how the Internet can be both friend and foe in this process.

Before I begin this tale of woe, fear and exhilaration, let me define what I mean by research archives. I will be focussing on small cross-media-based archives that hold field-recorded and specialised collections of audiovisual media and their print documentation. They may be part of larger organisations, such as universities or research organisations, or may be stand-alone archives with a topical emphasis. Examples of the former are the Archive of the Research Institute for the Languages of Finland or the Archive of the American Institute for Indian Studies. Some stand-alone topical archives would be the archive of the Performing Arts Museum in Melbourne or the archive of the Kimberleys Language Resource Centre at Halls Creek, WA. Small research archives differ in size and focus from large national archives, such as the Library of Congress or ScreenSound Australia and from broadcasting archives, like the ABC. The archives of these larger organisations hold research collections, but their charters require them to amass comprehensive national collections or program materials.

Small research archives, along with other collecting institutions, have no choice about digitising their collections. Up until recently, the received wisdom of archiving audio material demanded that preservation reels be the preferred archival medium. However, a UNESCO-funded survey by the International Association of Sound and Audiovisual Archives (IASA) determined that about 15 years remain before maintaining reel-to-reel tape recorders becomes prohibitively expensive. Ten years ago there were 25 manufacturers of reel-to-reel recorders- now there are 6. There were 70 models of recorders- now only 8. (Boston 2000: 3-4) Because research archives hold much early material on reels, there is great pressure to transfer the recordings quickly while reel-to-reel recorders can still be functional. Also, the cost of reel-to-reel tape is hard to justify when a blank CDR, at around the $1-2 mark will record as much information as a $36.00 analogue reel.

Analogue audiocassettes are also in the process of becoming obsolete, although many archives still keep them for access copies. It is becoming hard to find replacement parts for the recorders. This becomes a difficult situation because analogue recorders are still generally easier to use on the field. Pricewise, the cost of a blank CD is now less than for a blank cassette although the price differential is less than that for reels and CDs.

Small archives and digitisation:

Two scenarios will help to give you empathy towards people who work in small research archives. Although the situations thus described are present in all institutions holding audiovisual materials, small archives have less staff, finance and infrastructure to deal with them. Virginia Danielson, of the Harvard University Archive of World Music, plaintively states our first issue:

Scenario 1: Utopian expectations

“My favourite library patrons will gesture wildly toward a part of our collection and say, ”of course, all this will be digitised eventually.” As someone working in a large collection, I find this view variously hilarious, pitiable, or depressing.” (Danielson 2001: 4)

Hilarious because of the assumption of adequate staff and the supposition that all will be digitised; Pitiable because of the disappointment lurking in the wings as cold grey dawn of reality descends upon the poor user;
Depressing because of the lack of finance, staff and time to achieve the expectations of the client.

Let us look at three issues arising from Virginia’s scenario- funding provisions, metadata standards, and documentation personnel.

**Funding provisions**

One simple fact remains about obtaining funding for digitisation- it is much easier to come by in the USA and in Europe than in Australia. Some examples will clarify my point. In the USA, the National Endowment for the Humanities and other agencies offer substantial help for digitisation projects. For the fiscal year 2001 their Division of Preservation and Access provided $1,892,473 towards projects listed in their Reference Material and Archives and Special Collections for digitisation or digitisation itself. This does not include the funding for online State encyclopaedias of $730,941. Although much funding was directed towards large institutions, such as the Museum of Fine Arts in Boston, smaller organisations like the Museum of the Rockies ($147,112) and the Vermont Folklife Centre ($20,000) received substantial financial aid.


The tradition of philanthropy in the USA offers many possibilities for funding. Foundations such as Kellogg and Getty have provided substantial support for digitisation of audiovisual materials, especially for photographs. A major project, known as Digital Promise, is building the Digital Opportunity Investment Trust (DO IT), a trust fund aimed at providing venture capital to enable digitisation of the holdings of non-profit organisations such as archives, within the US. Revenues earned from investing $18 billion received from mandated FCC auctions of the radio spectrum will provide the funding base for this project.

In Europe, significant activity took place in 1995 when the German national broadcasting institutions were funded to digitise their programming and to investigate digital mass storage. A number of European broadcasters and archives are participating in the beautifully-named AMICITIA, which is developing a digital archiving system for preserving television and video material. Governments of a number of Western European countries along with industrial project partners are putting financial resources into enabling digitisation of the audiovisual part of the European memory, such as the ECHO/MEMORIAV project in Switzerland. In the U.K. alone, funding for digitisation projects comes from sources as varied as the New Opportunities Fund in the U.K. with resources drawn from the national Lottery, and the Arts and Humanities Research Board, who offer grants up to 500,000 pounds.

In Australia, the funding base is not large as for the US and Europe. Major libraries in Australia such as the National Library, Mortlock Library in SA, State Library of Victoria, State Library of NSW and others, have received funding for digitisation, but high priority has been set for their print materials. For audiovisual material, the Department of Communications, Information Technology and the Arts (DCITA) has contributed funds towards a digital mass storage system at ScreenSound Australia. Small archives have fewer options. If they are part of a larger institution they can bid for internal funding. If they are a stand-alone organisation, one source of money could be the Community Heritage Grant program sponsored by the National Library of Australia. In 2000, $131,142 worth of grants was awarded to archives and keeping places under its Community Heritage Grant program; however, this money was spread amongst 32 organisations. Generally, it is not easy to find funding for digitisation projects for small archives within Australia, especially if they involve sound recordings and moving images.

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3 See www.digitalpromise.org/report/backgroundpapers/3_Fremont-Smith.pdf for more information on the DO IT initiative.

The fact remains that all of the impressive funding mentioned above was given in the form of grants. Large organisations can afford to employ staff to spend a significant portion of their time in preparing grant applications. For small archives, the human resources for such work are often not available. Also, a major philosophical problem arises here for archives—large or small—about grants and how they work.

A grant covers a discrete project that has time and budget limits. From a management point of view, it is easier to get funding for something that has a definite beginning and ending. Yet the philosophy behind archiving involves providing a lasting resource for present and future generations, the management of which should not be dependent upon fits and starts. Once digitisation is embarked upon, archives need continuous funding to maintain the standards and to cope with the rapid hardware and software changes required for refreshment and migration. Such processes become part of the ongoing work of the archive. Managers need to realise that digitisation is not a one-off project level activity but is a vital part of the program level planning and will remain so for the foreseeable future.

Along with this continuity issue, grants allow for employment of extra staff to achieve the projected goals. A training component should always be part of the budget for any such grant. However, unless the archive can raise more funding, once the grant is used up, the staff will not be able to continue in the archive. Archives are also about corporate and subject-matter memory, and the skills and collection knowledge learned by the staff on specifically funded projects will depart along with them.

Many small archives are part of larger institutions. This situation has its good and bad sides. As long as the institution receives funding, the archive as part of that institution will be able to benefit if the institution remains committed to the archival functions. But the archive must compete for funding with other areas of the institution.

**Standardisation of metadata**

Archivists are being told in no uncertain terms to make listings of their holdings available to the public, yet standards governing how the listings are made are in great flux. Metadata standards exist to help people find material in a consistent way. Yet there is a great paradox—one of the nice things about standards is that there are so many of them to choose from. (Cunningham 2000: 16) Large national collecting agencies are struggling with these problems as much as small research archives. Archivists and librarians are being hit with a wonderful series of acronyms, such as ISAD(G), MARC, OCLC, MARC-AMC, APPM or the somewhat self-descriptive MAD, RAD, EAD. A translation of some of these acronyms gives us:

- **ISAD (G)** – General International Standard Archival Description
- **ISAAR (CPF)** - International Standard Archival Authority Record for Corporate Bodies, Persons, and Families.
- **MARC** – Machine Readable Cataloguing (US MARC becoming the standard)
- **MARC-AMC** – Archival and Manuscript Materials (different standards for different countries but
- **OCLC** – Online Computer Library Center
- **APPM** – Archives, Personal Papers and Manuscripts
- **RKMS** – Records Keeping Metadata Schema
- **EAD** – Encoded Archival Description
- **MAD** – Manual of Archival Description (British)
- **RAD** – Rules for Archival Description (Canadian)
- **AACR – NBM** – Anglo-American Cataloguing Rules, Non-Book Materials
- **ISBD (ER)** - International Standard Bibliographic Description for Electronic Resources

Aside from offering a description of the digital item, archives need to manage their metadata. Record-keeping metadata exists to identify, authenticate and contextualise records and the people, process and systems that create, manage and use them. (Cunningham 2000: 20). If such information for each digital object cannot be kept in this era of ever-changing hardware and software, then it may become impossible to preserve them. For the archivist the basic challenge is to be able to migrate the structure and content of information through a maze of competing digital coding systems. 

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5 For an interesting example of a project that adapted various standards of metadata description, see van Ballagooie, Marlene. Metadata for Archival Collections: The University of Toronto's 'Barren Lands' Project. http://www.rlg.org/preserv/diginews/diginews5-4.html#feature3.
Both the Australian Society of Archivists and the Records Management Association of Australia are spending much time in addressing such issues of metadata and met together in Hobart from 2-5 September in a conference aptly named “Convergence.” The keynote address and the bulk of the topics embraced managing digital records.

So how can a small research archive decide which standard to adopt? One shining hope in the midst of these different standards is the Dublin Core, a system specifying which fields of information are necessary for effective on-line cataloguing and management of digital and non-digital records. But even within listings of basic Dublin core elements, the number of fields can vary from 10 to 20 or more. Also, working groups update the Dublin Core specifications from time to time. In any case, archivists can deal with an internationally accepted standard for metadata description that is easily available on the Web.6 The Web has been especially kind to audiovisual archivists, providing many helpful sites for all aspects of archiving that can be found on lists assembled by the major collecting institutions within Australia.

Once the standard is adopted, small archives can get valuable information about item level cataloguing, including proper preservation metadata guidelines for digital objects, from the Preserving Access to Digital Information website attached to the National Library of Australia site.7 Specific help for cataloguing audio materials comes from the IASA Cataloguing Rules, available on-line.8 For cataloguing moving images, the AMIA Compendium of Moving Image Cataloguing Practice provides writeups from the experiences of 27 organisations holding moving images and how they have dealt with cataloguing. Smaller archives, such as the Minnesota Historical Society, are included as well as large archives such as ScreenSound Australia.9

However, face to face sharing of knowledge and experience is one of the most efficient ways of creating a useful database and solving cataloguing dilemmas. Many of us will attest to the fact that a major benefit of conferences comes from personal contacts and exchange of ideas about specific issues.

Also, archivists from large institutions within Australia have been connecting with outlying smaller institutions to create practical archiving procedures. ScreenSound Australia has sent teams of archivists to Vietnam, the Philippines and other Southeast Asian nations to help with archiving practice, including helping to set up cataloguing conventions. Preservation staff from the State Library of WA have been advising the Kimberleys Language Resource Centre in NW Australia about care and maintenance of collections and creation of on-line cataloguing, amplifying the functionality of the database that is already in use.

Need for subject knowledge

Within the last ten years or more, there has been a trend for large collecting institutions to employ generalists rather than subject specialists who could be moved into any section to catalogue any item put before them. In organisations where most of the holdings are published and well documented, this strategy may be adequate.

However, field-recorded collections are not always given to an archive in neatly arranged form. Unless a researcher had been provided with standardised forms for documentation, description of the collection will be influenced by the researchers’ internal senses of order. Perhaps early descriptions are written in a florid German script or Pitman shorthand on scraps of paper that need to be matched up with recordings. If documentalists have an understanding of the academic disciplinary framework under which the collection was made or some knowledge of the particular subject focus of the material, these treasures can be arranged in a meaningful way. A good subject knowledge helps the person doing the listings to identify what is relevant documentation and what is not. This is especially important for the process of selection for digitisation and planning for linkages between related bits of information.

Copyright and ethics

The second scenario to arouse your empathy deals with copyright issues.

Scenario 2: Labyrinthine realities

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8 See http://www.llgc.org.uk/iasa/ for a link to the IASA Cataloguing Rules.
9 http://www.amianet.org/05_Committees/Compendium.html
Anthony Seeger, of the Ethnomusicology Department of UCLA and one of the most able, inspired and tireless advocates for protection of cultural heritage material, provides a most apt outback metaphor for copyright challenges.

“Most archives, in particular, find themselves in the position of a horse being kicked forward and reined in at the same time. When you kick a horse and pull back on its reins, the horse gets confused and may rear, buck, rear, kick, and forget all its previous training. Faced with the tremendous challenges of preserving disintegrating collections, prodded by increasingly entrepreneurial administrations to be more self-supporting, kicked by patrons for not having more online, and reined in by concerns about copyright and ethical uses of their materials, archivists rarely buck, but we do roll our eyes in frustration, consider other jobs, and may forget what we have learned through decades of work with our collections, with depositors, with patrons, and with communities.” (Seeger 2001: p.32)

When many field recordings were first made, neither the recordists nor the people recorded had any idea that there would be international interest in the material—neither in the subject matter nor in the physical recordings. Recording technology was a new thing and produced an artefact that could inspire fascination, fear or mirth. When these recordings were deposited into archives, such as the Berlin Phonogramm-Archiv that was founded in 1900, they were seen as source material for academic study. Now they may be seen as some of the last bits of cultural identity for ethnic groups that may have lost their languages or songs. Recordings may also be seen as thematic treasure troves for composers looking for new material to inspire their compositions or for record publishers seeking novel additions to their catalogues.

Needless to say, the makers of early recordings did not always negotiate how the recordings should be used with the people they recorded, simply because they did not think it was necessary. And if they did have an agreement with the person they recorded, it was often done within the framework of mutual trust between the two parties. If that recording is put on the Web, the whole world is brought into the picture, which was definitely not part of the original arrangement! Also, when they deposited their recordings in an archive, they may not have legally transferred the recordings to the archive so the provenance remains unclear, especially if the recordist cannot be located. The expense of making preservation copies for material that the archive does not own is hard to justify. And finally, the recordists may or may not have documented the material and/or provided instructions to the archive on access and copying. Although the material may now be out of copyright, ethical issues arise such as:

- Cultural sensitivities cannot be observed.
- Financial remuneration would not be guaranteed to the owners of the cultural property if the recordings were to be published.
- Copying the material for clients could cause legal action to be taken against the archive.

Even if some of the information is provided, copyright law protects the recordist but not necessarily the performer. In Australia, the Copyright Amendment (Moral Rights) Act 2001 protects the creator of a work, ensuring that

- the author be clearly identified (right of attribution) and
- the work be protected from derogatory treatment (right of integrity).

**Right of attribution**

A number of ethical difficulties arise with field recordings. First of all, archives hold much material where it is impossible to determine who is the composer or creator of the songs and stories; therefore in copyright law, this material is not protected. In Seeger’s work with the Suyá Indians of Brazil, he mentions a song composed by a jaguar, learned from a captive over 200 years ago and controlled by a ceremonial moiety. (Seeger 1996: 90) I know of a song from near Hatches Creek, NT in the Alyawarr language that was given to an Aboriginal woman by the kwereympe, a female spirit, who appears often in dreams. Both examples retain special ceremonial and cultural relevance within the communities from which they came. Should those songs be available to a record company who stands to gain large profits from their use without benefits going to the community from whence it came because copyright law does not protect it?

Secondly, once the creator is identified, the law protects works created after December 2000. Therefore, the Moral Rights provisions protect only holdings created after that date. Although the Moral Rights Act is a good beginning, most holdings of archives were made before 2000. As pressure increases on archives to put more information on the Internet, this is a serious ethical issue.

A third point of contention arises because the law protects the individual creator, giving no provision for group ownership. In the case of the jaguar song mentioned earlier, a clan controls who may have the right to sing the song. The Western cultural roots of copyright law do not take such aspects into consideration.

**Right of integrity**

If a copy of a recording or a design on a photograph is used in a creative work in a way unacceptable to the creator of the work, it often will take a court case to establish the right of integrity. Misuse needs to be defined and the action has to be proven to have fallen within that definition. Such rights have been successfully upheld even before the Moral Rights provision came into effect. One example is the case of the Aboriginal artists Johnny Bulun Bulun vs R & T Textiles, where one of his clan designs was used on a T-shirt without permission. (Janke 1997: 69) Archives have used indemnity forms to protect themselves against misuse, where the client must state the way in which they will use the material. This ensures that archives have done everything possible to maintain the integrity of the material. The Moral Rights provision carries the protection from there on, but, again, only for material created after the law was enacted.

Therefore, archivists working with research collections involving historical recordings find themselves becoming referees between cultural concepts of ownership, constraints placed by the depositors and prevailing copyright law.

They must be aware of the original intent of the recordings as opposed to the pressure to provide access holus bolus. Archivists must know the legal and ethical issues surrounding the collections that they hold and must be able to express their reasons for managing their collections in the face of growing pressures to give Internet access.

**Where do we go from here?**

Archivists in both large and small institutions have been meeting, debating and exploring how to ensure that their archives will last into the foreseeable future. They have also been publicising themselves and their work as never before. Journals such as the Cultural Survival Quarterly have highlighted the importance of intellectual property rights and have included articles by archivists throughout the world who deal with Indigenous material. Issues on ethics, digitisation and dissemination of cultural material appear regularly in major ethnomusicological, linguistic, and anthropological journals and interdisciplinary Web sites.

Almost as I speak, the International Association of Sound and Audiovisual Archives (IASA) will be voting on the creation of a Research Archives Division to stand alongside the National Sound Archives and Radio Sound Archives Divisions. It will give small archives a voice structurally within the organisation and will work to recruit small archives from developing countries to IASA. Because IASA carries Category B status with UNESCO, it is possible to request funding for approved projects. Watch this space.

One of the most exciting developments for research archives occurred in December 2000 in Washington, DC—paradoxically the same time when the Moral Rights legislation was ratified in Australia. The symposium, ‘No Time to Dawdle: Folk Heritage Collection in Crisis’ was held at the Library of Congress. The purpose of the meeting was ‘to identify and define common problems, encourage the sharing of best management practices, suggest responses to critical issues, and develop plans to preserve folk heritage recorded sound resources for future generations.’ (Folklife Centre News 2110: 3). Representation came from librarians, archivists, audio

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12 The symposium was sponsored by the American Folklife Center and the American Folklore Society December 1 and 2 and was funded by the National Endowment for the Arts, the National Endowment for the Humanities, the Council on Library and Information Resources, the Recording Industry Association, and the GRAMMY Foundation.
engineers, computer scientists, preservation specialists, folklorists, ethnomusicologists, anthropologists, entertainment lawyers and recording company executives, who engaged in spirited debate. Our meeting today includes many of the same types of participants.

Although this symposium was directed at collections within the USA, some of the recommendations for action can be seen as applicable internationally. The central issue for the symposium was not digitisation, but each of the keynote speakers spent considerable time describing the need for it and the complexities arising with its implementation. Proposed actions directly pertaining to digitisation were:

• To develop an interdisciplinary Web site that will provide links to resources for sound archives. Some of this is already happening with the issue of preservation, especially on the PADI site (Preservation of Digital Objects) run by the National Library of Australia.

• To provide disciplinary input by scholars to the further development of the Dublin Core and other relevant metadata schemes.

• To designate regional facilities able to offer help to smaller archives for data migration and other aspects of digitisation. In Australia, the National Library is taking this role along with some of the State libraries.

• To develop a set of ethical guidelines for dissemination of digital objects

• To set up a committee to address pertinent issues in the development of copyright law

Although, as I have shown, work is beginning in some of these areas in Australia, this list gives a good outline of major projects that will benefit small archives as they digitise their collections.

I would like to conclude with the rather frightening words of Lorcan Dempsey, the Director of the UK Office for Library and Information Networking (UKOLN) in relation to digitisation from an archives perspective:

"The digital medium is radically new…. (In order to implement digitisation within institutions) The costs of developing necessary roles and sustainable practices will be high, as will the social and organisational costs of change and institution building. However, the costs of not doing so will be higher, as the cultural and intellectual legacy to future generations is entrusted to a house of cards built on a million web sites" 13.

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