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Hot off the press following an inspirational and seamless 40th anniversary conference in Athens in September, this journal offers 10 papers delivered at the event. Most of them have been reworked for publication so even for those lucky enough to have been there, this issue will be of value.

The theme the conference was grappling with was “Towards a new kind of archive? The digital philosophy in audiovisual archives”. In many ways it was an invitation for us to do some blue-sky thinking about where we see our profession, our institutions, and our disciplines in years to come. But of course futures depend on where we are at the present, and it’s clear that different types of archives experience different ‘presents’ and thus focus on a variety of visions as they head into their futures.

Ray Edmondson’s digital philosophy concentrates on convergence - he envisages a future of public “mega-institutions”, not driven by profit-making, and presenting words, images and sounds together digitally. Referring to our profession, he suggests that “it needs... to learn the lesson of convergence within its own internal politics, so its advocacy and cohesion as a field can grow and be more effective”.

Indeed, if there was a single buzzword of the 40th anniversary conference, it was probably “convergence”. And we can see this as we read through many of these papers, despite the fact that they are penned by people working within different types of archives and within different fields of research. We see Aaron Bittel from a research archive perspective believing that “hybridity is our strength”, hybridity not only of collections but also of functions (including teaching, librarianship, archiving, preservation, subject specialisation). We see Ruth Abankwah putting forward her ideas for the convergence of audiovisual collections within a country into a single national collection. In some senses this suggests the opposite of convergence in that these audiovisual collections would be drawn out from library collections that are more hybrid. However, she suggests that where resources and expertise are scarce it makes sense to allow them to develop in a single specialised environment rather than spreading them thinly across several non-specialised institutions. It is interesting to dwell on the potential for Jamaica’s solution to the problems of lack of resources, presented in this issue by Maureen Webster-Prince. “The Audiovisual Information Network (AVIN) of Jamaica provides a community for rallying the cause to develop comprehensive collections of AV productions”. Is this network of organisations - including representatives from a range of other networks as well as media practitioners, researchers, cultural historians, librarians, archivists, entertainment lawyers and promoters - delivering the “advocacy and cohesion” that Ray suggests we need as we head into the digital future?

Bert Lyons, Nathan Salsburg and Anna Lomax Wood’s paper presents a case study that also speaks to Ray’s model of convergence. In the case of the Alan Lomax Archive, the original items have been passed to the Library of Congress, which now takes responsibility for their stewardship, thus freeing the Alan Lomax Archive - a digital archive - to deal with research requests, and to develop cultural and social outreach programmes that ultimately will promote the value of archives overall.

Edwin Van Huis, founder and director of XPEX Experience Experts in Amsterdam and previously General Director of the National Institute for Sound and Vision in Hilversum in The Netherlands, brings his years of experience to the very good and simple question: ‘What makes a good archive?’ His answer: one that listens to its users. His inspirational keynote speech, presented here with some of the memorable images in full colour, argues that users want a multi-media experience, suggesting, perhaps, that collections of all formats within and between institutions must converge.

Two other papers in this issue explore the relationships between archives and users. Gisa Jähnichen asks what the ethnomusicology archivist/curator is to do as users within this subject make use of ever broadening and diverse resources. Highlighting the importance of format and subject specialists, Gisa suggests that audiovisual archivists are needed to guide users to high quality and subject appropriate resources for their study. Budhaditya

Chattopadhyay's contribution, while talking specifically about a number of "soundscape" projects in India, simultaneously presents research on the importance of user-generated content and the archivists' role in raising awareness within communities of the need for recording and archiving their environment.

I have also included a detailed paper on DAT migration by Tim Bathgate at the Radio New Zealand Sound Archives / Nga Taonga Korero. There are many aspects of this paper that should be of interest to IASA members. However, in considering our question of the future of archives it struck me that broadcast archives are arguably in the best position to research methodologies and technologies for such processes, for their own purposes of course, but also for the benefit of smaller institutions where collections may be more varied.

Grace Koch's paper does not present the future of archives, but rather the past – of IASA through the eyes of its editors. This was a paper Grace entertainingly presented at the 40th anniversary party in Athens and which offers great insight into some of the main themes tackled by our Association

And finally, also looking into the past, Gila Flam's tribute to the late Israel Adler reminds us of IASA's own heritage and inspires us to emulate what he achieved during his productive and influential life and career.

The past century has been the century of sound and moving image. Amongst ourselves this piece of information is self evident, and we hear it repeated often at conferences and speeches. The way of documenting our history and knowing our past now includes the new sound and audiovisual documents, and has done for over a century. With these dynamic time based documents came a new set of imperatives; where libraries and archives were once content to wait until the documents of their time were no longer active, and then take them from their shelves, boxes and folders and incorporate them into the archives of the world's memory, we have learnt, often to our detriment, that we only have a finite time to acquire our collection material before the ravages of decay and technical obsolescence take them from us, and we commenced a race to acquire and save as much of our AV heritage as we can. As these documents took centre stage as records of our more recent past, still more challenges awaited the libraries and archives that acquired them; we now know that we need to interact in the digital environment, even more quickly than before, and take an active part in determining the format, structure and architecture of the information we acquire.

Using archival collections was once an elite practice, and the trusted and verified scholar could blow the dust from the boxes and reverently use that content. In the last century, we AV archivists invited our users into our collections, wheeled out our dust free machines, and provided access to our precious collections. In the present we are now providing access to people we have never spoken to and will probably never know. We aspire to preservation practices that are part of our everyday workflow. Recognising the large technical challenge and responding to it has led to the realisation that acquisition, preservation and access are part of a single practice in which each part depends and relies on the other.

Sound and audiovisual archives everywhere have adapted and changed, and are still adapting and changing with an ever increasing sophistication in our understanding of the environment in which we operate. Embracing that change while preserving the principles that underpin the core reason for being, has been, and remains, a difficult balance. This balance has been achieved with varying degrees of success in many parts of the world, and has a way to go in many others. It is inevitable, however, that the sound archiving community will need to think about how we do things differently in the light of how things have changed.

In the same way that our collecting institutions have grasped that nettle, IASA must think about how we remain a valuable and significant organisation that is different from that of 40 years ago. As the opportunities offered to IASA to become involved in the changing socio-technical environment grow, we need to be able to respond and participate. So to be more internationally responsive do we need to be more legally constituted? It is a concern that IASA is not a legal entity, and the Executive Board will be moving to address that immediately under our existing constitution.

However, there is a need to take a deeper look at our constitution to see how it helps and hinders us in our endeavours, and to consider the concerns of our members. At the Athens 2009 conference, the Board and the membership discussed some of the issues that have arisen as a result of our old constitution, and a small committee has been charged with the task of developing those ideas, and investigating the strengths and shortfalls of our organisation. They will provide the Board with a report indicating the issues that need to be addressed. Constitutional reform is a slow process within IASA, ironically because of its constitution, but this is a safety net which will ensure the best possible result, and we will make sure there is a forum to consider the issues that have been raised at the 2010 IASA/AMIA joint conference in Philadelphia in November next year.

Likewise, the sections and committees have nominated a member to review and revise the draft "Professional Ethical Principles for IASA". It is expected that we will have a final version for our Philadelphia meeting next year.

So the challenges that face IASA are in finding a way that we can best move forward in our organisation and in its programs and initiatives, to encourage our members to remain productive and enthusiastic, but to find a useful and reflexive structure that supports it.

The next two years will be pivotal in reshaping our organisation as we review our key documents and clarify our purpose. I encourage you all to express your views and participate in the discussion to make this a fruitful and representative process.

Next year's conference, in Philadelphia, USA, (mid way between Washington and New York), will be an exciting event, not only because so much that is critical to IASA will be discussed, but also because we will be meeting with AMIA, the Association of Moving Image Archivists, an organisation whose interests overlap with some of ours. The call for papers will be out soon, and I look forward to seeing your paper proposals. More news on the IASA list soon.

Yours sincerely,

Kevin Bradley

Canberra, Australia
October 2009

Adler Israel (1925 - 2009)

Gila Flam, Director, Music Department and Sound Archives, National Library of Israel Jerusalem



Israel Adler was born in 1925 in Berlin and emigrated at the age of eleven to Palestine. He pursued Talmudic studies in yeshiva in Jerusalem and Petah Tikvah. After the establishment of the state of Israel (in 1948) he went to Paris where he studied music at the Conservatoire National de Musique, at the École Pratique des Hautes Études and at the Institut de Musicologie at the Sorbonne, where he graduated with a Doctorate in 1963. From 1950-1963, he was in charge of the Hebraic/Judaic section of the Bibliothèque Nationale in Paris.

In 1963, the Hebrew University of Jerusalem appointed him Director of the Music Department of the Jewish National and University Library. There he founded in 1964 the Israeli National Sound Archives and the Jewish Music Research Centre, which he directed from 1964 to 1969, and again from 1971 to 1999. From 1969 to 1971, he served as Director of the Jewish National and University Library. In 1971, he was appointed Associate Professor of Musicology at Tel Aviv University, and in 1973 he joined the Department of Musicology at the Hebrew University of Jerusalem (Professor 1975, Chairman 1974-1977 and 1987-1989, Emeritus since 1994). Israel Adler initiated, in 1967, the foundation of the Israel Musicological Society, which he chaired several times.

Israel Adler was the founder and president of the Provisional Council of the International Association of Sound Archives (IASA). Israel Adler was instrumental in view of the development of sound archives as archives that focus not only on music recordings as part of library collections but on other kinds of sound recordings within research institutions and archives as well. In addition, as an active member of IAML, he expressed his disappointment at the inactivity of the Federation Internationale des Phonotèques (FIP), which was under the umbrella of IAML already in 1968. And as a result, he formed a group of scholars who established IASA in 1969 during the course of IAML's annual conference in Amsterdam.

Israel Adler was vice president of the International Association of Music Libraries, Archives and Documentation Centres. He was founder and co-director of YUVAL-France (Center for the preservation of the musical traditions of the Jews) and member of the Commission Internationale Mixte of RISM and RILM. From 1991 until 1997 he was member of the Executive Committee of the International Music Council of UNESCO, and in 1997 he was elected as a member of the Board of Directors of the International Musicological Society.

He was guest lecturer at numerous European, North and South American universities, and Chercheur Associé at the Centre National de la Recherche Scientifique in Paris. In 1984 he obtained the "Kavod" Award of the Cantors Assembly (U.S.A) and in 1994 he was awarded an honorary doctorate of the Hebrew Union College (New York, Cincinnati, and Jerusalem).

Most of Israel Adler's publications are concerned with Jewish music from medieval times to the emancipation of the Jews in Europe. Among his main fields of interest are the comprehension and disclosure of Hebrew writings concerning music, the rabbinical attitude towards music, the dialectic between oral transmission and written sources of sacred Jewish music, and the practice of Art music in and around the European synagogues in the seventeenth and eighteenth centuries.

Israel Adler was a person of vision and work. He knew how to make things happen: how to organize, convince and execute. He left behind him several institutions and associations that continue to operate and serve the interests of people in the field of music, musicology, ethnomusicology, archives and libraries.

I would like to sum with a personal note. Israel Adler said to me in an interview I conducted with him in Jerusalem on August 2nd 2004: "There was nothing easier in Israel than to build something new. To maintain it is a more difficult thing". As the director of the Music Department and Sound Archives of the National Library of Israel that Prof. Adler built, I will always remember these words and continue his work and legacy in collecting, preserving and providing access to the aural records of the people of Israel and the Jewish people around the world.

Israel Adler passed away on August 17, 2009.

Let his memory be blessed.

From the Editors: Perspectives on IASA as reflected through Editorials in IASA Newsletters, Bulletins and the IASA Journal.

Grace Koch, *Australian Institute of Aboriginal and Torres Strait Islander Studies*

In 1970, the IASA Board decided to publish a newsletter with information and articles of interest to sound archives. The editorials in these and in subsequent IASA publications offer fascinating descriptions of the actual development of the organisation. This paper will show how the various IASA Editors have expressed their views on issues of importance to IASA, often delivering these wittily and with a touch of humour. I shall refer to all of them by their first names because it has been my pleasure to know each Editor as well as to have been one. All of the information in this article has been drawn from *Phonographic Bulletins/IASA Journals, Information Bulletins* and *EBulletins*.

Let us look at the people who have served as IASA Editors. In total, there have been eight Editors elected by IASA members and two Associate or Co-Editors. All of the ten are published authors, and eight have backgrounds in music education, music performance and/or ethnomusicology. They have come from six countries. Four have held other offices on the IASA Board with three having served as President, three as Secretary-General, and two as Vice-Presidents; however none have been Treasurer.

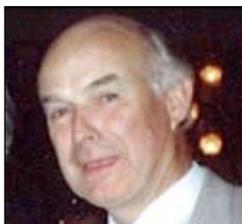
The Editors and their terms of office are:

Rolf Schuurmsma	1970 - 1978
Ann Briegleb and Frank Gillis	1978 - 1984
Dietrich Schüller	1984 - 1987
Grace Koch and Mary McMullen/ Miliano	1987 - 1993
Helen Harrison	1993 - 1996
Chris Clark	1996 - 2002
Ilse Assmann	2002 - 2008
Janet Topp Fargion	2009 -

The editorials in the *Phonographic Bulletin/IASA Journal* reflected the personality of each Editor, and we shall see this as they speak to us. I will give a brief biographical statement about each Editor, then offer some glimpses into their contributions to IASA.

Rolf Schuurmsma: The beginning

The distinguished Dutch historian, Dr. Rolf Schuurmsma, was Director of the Foundation for Film and Science in Utrecht when he became IASA Editor and IASA Secretary simultaneously. One of the most influential founding members of IASA, Rolf went on to become Vice-President and President of IASA. Later, he served as Head of the Library at Erasmus University, Rotterdam.



Although IASA was founded in 1969, it did not have a newsletter until 1971. Previously, IAML had published minutes of the IASA meetings in its own journal, *Fontes Artis Musicae*, but did not include IASA papers or other communications. It was thought that IASA needed its own newsletter, and Rolf rose to the challenge. Herbert Rosenberg, Director of the Nationaldiskoteket in Copenhagen, was the 'auctor intellectualis' of the name, *Phonographic*

Bulletin, for the new publication.¹

During the meeting at Leipzig in 1970, where the International Association of Music Libraries (IAML) extended hospitality to the Council of the International Association of Sound Archives, the Board of IASA decided to start a newsletter with articles and communications concerning sound archives all over the world. We are happy to send out now the first issue, at the occasion of the third meeting of the IASA Council in St. Gallen during the ninth Congress of the IAML. We sincerely hope that the first *Phonographic Bulletin* will be followed by many more and can be put out on a more professional basis at short notice.²

Indeed, from 1971 to 1976 the frequency of issues of the *Phonographic Bulletin* varied from one issue in 1971 to four in 1972, finally settling on three per year in 1974. These early issues varied widely in size from 16 pages (*Phonographic Bulletin* 15 July 1976) to 63 pages (*Phonographic Bulletin* 18 July 1977). Rolf, as one of the founders of IASA, described IASA's beginnings:

IASA is, in particular, a product of the efforts of IAML members, mainly members of the Record Library Commission of this Association. So up to now it was in fact above all an organisation of musically oriented sound archivists.³

Although he recognised the importance of music archives, Rolf, as an historian, ensured that articles on spoken word recordings and on the craft of oral history were included in at least half of the 21 issues he edited. Generally, he requested articles that would describe the work of specific sound archives, deal with discographies, and would enumerate 'problems in connection with preservation, documentation and reproduction, problems concerning distribution of recordings and copyrights, and any other problem in connection with our work.'⁴ 'Problem' seemed to be the operative word here.

As Secretary of IASA, Rolf included all of his minutes of IASA Business meetings. Indeed, the practice of including minutes and reports as part of the *Phonographic Bulletin* continued well into the 1990s. Rolf held two offices concurrently, either Secretary or Vice-President, during most of his Editorship until 1977, when he relinquished the Vice-Presidential role to Ann Briegleb.

Lists became important in the early issues which included a 'directory' of IASA members with their institutional affiliations; this practice continued until December 1976⁵ when Ann Briegleb began to compile the first volume of the *IASA Directory*. The last listing of members appeared in mailing label format with full addresses, which was useful for the new Secretary to print, stick and post. Names of people attending conferences were included as early as 1972, where we can read the names and institutions of everyone who attended the Bologna conference. Not only the lists of people attending appeared, but 'a tentative list of people attending' the Jerusalem conference⁶ and a 'preliminary list of attendants (sic) of the Montreal conference'⁷ were published; however, after 1975 the complete conference participation lists did not appear. Other types of listings to be found in the *Phonographic Bulletin* were discographies and new publications relevant to sound archives.

Letters to the Editor appeared as early as *Phonographic Bulletin* 2 (January 1972) when Walter Welch, Curator and Director of the Audio Archives at Syracuse University, stated that standardisation of playback instruments 'should be a principal concern of the International

1 Schuursma, R. 1994. 'IASA: The first ten years: some personal memories.' *IASA Journal* 3:8.

2 Schuursma, R. 1971. 'Editorial.' *Phonographic Bulletin* 1:1.

3 Schuursma, R. 1971. 'Editorial.' *Phonographic Bulletin* 1:1.

4 Schuursma, R. 1971. 'Editorial.' *Phonographic Bulletin* 1:2.

5 By *Phonographic Bulletin* .3 (July 1973), Rolf stated that only paid-up members' names would appear.

6 Schuursma, R. 1974. 'Editorial.' *Phonographic Bulletin* 9:15.

7 Schuursma, R. 1975. *Phonographic Bulletin* 12:23.

Association of Sound Archives.⁸ Rolf encouraged discussion and debate on various issues including the scope of national archives, printing a lecture by the Director of the British Institute of Recorded Sound, Patrick Saul,⁹ followed by his own observations on why national archives should include various types of audiovisual media.¹⁰

During Rolf's Editorship, one of the most exciting exchanges of letters occurred since the founding of IASA! An article appeared in *Phonographic Bulletin* 4 (August 1972), 'Some information on sound archives in Australia' by Peter Burgis, who at that time worked as a consultant to the National Library of Australia. This modestly titled contribution, which highlighted the lack of support to sound archiving in Australia, elicited a fiery response from the Deputy Manager of the Australian Broadcasting Corporation, who decried Burgis' implications of 'unnecessary denigration of the sound archive's programmes being carried out by Government, Commercial and Institutional organisations throughout Australia.'¹¹ An equally passionate response came from Burgis, whose riposte in the following year stated in capital letters 'I MAINTAIN THAT AUSTRALIA HAS A MISERABLE AND DISGRACEFUL HISTORY IN THE FIELD OF RECORDED SOUND ARCHIVES.'¹² How far we have come since 1972!

In 1975, the IASA Board decided that the *Phonographic Bulletin* should concentrate on thematic issues. This posed great difficulties for many IASA Editors because they are at the mercy of the copy provided to them; however, from this time we can begin to see thematic patterns emerging such as oral history, regional archives, storage and preservation of tapes, the centenary of the phonograph, and, increasingly, the use of computers in cataloguing.

Up until 1976, the *Phonographic Bulletin*, in A4 format, had been published in Utrecht, but in that year the Board decided to change the size to B5. In Rolf's words:

Discussion was inevitable because the Board felt that some members might find the alteration to a smaller size would cause inconvenience. However, it was also felt that the new format in the first place provides a more handy journal, both for libraries and for individual readers.¹³

That same year, printing was transferred to Vienna, with Dietrich Schüller as 'Technical Editor.' This smaller size, or close to it, continued until 2002, when the Editorship moved to South Africa.

Rolf began the tradition of writing obituaries for some of the important IASA (and sometimes IAML) personages, with touching tributes to Harold Spivacke (Music Division of the Library of Congress)¹⁴ Timothy Eckersley (President of IASA 1973-1975)¹⁵ and Vladimir Fédorov (Honorary President of IAML).¹⁶ At this poignant point we shall leave Rolf. Most Editors since have written farewells at the end of their terms, but Rolf must have been deeply immersed in his new role as President of IASA. His writings, though, appeared frequently in *Phonographic Bulletins* and the occasional *IASA Journal* with special articles on the history of IASA.

8 Welch, W. 1972. *Phonographic Bulletin* 2:21.

9 Saul, P. 1976. 'National Sound Archives', *Phonographic Bulletin* 16 25-30.

10 Schuurmsma, R. 1976. 'Three Observations on some of Mr. Saul's points', *Phonographic Bulletin* 16:31.

11 Semmler, C. 1973. 'Letter to the IASA Secretariat by the Australian Broadcasting Commission, Office of Deputy General Manager', *Phonographic Bulletin* 6:9.

12 Burgis, P. 1974 'Sound Archives in Australia.' *Phonographic Bulletin* 8:8.

13 Schuurmsma, R. 1976. *Phonographic Bulletin* 19:1.

14 Schuurmsma, R. 1977. 'In Memory of Dr. Harold Spivacke.' *Phonographic Bulletin* 19:2.

15 Schuurmsma, R. 1981. 'In Memoriam Timothy Eckersley.' *Phonographic Bulletin* 29:2.

16 Schuurmsma, R. 1979. 'In Memoriam Vladimir Fédorov.' *Phonographic Bulletin* 25:2.

Ann Briegleb and Frank J. Gillis: Associate Editors



Ann Briegleb, an ethnomusicologist specialising in Romanian music and Head of the Ethnomusicology Archives, Music Department at UCLA, had been active in IASA since 1975, when she undertook to compile a Bibliography of Directories of Sound Archives. She served as Vice-President and IASA Editor, but, unlike Rolf, not concurrently. She persuaded Frank Gillis, the Director of Indiana University Archive of Traditional Music and scholar, noted jazz pianist and librarian, to work with her as Associate Editor.¹⁷ This was absolutely necessary because she became Editor at the time she was scheduled to do her fieldwork for her PhD thesis on the music of south-western Transylvania. Frank took responsibility for issues 22-24 while she was away. Thus two Editors whose work centered on ethnographic and folk recordings brought a new approach to the *Phonographic Bulletin*.

Ann's first editorial paid a warm tribute to Rolf Schuursma:

Since its inception (N. 1, Summer 1971) under the paternal leadership of Rolf Schuursma, the *PHONOGRAPHIC BULLETIN* has been the major vehicle of communication between the IASA Executive Board and the membership..... At the Annual Conference in Lisbon, in July 1978, Dr. Schuursma "graduated" to become the President of IASA. The *BULLETIN* will sorely miss his competent and dependable journalistic abilities, but congratulates him in his challenging new role within IASA.¹⁸

In turn, Rolf's Presidential Address appeared right after the editorial in issue 22 with a gentle message to the IASA membership:

Let me take this occasion to wish that my successors meet with the same good-will and cooperation which I have enjoyed as Editor for so many years.¹⁹

Frank Gillis wrote the second part of the editorial, giving some of his ideas for development in the *Phonographic Bulletin*:

In the future, we plan to add reviews and citations of books, recordings and film of importance to our field and about which our membership should be informed.²⁰

Editorials during this new regime became short and to the point, often consisting of two or three paragraphs while the issues themselves became larger, with page numbers varying from 36 to 65 pages. Some items that used to be printed within the body of the *Phonographic Bulletin* began to appear as inserts. Members now received separate leaflets containing the IASA Constitution and copies of proposed amendments, the IASA Membership List,²¹ a list of contents of all the *Phonographic Bulletins* from 1971-1979, and an occasional errata sheet.

¹⁷ Frank Gillis had an even earlier connection with IASA, having published an article on the Indiana University Archives of Traditional Music in *Phonographic Bulletin* 7 (July 1973).

¹⁸ Briegleb, A. 1978. *Phonographic Bulletin* 22:1.

¹⁹ Schuursma, R. 1978. 'Presidential Address.' *Phonographic Bulletin* 22:2.

²⁰ Gillen, F. 1978. *Phonographic Bulletin* 22:1.

²¹ In 1978, Ann Briegleb had compiled a detailed Directory of Member Archives.

Preliminary and final conference programs, summaries and full versions of minutes of the IASA Executive Board and the General Assemblies, and some committee reports still appeared as part of the *Phonographic Bulletin*. Frank commented that by issue no. 24 (July 1979) descriptions of nearly 35 archives had been included. He despaired that most of the reviews and notes that he had received had been coming from the USA and Canada, and wished that all members should use the *Phonographic Bulletin* as a means of communication.

Ann returned from her field work in time to edit issue no. 25, which celebrated the tenth anniversary of IASA. Significant anniversaries of IASA offered a chance to commission special historical articles; this issue contained a marvellous article by Rolf on the history of sound recording. Ann attempted to create a 'New Members' section, which lasted only a short time and consisted of two offerings from Ghana and from Papua New Guinea.

By November 1980, the Board decided that issues of the *Phonographic Bulletin* should become spread evenly throughout the year, nominating the dates as November, March and July, and this schedule usually worked. By March, 1981, a style manual was published based upon the *Modern Language Association Handbook for Writers of Research Papers, Theses and Dissertations*.²²

Phonographic Bulletin 31 (November 1981) contained a stirring address by the new President, David Lance, who was very outspoken in his vision for future directions for IASA. Three issues later, a regular President's Corner appeared full of thought-provoking ideas. David Lance really wanted all members to take interest in the business of IASA — how it is governed, what the Constitution said, and other matters. His position ensured that the long sets of minutes and reports would remain in the *Phonographic Bulletin* for some time to come.

In this same issue, Ann asked for volunteers to become part of an Editorial Board, but hoped that members would 'not get trampled in the process of volunteering your services.'²³ By the next issue, Joel Gardner agreed to do the Recent Publications and Reviews Section,²⁴ with Peter Burgis becoming News and Notes Editor in November, 1982. Since that time, an Editorial team has worked together to produce all of the publications of IASA.

During Ann's editorship, five IASA Special Publications appeared:

Lance, David. 1978. *An archive approach to Oral history*.
Briegleb, Ann. 1978. *IASA Directory of Member Archives*.
Koch, Grace. 1982. *IASA Directory of members archives, Second edition*.
Lance, David. (ed.) 1983. *Sound archives: a guide to their establishment and development*.
Harrison, Helen. 1984. *Selection in sound archives*.

Midway through her term, Ann invited a guest Editor, Dietrich Schüller, to compile *Phonographic Bulletin* 35 (March 1983). Perhaps this was a portent of his editorial involvement to come. A wonderful exchange of letters appeared in that issue²⁵ where an Australian Oral History Officer admitted to not being able to find:

...any literature giving empirical scientific data related either to the ageing process [of cassette tapes] or standards of deterioration. There are plenty of 'seat-of-the-pants' suggestions based on common sense but where is the hard scientific data?

Dietrich, whose main research has been in this very area, showed remarkable restraint in assuring him gently but firmly that indeed there was 'adequate literature about the problem of tape deterioration'²⁶ far beyond any seat-of-the-pants suggestions.

22 Modern Language Association. 1980. *Modern Language Association Handbook for Writers of Research Papers, Theses and Dissertations*. New York.

23 Briegleb, A. 1981. 'Editorial.' *Phonographic Bulletin* 31:1.

24 In July 1983, Martin Elste replaced Gardner as Recent Publication and Review Editor, holding that position for nine years.

25 Adams, W. 1983. 'Letter to the Editor.' *Phonographic Bulletin* 35:54.

26 Schüller, D. 1983. 'Reply.' *Phonographic Bulletin* 35:54.

By *Phonographic Bulletin* 38 (March 1984), IASA members became aware that Ann Briegleb and Rolf Schuursma had become partners in work and in life as there were now two Schuursmas listed on the inside cover of that issue. Ann's last issue was *Phonographic Bulletin* 39 (July 1984). Although she had enjoyed the unique responsibility of being Editor, Ann wished that she could have written more.

Dietrich Schüller and Ann Briegleb: Down to business



(Dr.) HR Dietrich Schüller has been, and still is, a vital force in IASA since he became Director of the Phonogrammarchiv of the Austrian Academy of Sciences (Österreichische Akademie der Wissenschaften) in 1972. His credentials in physics, anthropology and ethnomusicology fit well with the backgrounds of the previous Editors. He had been the third President of IASA and led the IASA Technical Committee for many years.

He describes his decision to stand as Editor of IASA:

When during the Rotterdam Board Meeting in January [1984] I was persuaded to stand as a candidate for the office of Editor – and when I turned out to be the one and only candidate – I knew that the Editor's job was one of the most challenging and cumbersome within this international community of sound archivists: challenging as it keeps you on tiptoe for all the latest developments and keeps you in closest contact with colleagues all over the world. Cumsome, as in the last instance the Editor is totally dependent upon the work of the authors.²⁷

He persuaded Ann Schuursma to stay on as Co-Editor 'to protect the English language from too severe inroads by courageous but not necessarily perfect non-native speakers.'²⁸ How many native English speakers have taken such care when dealing with other languages?

When commenting upon the burgeoning organisational content and dedicated work of the Secretary-General he said:

The ever growing length of these (minutes of AGMs, etc.) reflects both the flourishing activities of our society and the indefatigable enthusiasm to report about them – thank you, Helen Harrison.²⁹

His one concession to minimising the size implications of these ever increasing reports was to print the minutes of the General Assembly as single-spaced items in his first issue; however, the extra spaces crept back after that. Perhaps these spaces served to replace the editorial, because his first one was also his last. The size of the issues remained about the same as for the previous editorial team.

²⁷ Schüller, D. 1984. 'Editorial.' *Phonographic Bulletin* 40:1.

²⁸ Schüller, D. 1984. 'Editorial.' *Phonographic Bulletin* 40:1.

²⁹ Schüller, D. 1984. 'Editorial.' *Phonographic Bulletin* 40:1.

Peter Burgis had served as News and Notes Editor, but fewer and fewer items came. This was disturbing to Dietrich, who wanted to expand this section. When the News and Notes copy for *Phonographic Bulletin* 42 (June 1985) came late, he wrote:

No further News & Notes, as the manuscripts from the News and Notes Editor did not arrive from Australia until today. D.S.³⁰

The next issue informed members that three regional correspondents would be appointed to contribute to the News and Notes as Peter Burgis had resigned. Those of us who know the situation with sound archives in Canberra at that time can understand Peter's reason for his action;³¹ on the positive side, the News and Notes section grew larger from that time on. Advertisements began to appear for conferences and symposia more frequently than ever before.

IASA committee members began to insert questionnaires for members to complete. The information gained gave substantial copy to the *Phonographic Bulletin* on copyright and training surveys.

Dietrich's last issue opened with an impassioned piece by the Secretary-General, Helen Harrison, who challenged the wisdom of always holding joint meetings with IAML. IAML was planning its next meeting in Tokyo and it was thought that many IASA members would not be able to afford the trip. Had IASA come of age to go it alone for conferences? An offer stood from Vienna to hold an 'IASA only' conference in 1988, which was accepted by the membership. Dietrich, whose feelings were very strong about IASA's unique identity, must have been very happy about these developments.

Following in the footsteps of Rolf, Dietrich did not offer a farewell editorial. Perhaps this was because his energies had been focussed upon the Technical Committee, of which he was a legendary chairman.

Grace Koch and Mary McMullen (Miliano): Co-Editors and exclamation marks



My background is in music education, historical musicology, ethnomusicology, and sound archiving. At the time of my Editorship, I was sound archivist at the Australian Institute of Aboriginal Studies (AIAS)³² in Canberra, Australia. It had been my pleasure to serve as an officer of various IASA committees. Mary had a background in music education and librarianship. She was a cataloguer of audio material and was involved in the design of MAVIS, the software used at the National Film and Sound Archive, also in Canberra.

I was first approached about the Editorship back in 1983 at the Washington conference, when Ann Briegleb was looking for someone as a successor. Earlier on Ann had persuaded

30 Schüller, D. 1985. *Phonographic Bulletin* 42:40.

31 At this time the new National Film and Sound Archive was being created in Canberra and Peter was very active in its establishment.

32 As of 1989, constituted as the Australian Institute of Aboriginal and Torres Strait Islander Studies.

me to do the second edition of the *IASA Directory* — an experience that began with Australia calling a mail strike at the very time I sent out the questionnaires. Somehow I was not too keen to take up another challenge after that, but when the call came in 1986, I had recovered sufficiently to run as Editor. Yes, most offices had more than one candidate at that time.

Mary McMullen, who worked just down the street from my office, consented to work with me, and the AIAS Editor allowed me to have the services of Elizabeth Goold as a typist. Elizabeth was a very adventurous soul who didn't settle down to a standard typeface until the last few issues. Readers will see that my first issue, no. 49 in 1987, was in very small print. Helen Harrison wrote to me that 'it was a bit difficult for the aged with failing eyesight to read', but was otherwise very encouraging. Most of my editorials contained far too many exclamation marks, but hopefully readers forgave such enthusiasm at the start. These became less and less as the Editorship progressed, but I counted five of them creeping into my last editorial.



Other than the typeface variations, we tried to add more photographs and even drawings. Beautifully drawn artwork was submitted for the invitations to both the Vienna and Oxford conferences.

Phonographic Bulletin 52 (November 1988) contains photographs of most of the authors of papers presented at the Vienna conference plus a few shots of food and some candid encounters. *Phonographic Bulletin* 55 (November 1989) displayed a number of photographs from the Oman conference. I recall Issam el Mallah, the convenor of that conference, ringing me up during a dinner party to say that the photos were on their way via courier, DHL. This cost IASA a bit of money, but my, those photos were lovely. Generally, the *Phonographic Bulletin* increased in size, varying from 40 to 116 pages.

During our tenure as Editors, we celebrated the 50th issue of the *Phonographic Bulletin*.³³ Contents centered around two themes — training for sound archivists and modification of the structure of the IASA Board. Both topics were near and dear to Helen Harrison, who had just been elected President of IASA. I was excited to include the preliminary program for the 1988 Vienna conference, which was the first 'stand-alone' conference for our organisation.

The breadth of contacts for IASA meant a burgeoning of acronyms. My editorial in *Phonographic Bulletin* 52 (November 1988) gave a list of 14. Chris Clark's list of 126 of these in 1999 documented the frightening increase of these.

³³ *Phonographic Bulletin* 50 (March 1988).

In 1987, the History of IASA Committee (HIC) was organised. Members of that committee became active in compiling the historical documents of IASA and in writing up commentaries for the *Phonographic Bulletin*. The first of these was, predictably, by Rolf Schuurisma, who provided a listing of the 1963 correspondence of Dietrich Lotichius, one of the early Vice Presidents of IASA and frequent contributor to the *Phonographic Bulletin*.³⁴ The correspondence was very important as it documented the 'prehistory' of IASA when the precursor of IASA, Federation Internationale des Phonothèques (FIP), was established.

I was delighted that so many IASA members felt strongly enough to write letters responding to material in the *Phonographic Bulletin*. The exchanges on the topic of 'what is research' between Poul von Linstow (Danish Radio) and Jeff Brownrigg (National Film and Sound Archive, Australia) continued over at least three issues.³⁵ Another paper eliciting an even longer chain of responses was that of Joanna Bornat, who wrote about how oral history affects the people being interviewed both during and after the interviews.³⁶ The development of IASA became a major point of comment,³⁷ and I do not know of any other organisation whose members have expressed so many hopes and fears for their professional organisations!

Another IASA birthday rolled around, this time the 20th *Phonographic Bulletin* 54 (July 1989) was the largest issue yet, with 116 pages. New archival developments were happening so quickly that the Board, at its meeting in Ottawa, decided IASA needed more frequent communications with members during the year. Also, thoughts were growing about how the *Phonographic Bulletin* should move on from being a combination newsletter, association business conveyance and conference paper publication towards becoming a journal.

Thus, in 1989, the *Information Bulletin* was born, thanks to the efforts of Hans Bosma, with the first words of issue no. 1 informing members that "This is new". And it was, but it took two years before the membership really began to submit enough information to it to warrant four issues per year. Hans continued to produce the *Information Bulletin* and to serve as Vice-President of IASA until the end of my term as Editor, and my everlasting thanks goes to him for his candidness, originality and wisdom. The *Phonographic Bulletin* fell back to two issues per year, containing mostly conference papers and the reviews and recent publications section, which grew very large and erudite under the guidance of Martin Elste, who passed the job to Pekka Gronow just as the *Phonographic Bulletin* became the *IASA Journal*.

A most thought-provoking article based upon IASA Board deliberations at its mid-year meeting in Maastricht (1991), 'Towards 2019 or IASA at 50' appeared in *Phonographic Bulletin* 61 (November 1992). This was followed by responses from IASA members, some of whom offered voluminous comments. I believe that this issue, coming at the time when IASA began to agonise in earnest about extending its scope, contained the ultimate set of 'IASA soul-searching' statements about all of its activities. Perhaps this development was most fitting for the last of the *Phonographic Bulletins*. Our final issue, in May 1993, was the first to be entitled the *IASA Journal*.

34 Schuurisma, R., comp. 1988. 'Correspondence of Dietrich Lotichius, Hamburg, 1963.' *Phonographic Bulletin* 51:4-7.

35 von Linstow, P. 1988. 'What is Research? An Analysis.' *Phonographic Bulletin* 52:22-29; Brownrigg, J. 1989. 'Searches and researchers; some reflections on a paper delivered by Poul von Linstow.' *Phonographic Bulletin* 53:33-36; von Linstow, P. 1989. 'Letter to the Editor.' *Phonographic Bulletin* 55:49-50.

36 Bornat, J. 1989. 'Oral history and reminiscence: a social context for sound archives.' *Phonographic Bulletin* 55:26-31. See responses by Joe Pengelly (*Phonographic Bulletin* 56:31-32); Ronda Jamieson (*Phonographic Bulletin* 57:7); Joanna Bornat, (*Phonographic Bulletin* 57:8); and Joe Pengelly (*Phonographic Bulletin* 58:4).

37 See Bosma, H. 1989. 'Four dilemmas for IASA's future.' *Phonographic Bulletin* 53:27-30; Hubert, R. 1989. 'IASA's future: some personal remarks and suggestions.' *Phonographic Bulletin* 53:31-32.

Helen Harrison: A widening of focus



Although she was born in the UK, Helen spent some time in Australia and had attended the University of Sydney, returning to the UK to become a cataloguer in the UK National Film Archive, Visnews (now Reuters News Service)³⁸ and, later, Media Librarian at the Open University, Milton Keynes, UK. In her latter years, IASA and its development became the focus of her life. She served IASA as Secretary-General, President and Editor as well as chairing several committees.

Helen became Editor at a time when IASA was exploring an expansion of its remit to include the entire audiovisual field, and the issues of the *IASA Journal* that she edited form an important corpus of members' opinions, showing the reactions both for and against this move.

She continued in the tradition of former IASA Presidents becoming Editors. Helen's editorials, which became extended opinion pieces, were printed right before the IASA President's³⁹ reports, and it could be said that two Presidential sets of viewpoints were appearing. The Association was most fortunate to have two such eminent officers who were so fiercely passionate about IASA's development and well-being, especially at a time when a balance needed to be struck between the unique expertise of IASA in recorded sound and its place within the broader area of audiovisual media. Helen ensured that members' opinions about this were printed in several issues of the *IASA Journal*. Five pieces on this topic appeared in *IASA Journal* no. 3 (May 1994).⁴⁰

In addition to editing the *IASA Journal*, Helen compiled the *Information Bulletin* — a practice that has continued with subsequent Editors. She did not, however, have the online facilities that we have now, so the job must have been rather onerous for her. Both the *IASA Journal* and the *Information Bulletins* were printed in Budapest supervised by IASA Vice-President Magdalena Cséve until 2002, when printing moved to South Africa.

IASA Journal 3 (May 1994) observed the 25th anniversary of IASA. In celebration, another historical gem from Rolf Schuurmsma traced the story of IASA up to 1979. Helen's editorial gives some historical details of her own, commenting upon her memories of her first IASA conference, held in Lisbon in 1977, and missing 'a bit of skull-duggery or heavy negotiation' on the part of 'established members' but realising that 'such manoeuvres were necessary to advance the cause of IASA on the international field map'.⁴¹

In the spirit of those 'manoeuvres', Helen managed to publish copies of Dietrich Schüller's correspondence concerning the Council of Europe's plans to formulate a Convention for the Safeguarding of the AV Heritage. He had discovered that the Council planned to refer only to film in its definition of the term, 'audiovisual', and he argued strongly that recorded sound should be included in the definitions as well. During this time of IASA's widening its scope and changing its name,⁴² the IASA Board was ever vigilant about the importance

38 Harrison, H. 1995. 'Editorial' *IASA Journal* 5:1.

39 The IASA President at that time was James McCarthy from the National Film and Sound Archive of Australia.

40 A section on 'Directions' consisted of strong positions stated by Ulf Scharlau (Stuttgart), Dietrich Schüller (Vienna), Ray Edmondson (Canberra), Frank Rainer Huck (Saarbrücken), and Jeff Brownrigg (Canberra).

41 Harrison, H. 1994. 'Editorial' *IASA Journal* 3:1.

42 The change of 'International Association of Sound Archives' to 'International Association of Sound and Audiovisual Archives' became effective at the beginning of 1996.

of IASA's unique expertise in recorded sound. President James McCarthy's report in *IASA Journal* 3 put the case eloquently:

The WIPO definition says it all... "*images and accompanying sounds*". [referring to the term, audiovisual]. Can any of our members ever imagine a situation where we would describe a motion picture as: "*Sound with accompanying image*"? Very unlikely, I believe.⁴³

Helen began to publish more and more articles on all aspects of digitisation, and increased the size of her editorials from two to four pages. A few of her statements reflect her somewhat ambivalent views on the subject and are very interesting in hindsight.

On the ethics of restoration:

I still want to hear the hums and fluffs (well – at least some of them), the original emphasis, the original interpretation of a great artist of a great composer's work! I do not want to hear some pristine, brittle so called "improved" or badly "restored" copy....Leave that to the 'musak' people, or rubbish on answer phones – supposed (sic) to amuse. This is **not** what IASA is about.⁴⁴

On digitisation in general:

If ever you thought you had problems go and talk to your Berlin and German colleagues about how to convert archives and their records into files for access today...⁴⁵

On the Internet:

Computers and the latest 'cyberspace' may well help you, especially if you claim to understand them, but they can frustrate, infuriate, and bedevil your best efforts.'.... In ten years time I doubt if we will be one big happy Internet family.⁴⁶

Helen hoped that IASA's publications program would expand in all areas important to IASA, and, by now, I believe that our organisation has fulfilled many of her wishes. She had wanted to include 'an audio cassette' with *IASA Journal* 6, and subsequent Editors have done just that, albeit in another format.

Although her swan song came with *IASA Journal* 7 (May 1996), where she wrote a mini-history of IASA from her own perspective, her editorial in *IASA Journal* 5 (May 1995) voiced some deeply personal issues, encapsulating many of the thoughts of other longstanding IASA members:

The trouble with most professions nowadays is that the older you get and the further up the hierarchy, the less opportunity you have to practice the real skills of the job. Some are fortunate enough to move up from a skilled position to an administrative post in the same discipline but beware – here lurks trouble- like other professions there is always a skilled person trying to get out - someone who really knows what they are doing, gets frustrated in not being able to get hands on again, sometimes able to pass on their skills, but sometimes not, and always wanting to do it better for fear of competition!⁴⁷

43 McCarthy, J. 1994. 'IASA President's Report' *IASA Journal* 3:4.

44 Harrison, H. 1994. 'Editorial.' *IASA Journal* 4:1.

45 Harrison, H. 1994. 'Editorial.' *IASA Journal* 4:2.

46 Harrison, H. 1995. 'Editorial.' *IASA Journal* 5:4.

47 Harrison, H. 1995. 'Editorial.' *IASA Journal* 5:2.

Helen's life was closely tied up with IASA. When she passed away in 2001, a number of IASA members wrote tributes celebrating her amazing work for IASA.⁴⁸

Chris Clark: A move to the Web



Chris was Head of Selection and Documentation in the Sound Archive of the British Library when he took up his position as IASA Editor. He had a background in systems management and librarianship with a major interest in discography, jazz and popular music. Although Chris had attended the IASA conference at Lake Como in 1984, he did not become involved with IASA until much later. He needed some serious persuasion to become Editor.

It happened on the Washington subway near Foggy Bottom. A group of Australians of the “toey”⁴⁹ persuasion exerted mild but firm pressure on my conscience. They must have taken my non-committal response as an affirmative signal. IASA is not noted for the celerity of its actions but the operation of its grapevine is clearly second to none.....I had barely ... acknowledged the Library of Congress décor when I was approached by beaming IASA Board members assuring me that I would not regret my decision. And so, before you could say “vinegar syndrome”, here I am facing my first blank page as Editor of the *IASA Journal*.⁵⁰

Thus began the editorials that reached a high point for descriptive writing, engaging allegories and scholarly content. Members had had a taste of this verbal art in 1995 with Chris' article on the meeting of a cataloguer with a discographer.⁵¹ Perhaps this is one of the reasons that the Australians presented Chris with the opportunity of running for IASA Editor.

The Vienna conference in September 1999 inspired him to soar into the realm of metaphor even more than usual and to produce one of his most erudite editorials. Two anniversaries coincided that year - the hundredth anniversary of the Phonogrammarchiv in Vienna and IASA's thirtieth birthday. He detected:

...an undercurrent of supernatural phenomena and divine providence in our work [through the papers given], and mentioned the allusions to Proteus, the omniscient Greek god who was reluctant to tell anyone what he knew unless overpowered and coerced and who could also change shape to avoid being captured and the Roman god Janus... usually represented as a double-faced head [exemplifying the] transitional position between the past and the future].....

If the main concerns of IASA are to preserve audiovisual information in the face of overwhelmingly destructive forces, then we should be paying homage to Vishnu and Shiva... Shiva's destruction always prevails, probably because Vishnu spends most of his time asleep. But in sleeping Vishnu also dreams and those dreams sustain the beauties of the world (which must now include the holdings of audiovisual archives). But there is another deity associated with them, Brahma, a creative

48 See tributes by Chris Clark, Clifford Harkness, Mike Biel, Michelle Aubert, Bill Storm, James McCarthy, and Grace Koch in *IASA Information Bulletin* 40, January 2002:1-3.

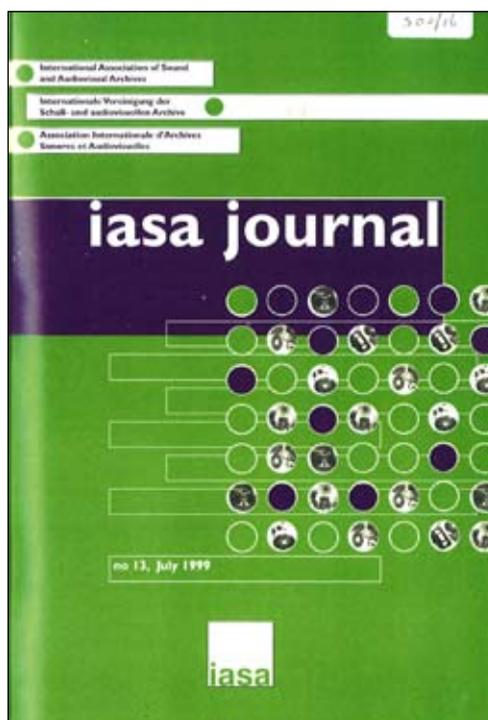
49 A survey of British-born people working at ALIATISIS confirms that this word means 'ready for action.' The author has not understood the meaning of this word until now but had concerns because the word was referring to her amongst others!

50 Clark, C. 1996. 'Editorial.' *IASA Journal* 8:1.

51 See Clark, C. 1995. 'A cataloguer meets a discographer, each one assuming the other to be dealing only in surfaces.' *IASA Journal* 6:60-63.

principle who intervenes very little in their battles. Applied to IASA, Brahma might represent intelligent selection, always needed but seldom in evidence.⁵²

Although Chris had wondered if the 'IASA train was at Foggy Bottom and not going much further',⁵³ his skilful engineering brought IASA into the world of the internet. An editorial policy statement that he submitted to the IASA Board in 1996 contained the proposal that the publications world 'adopt a mixed programme of regular and irregular paper publications complemented by web site development.'⁵⁴ He assured the membership that the paper publications would continue. Other plans included updating the membership list and revising the IASA publicity folder. He ensured the consistency of IASA's branding for all publications, bringing a corporate look to our organisation. A new cover to the *IASA Journal*, the first in 23 years, enabled members to peer through a set of round windows to early gramophones, discs, and video cassettes.



Chris worked with Iestyn Hughes at the National Library of Wales to create the IASA website, and it was hosted by that Library for some time. The launch date was given in *Information Bulletin 20* as 27 January 1997, but the reality was achieved a month later. A new version of the website happened in 2002.

The *IASA Journal* remained focussed upon articles, letters to the Editor and reviews; however a few items of Association business turned up within the body of the *IASA Journal*⁵⁵ as well as an Index and Contents List for *IASA Journals 1-15 (1993-2000)*, which appeared in *IASA Journal 17* (June 2001). The special publications continued at a good rate. During the time of Chris' Editorship a number of important publications appeared: *The Safeguarding of the Audio Heritage: Ethics, Principles and Preservation Strategy (TC-03)*, *IASA Cataloguing Rules*, various

52 Clark, C. 1999. 'Editorial'. *IASA Journal* 14:2.

53 Clark, C. 1996. 'Editorial'. *IASA Journal* 8:1.

54 Clark, C. 1996. 'Editorial'. *IASA Journal* 8:4.

55 'IASA policy statement on national discography', *IASA Journal* 17:6-7; 'IASA policy guidelines on copyright and other intellectual property rights', *IASA Journal* 17:8-9

membership lists and, of course, the *IASA Information Bulletin*.

The President's Letter continued, but Chris' editorials maintained a discreet distance from IASA business and directions. IASA General Assembly minutes were the only meeting records to be disseminated and were sent separately from other publications. *Information Bulletins*, however, did keep members informed by outlining some of the Board initiatives from time to time, such as the 'Medium term corporate plan for IASA'.⁵⁶

The *Information Bulletins* became gold mines of web addresses, conference details (other than those of IASA, which were also included), developments within audiovisual archives, awards given by organisations, achievements and honours for IASA members, welcomes to new members and, sadly, obituaries. *Information Bulletin* 30 (July 1999) contained an amazing listing of 126 acronyms used by audiovisual organisations.⁵⁷ His section on 'Sites and Sounds' grew into a wonderful interactive exercise for members when the *Information Bulletin* went online. Chris must have had a good time thinking up headlines for the many items in the *Bulletins*; some interesting efforts were 'When 'access' equals 'excess',⁵⁸ 'Hell's teeth! Have they cracked it?',⁵⁹ and 'Swiss switch'.⁶⁰ These flowered in his early issues, but regretfully became less colourful by the year 2000.

In order to add 'some lighter material as a counterweight to the necessarily earnest business of the main articles'⁶¹ Chris instigated a new feature known as the IASA Board Charts. This had the dual purpose of alerting IASA members to some wonderful recordings and helping members to know the Board better because they often gave personal glimpses into their earliest experiences with sound recordings. Chris wrote the first Board Chart in his first issue of the Journal, mentioning such titles as Holst's *The Planets*, *I went to your wedding* by Spike Jones and *Ape call* by Nervous Norvous as some of the first recordings he experienced; however, none of these made it into his top ten.

Chris' farewell editorial was succinct, conveyed his optimism

...about the future of audiovisual archives and the future of IASA... the value of historic recordings to make sense of one's roots... I shall certainly miss this particular avenue of contact with such an engaged and interesting group of people.⁶²

And I shall miss his annual Christmas greeting, written in three languages.

Ilse Assmann: Hemispheric change



56 IASA Information Bulletin 27, October 1998:5-12.

57 Huck, F. and Chris Clark. 1999. 'The IASA Guide to Acronyms.' IASA Information Bulletin 30:6-8.

58 IASA Information Bulletin 25, April 1998:3

59 IASA Information Bulletin 21, April 1997:9.

60 IASA Information Bulletin 25, April 1998:2.

61 Clark, C. 1996. 'Editor's top ten.' IASA Journal 8:76.

62 Clark, C. 2002. 'Editorial.' IASA Journal 19:3.

Ilse is the first IASA Editor from the broadcasting sector, working as Manager of the Media Library, South African Broadcasting Corporation. Her background was in archival studies with research interests in South African contemporary music and sound and audiovisual archival strategies. The tradition of extended IASA Board involvement continues with Ilse, as she moved last year from IASA Editor to Secretary-General.

It was a mild evening in Aarhus when Chris Clark and I met over dinner in a small cosy restaurant to discuss the formal handover of the IASA editorial [sic].⁶³

Thus Ilse brought IASA publications farther into the digital age, coping with hardware and software challenges in her wonderful style of elegance and good humour. Ilse became Editor just before the IASA conference in South Africa, thus assuming a daunting, double job of being on the conference organising committee and serving as IASA Editor.

She brought a set of new geographically-based perspectives to IASA members. Indeed, in Kurt Deggeller's President's Letter which appeared in Ilse's first *IASA Journal*,⁶⁴ he emphasised that:

...we [IASA] need to modify our "northern hemisphere" or "western world" view of the problems of audiovisual archiving and listen carefully to what our colleagues from other areas have to say.⁶⁵

Ilse's editorials assumed this task most competently, drawing upon wide knowledge of issues faced by audiovisual archives in Africa. Her work, profiled in her second editorial as an advisor evaluating an audiovisual project to preserve the material generated by the courts as they dealt with the horrendous genocide in Rwanda, presented a compelling picture of the special importance of African audiovisual archives to IASA members.⁶⁶

Another answer to Kurt's challenge came most eloquently in her editorial in *IASA Journal* 23 (July 2004:2)

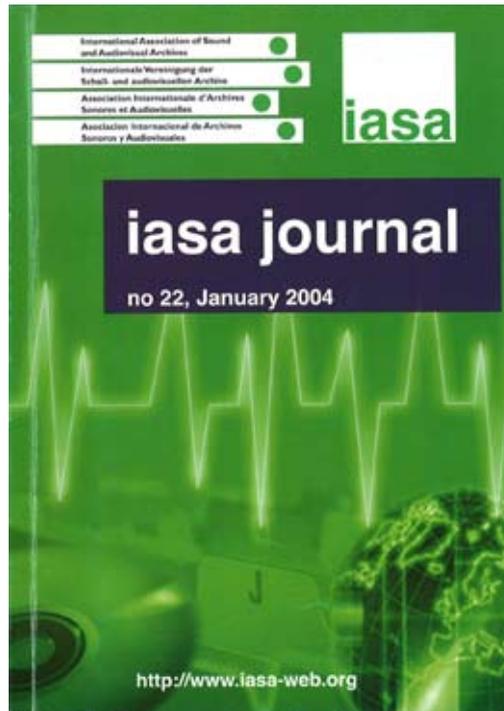
The archives, and in particular the audiovisual archives, of the developing world are at a crossroad. As places of memory, they need preservation desperately: that is, in the context of what we understand as preservation. The developing world has, over centuries, established ways of memorising and sharing its collective texts. But it is no longer enough. With the world changing rapidly and becoming more integrated, cultures are changing, and traditions such as storytelling and oral traditions are becoming seriously endangered.... The first world has accepted its role as custodians of audiovisual archives within the parameters it set for itself, whereas the developing world understands its role of custodianship within the context of its age-old traditions.

63 Assmann, I. 2002. 'Editorial.' *IASA Journal* 20:2.

64 *IASA Journal* 20.

65 Deggeller, K. 'President's letter'. *IASA Journal* 20:3.

66 Assmann, I. 2003. 'Editorial.' *IASA Journal* 21:2.



Her encouragement to her colleagues resulted in a noticeable increase of African institutional and individual members of IASA. During her time as Editor, the *Information Bulletins* named 24 new African members, both individual and institutional.

Ilse immediately changed some features of the *IASA Journal*. Her first (*IASA Journal* 20 (December 2002)) appeared in an A5 size, with fairly small print, but the second issue had a slightly larger typeface. Both the IASA website address and a zappy new cover design with a glowing yellow sound wave and a sparkling globe showing Europe and the Atlantic Ocean greeted members for *IASA Journal* 22 (January 2004). Some former sections returned, such as the 'IASA Board charts'. Issue 25 (July 2005) reverted to the size used by Chris Clark and his predecessors. Also, in 2005, the *IASA Journal* began to publish advertisements for goods and services.

Resources available to members online started to change. In 2003, the IASA list-serve, hosted by the National Library of Norway, was created. The *Information Bulletins* began to publish longer contributions, such as 'The Library of Tibetan Works and Archives' by Karma Khedup (*Information Bulletin* 53, July 2005). Distribution of the *Information Bulletin* changed. The frequency of four times per year remained, but, in 2006, two of the *Information Bulletins* became *EBulletins*, allowing members to peruse a set of précis and click on a link for the full text. A plethora of announcements of meetings, symposia, workshops and training programs appeared, often with links. The website went through several versions, with the *Information Bulletin*, as well as the *EBulletin*, becoming available online.

IASA Journal 27 (July 2006) was a landmark issue; Helen Harrison's wish for 'an audio cassette' became a more sophisticated reality with a CD of recorded examples of Slovenian, Welsh and Australian songs and a movie clip of a Jerry Tyke cartoon with a Welsh sound track. *IASA Journal* 29 (July 2007) included another CD of calypso music. Perhaps the journal had truly come of age.

Ilse served two terms as IASA Editor and was willing to go for a third; however, another IASA office beckoned in the form of Secretary-General. Her parting words as IASA Editor recognised the work of Dorothy Tonder, who did the language editing, and shared her own thoughts and feelings:

It was a privilege to serve IASA as Editor. Apart from learning so much more about IASA, I have made friends across the world....It has been a most gratifying experience with the role of the Editor slowly changing as new ways of communication emerge.⁶⁷

And so, as of last year, we have a new Editor, Janet Topp Fargion, who is in the process of setting her own stamp upon the IASA Editorship. I leave the privilege of adding her name with those of her successors to a future article, and have treasured my journey through IASA's past.

⁶⁷ Assmann, I. 2008. 'Editorial' IASA Journal 31:3.

What Makes a Good Archive?

Edwin van Huis, XPEX Experience Experts, Amsterdam

Most of you who read this journal work in archives. Most of you are professionals, who have been working in this field for several years. And during that period you must have thought about this issue more or less on a daily basis. Maybe not consciously, but it is behind all the decisions that you make in your work: what makes a good archive?

For more than 12 years I have led the national audiovisual archive in the Netherlands and I was active in the international archive community. That period has given me ample time to think about this question as well. In this article I will try to answer it.

Thinking about the question “what makes a good archive” the things that pop into our mind first are aspects of the archive itself. A good archive is an archive with a “unique collection”, with an “expert staff”, with “clever systems” and with “state of the art facilities”. This is because we tend to look at the archive from the inside out. But what if we look at the stakeholders outside the archive. What would be the answers if we were not to ask you, archivists, but the general public, or schoolteachers, or politicians this question?

Creative destruction

Let me bring in another dimension: time. Because time has a tendency to change the answer to many questions.

Are you familiar with the term creative destruction? The Austrian economist Schumpeter used this term to describe the process of transformation that accompanies radical innovation. It means that the new does not only replace the old but also will destroy it - like in the 1970 and '80s, when supermarkets wiped out the small bakeries and grocery shops that crowded our cities; like MP3 is bringing the record companies down. Examples are everywhere when you look. Creative destruction also predicts that no institution, no company, however powerful, will eventually be able to survive the forces of innovation without adapting.

Digitisation, Internet, mobile, they are the driving forces behind creative destruction nowadays. Look at the way people listen to music, see how big newspapers are going under, see how no kid ever seems to read a book any more, see how games are already a bigger economic market than film. Schumpeter's ideas were at first heavily criticised. When he launched them, in the 1940s, no one could believe that the big corporations, which were just coming up in those decades, would ever cease to exist. Now we know that even General Motors can go under. And so can archives, believe it or not. The world is changing, evolving, and we will have to evolve with it or become extinct. Digitization will change the world and it will change our world. It will change the way people look at archives, and it will change what people expect of archives.

Change

I hope I do not have to debate that digitization has changed the world. Look at the technology that has entered our homes in the last two decades - it is enormous.

When I was a kid, and I did not want to eat the food on my plate, I was punished by my parents by sending me to my room. When I today tell my son to go to his room he runs upstairs before I can finish my sentence. He has got PlayStation, Xbox, MSN, World of War Craft, YouTube, etc. There is more technology in his room than there is in the rest of the house. So the only punishment he is really afraid of is when we say: stay at the table and talk to your parents.

The way people respond to change is always the same: first we resist it, then we try to assimilate the changes into our existing operations. We try to adapt new technologies without changing anything else. For example: the first cars that were made looked exactly

like carriages, only the horse was missing. In archives it is no different. First we quarrel for a while about digitization, claiming that analogue is better. When time moves on and there is no choice, we quarrel over which digital formats are good enough to use. In the end we change, reluctantly, everything that is analogue to digital, and we hope everything else will stay the same. But this time it will not. This change in technology comes with a change of paradigm. What we need to do, is find out what the nature of that change is. It is not digitization itself. Digitization has made it possible, it has opened the gate, it has set the monster loose. What we have to ask ourselves is: what is the very nature of the innovation that drives today's creative destruction?

Imagine you are a baker with a shop. In the good old days everyone would visit you if they needed bread. They would applaud your skills as a baker and pay a decent price. Now the supermarket has opened up around the corner and sells incredibly cheap bread. And everyone goes there, even if it is not as good as yours. What will you do? What can you do? Sit still and complain your bread tastes so much better?

For archives it is not that different. Our society, and the position of the archive in it, has transcended from a professional centred universe into a universe of content driven by laymen. To sum it up in a few words, in the old days you had the content and you had the key to the content. You had the bread and you had the shop. If anyone wanted it, they would have to come to you. Now, if you cannot show your content on the web, your customers will go elsewhere. They will not come to you to find out what it is you keep in your vaults, they will search the big supermarket called "The Web" and settle for someone else's content instead. Even if that content is not half as good as yours.

This is not the first big change in cultural history. But it is the first for AV archives, and that makes it difficult to adjust. But maybe we can also learn from the past.

Wunderkammer

Let me take you back to the days of the wunderkammer. As you may remember from your history lessons, a wunderkammer is a collection: a collection of natural artefacts, art, anthropological objects, etc. In the wunderkammer you would find the wonders of art and the wonders of nature, like fossils, shells, bones, feathers, plants, or a mermaid.



The wunderkammer is a product of the European renaissance. The reasons for its origin are complex, but you could say they show how mankind was slowly getting a grip on the world and its miracles, a domain that was till then monopolised by the church. It was a tribute to those wonders, but also a means to show the wealth and knowledge of the owner. Because the owner knew what it all was, and, on top of that, could classify it.

Classification is the real wonder of the wunderkammer. The renaissance's classification is for us difficult to understand, but nonetheless very clever and complex for those early days. Every object in the wunderkammer would be given a meaning. Now today that meaning

is often a lot more intriguing than the object itself. For instance, in many collections you could find sepia shell, the bone of a squid. It is that white thing that we hang in the cage of a parakeet. In those days it was still a mystery what it was. In one collection it would figure as a symbol for the sea, for Atlantis, or Neptune; in another, as an example of a soft stone, exhibited next to granite as an example of a hard stone. There was even a collection where this object was exhibited as a bone from the foot of a huge manlike creature that only had one leg with a very big foot, on which it could run very fast. Here is a picture of this creature from a 13th century book. For its afternoon nap it would rest in the shade of that enormous foot in the melting sun of Asia.



Wunderkammer were prestigious for the owners. For an emperor it was a must-have, and he would hire explorers and scientists to compile it. The biggest wunderkammer ever was that of Rudolf II of Habsburg in Prague. Rudolf loved the combination of art and nature: gold-rimmed shells, bouquets of real flowers cast in silver and after that decorated hyper-realistically to the extent that you could not see the difference with real flowers; clocks that launched a real bird when they struck the hour, etc. Rudolf himself was a technician and he constructed several clocks and planetaria with great ingenuity, and the most precious materials. But his wunderkammer lacked order and logic. He bought everything the treasury could support and more. Rudolf constructed what you could call a data-cloud without logical connections. His wonder was in the objects, not in the classification.

The modern archive

The modern archivist has come a long way. Still, like Rudolf, he is the only one who is in the position to give a meaning to an object. He has gone through a long training to do so, and he uses internationally accepted classification rules. In the archive, objects are categorised and subcategorised, tying their meaning to one interpretation and cutting them loose from other relations. In doing so, we usually concentrate on our specialist users. They understand and applaud our work. But most objects will have many, many meanings and information to give, and can easily have relations with many different user groups. Do we take them seriously enough? Remember, the wonder of the wunderkammer was not in the objects, it was in the relations!

Let us now go back to the beginning of this article. We have all these stakeholders who want and expect something from your archive: schools, universities, the general public, to name the most obvious. Do you give them what they want? Schools want footage that they can use in the classroom instead of their textbook. What they look for is very specific; it must fit into the curriculum exactly. Universities want footage that drills deep into one subject. It is not specific but they want everything, even if it is remotely related to the subject. The public wants to see that one piece of footage where mum took part in that game show. And dad wants to see that one soccer match again. And that childrens' program, what's its name? And the specialist? The specialist wants that everything is available at any time at the highest possible quality.

So let's go back to a previous question. What is the driving force behind the creative destruction we face today? In my view it is the power shift. The power shift from sellers to buyers, from professionals to consumers.

There is a very interesting book, called: "What would Google do?" by Jeff Jarvis. If you have not read it, you should do so. It gives a great insight in the company that understands our times better than anyone. These points, a little bit adapted for archives, but not much, were taken from Jarvis's book:

- We have shifted from an economy based on scarcity of content to one based on abundance. The control of content or its distribution will no longer guarantee clients. Owning archives, specialists, recordings, or even intellectual property is no longer the key to success. Openness is.
- The mass market is dead, replaced by the mass of niches.
- Markets are conversations; that means the skill in any organization no longer is marketing, but conversing.
- Enabling users to collaborate with you – in cataloging records, in creating new uses, in distributing your assets, and supporting your archive – is what counts nowadays.
- Link to others, become part of a network; go where your users are.
- If you're not on the web, you won't be found.

There is another list that is of interest to us. It is from Google itself. Now, I know that a lot of people, especially cultural professionals, do not like Google. They don't trust Google, because Google gets on our turf. Well, even if they are right, it won't hurt anyone to learn from what they did. Did you ever surf to the Google home site? There is a list that is called: "Ten points Google has found to be true". I picked two points out of that list for you to consider:

- It's best to do one thing really, really well.
- Focus on the users and all else will follow.

So the debate about the future and the value of archives is not about formats, about 2K or 4K or about metadata standards. It is about the user. People love archives. They start making archives themselves immediately after you give them the tools. They built YouTube, the largest AV archive in the world, in a matter of years. They built enormous audio archives. They don't mind that MP3 is a low quality format, and they'll watch anything in low bandwidth. There is an audience out there of billions, and they love what we have to offer; if they could get their hands on it. A good archive understands its users and makes contact with them.

The collections that I was managing in Holland were at first solely aimed at our professional clients, in our case the broadcasters. But the programs we kept were valuable for schools and students as well, and for the individual member of the public who is searching for an old show or footage of the town where he was born. In many cases, our catalogue, which was aimed at professionals, was not very helpful in finding the right footage for schoolteachers, students or the general public. We understood that to successfully open our collections up to these user groups, we would have to add meaning to our catalogues and establish new relations between our objects and these users.

User groups all have different ways of searching and accessing objects. The meaning the objects have for a new group of users is often different from the professional use. For an archivist it is not easy to look at his collections with the eyes of different groups, to see the value and meaning it has to them. It is not self-evident what the meaning of archive-materials is for different groups and individuals. So to be successful we have to use their input.

For the use in schools in Holland, for instance, we set up a broadband service delivering thousands of programs to the schools. To tie the content to the school curriculum, and even to the books and chapters they used, we had a group of educational documentalists that edited our catalogue entries to make them suitable for use in the classrooms and

make a “curriculum tree” where the programs or the fragments are organized according to the subject and the textbook used. Schoolteachers participated and helped to select materials. For universities we also started to deliver thousands of programs online. Here it is the universities’ staffs themselves who search the database, view programs and develop new meanings and entries to make the programs useful for their students. We started a dedicated YouTube channel, and we started a 24 hour theme channel. For our theme channel we have worked with a group of editors who develop the format and select the programs for the TV audience.

I am not suggesting that every archive has to develop new services for every group of users, as we did in Hilversum. Listen to Google: try to be really, really good at one thing. That is difficult enough. And it will change your outlook on your own archive. If you decide that you want to concentrate on the general public, this is what I recommend most: try to think of the archive as a physical place that is open to the public and where the public would want to come. Try to imagine what that archive would look like.



This is the Media Experience we built in Hilversum. It has a provokingly beautiful building and inside is a carnival of colour and experiences. People walk through pavilions filled with radio, film, television and music. They look at old programs, play games, shoot their own little television programs, present radio shows and experience special effects. It is a great success and it completely changed the way people in Holland looked at our archive. This is what they really, really want, and now they can find it.



The future for archives is in understanding the meaning our archives have for different users. Listen to your users, and all else will follow. Begin by making your collections searchable on the web; if they can't find you out there, they will go somewhere else in a heartbeat. And if you really want them to enjoy your archive: build them an experience.

Sunrise or Sunset? The Future of Audiovisual Archives

Ray Edmondson, Archive Associates, Australia

This article is an adaptation of a PowerPoint presentation given at the 2009 IASA Conference.

We have analogue attitudes in a digital age...people consume content in a very fluid way. What were once separate media are now increasingly interconnected and exchangeable. We no longer have a TV market, a newspaper market, a publishing market. We have, indisputably, an all-media market.

We must have genuine independence in news media. It is essential that a fair price can be charged for news to people who value it. The only reliable, durable and perpetual guarantor of independence is profit.

Thus the views of James Murdoch, who had this and much more to say in the McTaggart lecture, delivered at the Edinburgh International Television Festival a few months ago.

Convergence is real. Daily we are presented with new ways in which words, images and sounds intersect through a widening range of devices.

Constant change is here to stay. The pundits say that broadcast television and newspapers are dying. Our mobile phones now have so many options that an old fashioned voice call seems a rather quaint minor function. Our desktops have shrunk to netbooks, the Goliaths compete to control tomorrow's optical and satellite networks, while the world's entire printed heritage, it seems, is being digitised by Google. The long predicted demise of radio and cinemas may be slow in arriving but the modes of delivery are increasingly digital.

The commercial gatekeepers of the public memory, like Mr Murdoch, are confronting the champions of free access. As the duration of copyright control stretches ever further into the future, they seem to be winning. So why would there still be a need for public institutions when commercial providers offer such vast data banks – for a nominal fee, of course? Does the new world of digital convergence mean public archival institutions are outmoded? Who still needs to go to a library when it's all downloadable at home?

Several people in recent years have seriously put this case to me. Mr Murdoch places his trust in profit and regards public institutions like the BBC as a menace. Right now, it's an interesting sentiment as the world climbs out of a greed-induced financial meltdown.

Lord Puttnam, British film producer and Chair of Patrons of FOCAL, the Federation of Commercial Audiovisual Libraries, has a slightly different take on the topic of convergence. Speaking at a FOCAL event in 2006, he looked into his crystal ball:

All national archives will be 'under one roof' one day... I don't expect that to happen in my lifetime – the forces of reaction are just too powerful – but it will happen one day, because you cannot continue to make a coherent intellectual or economic case for artificially dividing archival responsibility by the technology with which it was recorded. Sooner or later the National Film Archive should fall under the organisational auspices of the British Library.

If archive is not 'democratised', Microsoft, Time Warner AOL and Google are gearing up to 'own' history. Left to itself the 'market' is far more likely to close down than open up optimal pathways to knowledge for those without the money to pay for access.

Lord Puttnam is possibly not on the same page as Mr Murdoch when it comes to the profit motive, despite the commercial nature of FOCAL's membership. But he sees the future of public institutions, and specifically audiovisual archives, as one of *organisational* convergence – in the case of the UK, under the umbrella of a powerful British Library. He sees no intellectual or economic alternative.

Are they right? Do we face a future of mega-institutions? Or will tomorrow belong to the profit-takers: the Murdochs, the Googles and the Microsofts?

In the face of change, our institutions have not been entirely idle. Let's consider a few indicators.

UNESCO's growing Memory of the World program is based on a *philosophical* convergence: the concept of "documentary heritage", which embraces any deliberate recording of information on any carrier, from papyrus to clay tablets to audio discs to digital files, and encourages both their preservation and their accessibility on the internet. In UNESCO's view, the documentary heritage is distinct from the built or environmental heritage (covered by the World Heritage Convention) and orally transmitted culture and memory (the Intangible Heritage Convention), although all three programs are complementary and can at times coincide or overlap.

Everywhere, the collections of individual collecting institutions are being virtually, if not physically, brought under a single roof as catalogues and inventories, and both digitised and born-digital documents of all kinds, become web-accessible. Dispersed collections are being reassembled as a virtual whole.

Organisationally, we see libraries, archives, museums and galleries grouping together in councils or forums for advocacy, promotion and self protection. And while inter-institutional rivalries will always be with us, there's a greater acceptance of the need to share resources and facilities, to complement each other, to show economic and practical common sense.

What, then, of the mega-institutions envisaged by Lord Puttnam? There have been organisational mergers and realignments in recent years, as there have been for centuries. There has also been divergence – divisions, splits and new creations. To evaluate them, one has to consider the specific circumstances of each. It's never exclusively a question of practicalities or economics or even rationality. In the real world, politics, ideologies, shifting government policies, transitory circumstances and even fashions play a part too – sometimes the major part.

In an audiovisual archive we may find several distinct professions: librarianship, archival science, museology and audiovisual archiving itself – the youngest profession, and in part, a convergence and amalgam of its older sisters. And we can add a range of sometimes arcane technical, IT and scientific skills. Each field has its own sense of identity, its own professional association, code of ethics and formal qualifications.

Memory institutions have evolved, sometimes painfully, into distinct organisational types. The difference lies less in the physical or intrinsic nature of the formats they collect, than in the worldview, policies, methods and ethos they bring to their operations.

Consider a typical film or a sound recording. It may be perceived as a "government record" within a records continuum by a national archives, as a "historical document" by a library, as an artefact by a museum, or as a work of art by an art gallery. These can all be valid perceptions. Yet in an audiovisual archive it is simply a film or sound recording, in which *all* these attributes are recognized in both its intellectual and physical nature. It is perceived holistically, *in its own right*, and not as a subset or manifestation of something else. It is defined by what it is – not by what it is not. It also means that terms like "special materials" or "non-book" or "non-print", which suggest deviation from a norm, are just philosophically inappropriate.

Specialisations and depth of knowledge flourish in sympathetic environments. An institution is only as good as the quality, motivation and knowledge of its staff. And only *content* can be digitised. If users are to study, understand and enjoy the whole character of the audiovisual media, and see and handle its artefacts, the archive has to be a *place* they can come to.

Audiovisual archives come in many styles, with varying motivations and mandates, and different levels of autonomy.⁶⁸ They have widely varying technical capabilities and facilities. They have different specialisations and serve different clienteles. The field embraces, for example:

- For-profit and non-profit organisations
- A focus on part or all of the AV spectrum
- Varying geographic mandates: for example – city, provincial, regional, national
- Different legal personalities and governance
- The presence or absence of enabling legislation
- Differentiated clienteles: broad, narrow, specialized, public, private.

Or viewed typologically, we recognize

- Broadcasting archives – radio and television
- Programming archives – such as cinematheques
- Audiovisual museums – focusing on objects, technology, costumes, environments
- National audiovisual archives
- University and academic archives
- Thematic and specialised archives – for example, oral history and ethnographic
- Studio archives – subsets of production houses
- Departments or sections of general archives, libraries, museums, galleries, institutes.

Organisationally we are a very varied lot. Some archives are the holders of corporate assets. Some are independent organisations with distinct mandates of their own. Some are departments or sections of larger bodies, reflecting an aspect of the parent body's mandate. Some serve a broad public clientele; others serve very focused audiences or specialised purposes.

Case examples

Collecting institutions are specific to countries and contexts: generalizations or analogies aren't always valid. The following case examples of amalgamation, division and creation might serve to illuminate any discussion on convergence.

Library and Archives Canada (LAC)

This may be the future as Lord Puttnam sees it. It was created by the merger, in 2004, of the National Archives, the National Library and the Portrait Gallery of Canada to create “a new kind of knowledge institution”. Previously there had been at least one other merger, when the National Archives took over the Canadian Film Institute collection back in the 1970s.

There are obvious economies of scale under a single administration, with over 1100 employees and a huge state-of-the-art preservation centre at Gatineau, Quebec. LAC has adopted what some regard as radical policies, aiming to remove “arbitrary barriers and distinctions”, focus on digitisation of records through private sector and other partnerships, and reduce on-site services in favour of increased off-site services. Audiovisual archiving activities or collections are not specifically identified in its published organisation structure.

These policies have reportedly been accompanied by the elimination or downgrading of specialist librarian positions (such as music and rare books) and a move to career bureaucrats taking over management roles previously filled by archivists or librarians. Not everyone is happy. The Canadian Library Association has expressed alarm over the loss of professional expertise in top management, while others have cited declines in the currency and physical condition of parts of the collections

⁶⁸ Source: Audiovisual Archiving: Philosophy and Principles UNESCO 2004

National Film and Sound Archive, Australia (NFSA)

By contrast, Australia – which has many cultural and political similarities to Canada – has moved in the opposite direction. Over time, the original Commonwealth National Library (created in 1901) has become five separate institutions:

National Library of Australia (1960)
National Archives of Australia (1960)
Commonwealth Parliamentary Library (1960)
National Film and Sound Archive (1984)
National Portrait Gallery (1999)

This did not happen without pain or controversy. There is evidence to suggest, though, that these progressive divisions have increased, rather than diminished, the profile and collective resource base of Australia's documentary heritage.

Through an accident of history the National Film and Sound Archive didn't get its own Act of Parliament until last year. On the way, it went through a confusing name change – for a while it was known as ScreenSound Australia – and then, for five years, it was forcibly amalgamated with the Australian Film Commission to benefit from unspecified "synergies". That the NFSA emerged largely intact from this destructive marriage owed much to politics: in this case, the sustained advocacy of outside constituency groups including the Friends of the NFSA, Archive Forum and Australian Society of Archivists.

The NFSA is now a statutory authority with the same legal character as the National Library, National Museum, National Gallery and so on. It has a mandate to collect, preserve and provide access to the nation's audiovisual heritage, broadly defined. It complements the other memory institutions and it symbolises the fact that the audiovisual heritage has a cultural status equal to older forms of expression.

Hellenic National Audiovisual Archive (HeNAA)

HeNAA is a new creation – possibly the world's newest national audiovisual archive. Its activities and structure demonstrate that it occupies a position in the institutional spectrum in Greece similar to that occupied by the NFSA in Australia. Like the NFSA, it has a mandate defined in law, and it complements the roles of other institutions with which it cooperates. It was created to fill a need – to bridge a gap which was not a natural area of operation for its peers. Unlike the NFSA, it begins life with the proverbial clean sheet of paper, and without the legacy of a lengthy evolution, so its experience in developing its role will be different.

Asian Film Archive (AFA)

Set up in 2005, the AFA is a new, independent non-profit body with multi-national scope. It preserves and provides access to Singaporean and, more broadly, Asian cinema. It complements the policy and practice of the audiovisual division of the National Archives of Singapore, as well as of archives in neighbouring South East Asian countries. It has a regional, rather than simply national, perspective and thereby it fills a need. The character of Singapore as a city-state and regional hub matches this purpose. AFA works closely with the National Archives (part of the National Heritage Board) and uses its excellent collection storage facilities. It likewise works closely with the well-endowed National Library, using its public facilities for events as well as its user access mechanisms.

I pass on from collecting institutions to two international bodies that audiovisual archivists should know well.

UNESCO (United Nations Educational, Scientific and Cultural Organisation)

UNESCO has given a particular privilege to the audiovisual archiving community - the World Day for Audiovisual Heritage, 27 October every year. It's a platform for advocacy: for promoting the needs, character and work of audiovisual archives and to celebrate the audiovisual heritage worldwide. It is **specific** to our field, and was established despite pressure to subsume the concept into a general World Day for archives, within which the AV heritage could never have achieved a separate profile. It was a significant gesture to our profession and our field, and we neglect its potential at our peril.

CCAAA (Coordinating Council of Audiovisual Archives Associations – www.ccaaa.org)

CCAAA is the peak forum of our field. Like the other peak memory bodies – ICOM (International Council of Museums), IFLA (International Federation of Library Associations and Organisations), ICA (International Council on Archives) and so on – it gives us a distinct international presence and identity on equal terms with our sister professions.

But there's a crucial difference. Unlike the other peak bodies, CCAAA has no formal relationship with UNESCO, which therefore can't formally recognize, support or fund it. Historically that relationship belongs to each of its constituents, one of which is IASA, for whom – despite increasingly overlapping memberships – cooperation and convergence has come only in small steps. To achieve the cohesion and political muscle of our opposite numbers, CCAAA members must surrender some of their independence. Can we imagine IASA doing that? Or merging with another association to improve the strategic strength of the profession?

Is there a trend?

Digital convergence will continue, whether for fun, service or profit! We follow where technology leads; we should relish its possibilities but know its limits. They are economic rather than technical. Mr Murdoch may align to the virtues of the unfettered marketplace, and the capacity of companies like his own to be the gatekeepers of history, but that only works *while they make a profit*. What doesn't earn its keep won't be kept. And what would happen to all that data if Google or – God forbid – News Corporation were to go under in the next recession? But it wouldn't, would it? Have we not fixed the global economic system for good this time?

So the best hope for the survival of collections, protection of the public memory and for the maintenance of a professional ethos, is the continuity of public institutions. There is no perfect institution, nor one whose long term existence is unquestionably assured, and I've yet to find an archive that has too much money. Institutions will continue to take many forms: no one size fits all. They will be kept honest and viable by the constant advocacy of those who work in archives, and those who support them privately or through professional bodies like IASA.

I don't see any trend changing the varied typology of audiovisual archives. Constant technology and format change is a fact of life for us, but it's not the ultimate determinant shaping mergers, separations or creations. That's more a product of history, circumstance and politics, personalities and advocacy, and it is country specific. We don't collect audiovisual *formats*: we collect audiovisual *works*, whatever their format, with their associated materials, objects, technology, knowledge and skills. Our structures should reflect that. It's hard to imagine how an audiovisual archive *as a place* will ever be redundant. Its public activities, services, access to the analog parts of its collection – these make it real, not a phantom in cyberspace.

My proof? The evidence is only circumstantial. Here at an IASA conference we're sitting in the middle of it. IASA and its fellow associations are now larger than ever. Among us we

have graduates of, and teachers in, university courses that now give formal qualifications in AV archiving, and we have a global legacy of training workshops reaching back two decades and more. The number of archives and collections continues to multiply. And with all its unrealised potential, we at last have the CCAAA. UNESCO recognises us as a profession, a field and a phenomenon.

Historically our identity has emerged slowly and, like many professions, it's still fuzzy around the edges. We have a distinctive literature, ethos, vocabulary, skills base and sets of values. We love this field with a sense of vocation.

Audiovisual archives have been around for over a century. Whether they will be prospering in 2100 will depend on their continuing necessity. Where they have disappeared in recognisable form – as very nearly happened to the NFSA in Australia – that necessity may cause them to re-emerge.

No politics please, we're archivists

Archiving is a political act. Selection and preservation decisions are political statements. Think about it. Archiving can be a health hazard in more ways than one, and there are many people besides Mr Murdoch who would like to be the gatekeepers of history. The reported destruction of archives in Honduras, following the recent coup, is simply the latest tragic case in point.

Advocacy, too, is a political act. It is also a professional responsibility. We cannot expect our aspirations, visions, and standards to be honoured or our organisations supported if we do not actively lobby for them in the public interest: ethically, persistently, and with intellectual honesty. We owe it to the public we serve. It may be hard work and against our natural inclinations. We may not achieve all we want to. We may even be seen as troublemakers. But as we live in a world of competing agendas, the character and continuity of our institutions and our work depends, ultimately, on our commitment to this. We are not passive onlookers.

I think that our profession sits neither at sunrise nor sunset, but somewhere in the morning. It has a proud pioneering history, though there are more challenges than ever – political, technological, financial, legislative and otherwise. It needs, I think, to learn the lesson of convergence within its own internal politics, so its advocacy and cohesion as a field can grow and be more effective.

We still need the visionaries and the troublemakers. But above all, we should be encouraged by how far we've come, and where we're going.

Sharing Resources, Sharing Responsibility: Archives in the Digital Age

Bertram Lyons, Nathan Salsburg, Anna Lomax Wood, Association for Cultural Equity / Alan Lomax Archive, USA

The theme of this year's IASA conference and the question that it asks – "Towards a New Kind of Archive?" – is especially pertinent to the experience of the Alan Lomax Archive, which we described at last year's IASA conference as a transitional archive, and us, its archivists, as learning to be stewards of a digital-only collection. We straddle the fence between preservation and access, between being sedentary and mobile, with our main commitments and activities lying in the interstices of cultural heritage and cross-cultural collaboration. With another year's experience under our belts, we are able to explore this further, and perhaps explain this better, today.

I. Towards a new kind of archive

In 2005, the Association for Cultural Equity (or ACE), which oversees and administers the Alan Lomax Archive, began a process of disposition in which the entire physical contents of the Archive were transferred to the American Folklife Center (or AFC) at the Library of Congress. Over the course of two years and three separate deliveries, AFC coordinated pickup of the archive, which includes materials of intangible cultural heritage from the American South, the Caribbean, England, Ireland, Scotland, Spain, Italy, Morocco, USSR, and other locales. Formats in the archive include manuscript materials documenting the extent of Lomax's career post-1942; original field-recordings; photographs and negatives documenting each of these post-1942 collecting field trips; film and video, including 400 hours of raw footage shot from 1978 to 1983 for the production of Lomax's American Patchwork documentaries; an extensive collection of books on folklore, folk song, and world cultural heritage; vintage and legacy recording equipment from many of Lomax's recording trips; as well as awards and other collected ephemera. Upon receipt, AFC processed the materials and began a larger plan to integrate the materials intellectually with the earlier share of Lomax's collected materials already in their purview.

The convergence of these two physical collections at AFC creates an almost complete archival collection of Alan Lomax's life work. Prior to this arrangement between ACE and AFC, the Lomax Archive, with the support of many public and private foundations, completed the digitization of these collections. We not only created digital surrogates of each physical item, but also captured descriptive and technical metadata in order to create associated catalogs. By the time AFC was prepared to acquire the physical collection, we had created a mirroring digital one, which remained under the auspices and control of ACE. The Alan Lomax Archive had become a digital-only archive. Our physical collections were separated from their digital surrogates. In the traditional sense of the term, we became collection-less.

II. Sharing Resources, Sharing Responsibility

Alan Lomax would not have considered himself an archivist, per se, but instead a scholar, a producer, and a promoter of the primary ethnographic documentation that comprised his collection. He was an archivist only by default, as his collection grew, and as the fragility of the materials in it increased with age – although, Lomax did know how to take care of his collections very well through his experience with many moves, vicissitudes, and the continuous lack of resources for professional-grade archival storage. Thus ironically what we call the Alan Lomax Archive was not fundamentally set up as an archival repository; it was instead just Lomax's office, filled with the tapes, photos, films and videos that he had gathered over the decades. (He jokingly called it "the orifice," because it swallowed so much.) It is important to note that when Lomax retired, his collections, in their original form, became for all intents and purposes closed. And when the American Folklife Center acquired the physical material that comprised those collections, our office – the Archive – was relieved of an enormous curatorial burden. We were then able to focus our efforts and resources away from the management of physical items and towards the documentation, organization, dissemination, and publication of their digital counterparts – that is, to realign ourselves

with Lomax's mission and his vocation. We became free to make our primary concern the perfection of our digital catalogs and the online interface through which the public would access our digital collections, as well as the pursuit of collaborations with our dissemination partners – site-specific archives that would receive copies of our digital media specific to their regions and their constituents, of which we will say more in a moment. As we have said, the Folklife Center staff were already the stewards of Lomax's earliest collected material, and were pleased to acquire the work he compiled after his departure from the Library in 1942, thus making their Lomax collections complete. They were also happy to be spared the responsibility of the material's digitization, as we had already accomplished such efforts, and shared the results with them after the acquisition, and they could focus their efforts on description and preservation of the physical materials. This relationship is a reciprocal one, however, with regard to research access.

The Lomax Archive was never a preservation repository nor a reading room, so while scholars, writers, and fans would come in to study or peruse our holdings, there was minimal protocol, and none of our staff were designated reference librarians or research overseers. That burden, too, has been relieved by the Folklife Center's acquisition, as now we are able to direct prospective researchers to our online catalogs, and we are able to tell them that if their needs are not met by those catalogs, they can direct their queries to the Folklife Center staff. The Center has also benefited from our intimate knowledge of the collections, acquired over many years. We often receive research queries from our colleagues at AFC asking for details they are not yet able to ascertain on their own, and they often refer to our online catalogs and accompanying references, such as comprehensive indexes of Alan's field trips; bibliographies and discographies; teaching tools; and profiles of his colleagues and collaborators.

III.A Digital Archive with a Mission

The Association for Cultural Equity is a digital archive with a mission. As any archival organization should be, ACE is guided by its mission – namely, furthering the cause of cultural equity, which Lomax defined as the right of every culture to express and develop its distinctive heritage. The practice of cultural equity – widely known in the U.S. as “public folklore” – takes many forms. ACE's role is a custodial one: through our archiving, repatriating, and helping to revitalize the full range and diversity of the expressive traditions represented in our collection; through diverse educational initiatives, publications, and dissemination projects. Dissemination plays a large part of our mission, and, in today's world, digitization is essential to dissemination, as it increases access exponentially. In many ways we have become an outreach center, able to pursue creative projects to extend the reach of our collections into new and interested communities. We launched our first searchable online interface in 2003, providing free access to Lomax's post-1942 field recordings, including still images, moving images and sound recordings. Its current iteration – featuring radio programs; discussions, lectures, and interviews with Lomax's colleagues and collaborators; video clips, and teaching materials – is available on ACE's website: <http://research.culturalequity.org/index.jsp>.

With the advent of Google Earth, we created a geographically specific interface, with Lomax's field recording locations plotted on the open-source mapping software. We call it the GeoArchive, and it offers another point of entry into, and interaction with, our collections: <http://lomaxgeo.org>.

Maintaining these catalogs and hosting them is time consuming and tedious for a small organization. ACE's flexibility as a collection-less archive allows it the capacity to continue to improve and enlarge this service. Ostensibly, anyone at anytime can access these materials from anywhere. But we understand that serving the cause of cultural equity demands more than web dissemination. High-speed Internet access allowing for streaming audio and video is still a luxury in many locales where Lomax's collections are of interest. So ACE initiated and supports an extensive repatriation program through the dissemination partners we mentioned earlier – establishing partnerships with repositories in many countries where Lomax originally recorded. We provide high quality digital copies of our digital collections

to those institutions and their constituent communities – the inheritors of the expressive traditions that the materials document. Our repatriation is inspired by the novel approach Alan Lomax first undertook on behalf of the Library of Congress in the late 1930s and early '40s. Seeking out private collections of far-flung scholars, as well as the vernacular-music catalogs of commercial record companies, Lomax encouraged copies to be made, when possible, and deposited at the Library. He later pursued this model in the service of central archives in Scotland and Italy in the 1950s; we are continuing it regionally in Spain and the Caribbean. The digitization of our collections makes this kind of repatriation possible. We do not need to give back the original tapes – in most cases they would be more of a burden than an asset. For instance, in some of our recipient sites in the Caribbean, facilities in which to play tapes do not exist, nor is there a means of keeping the tapes from deteriorating – let alone a method for sharing them with the community. Our model is built specifically on repatriating *digital* copies of originally analog sound recordings and photographs, with supporting metadata and catalogs.

This process is not merely about returning cultural artifacts to their places of origin. It is about building relationships, partnerships, and collaborations.

As we stated in our presentation at IASA last year, ACE has partnered since 2005 with the Center for Black Music Research at Columbia College, Chicago, to repatriate digital copies of Alan Lomax's Caribbean sound recordings and photographs to interested repositories in the island countries where they were made. Repatriation sites so far have included:

- Nevis and St. Kitts Historical Society, Nevis
- Folk Research Center, St. Lucia
- La Médiathèque Caraïbe Bettino Lara, Général de Guadeloupe, Basse Terre, Guadeloupe

Future Caribbean sites include repositories in St. Barthélemy, Grenada, and Carriacou; at several Trinidadian universities; and, as has just been announced, in Haiti, with the support of the Green Family Foundation, the Open Society Institute, and the Clinton Global Initiative. We also have deposited high quality digital surrogates and digital catalogs in many other locations where our materials were recorded, including the following repositories:

- Alabama Center for Traditional Culture, Montgomery, Alabama, USA
- Archivio Sonoro della Canzone Napoletana della RAI, Naples, Italy
- Blue Ridge Institute and Museum at Ferrum College, Ferrum, Virginia, USA
- Blues Archive, University of Mississippi Library, University of Mississippi, Oxford, Mississippi, USA
- The English Folk Dance and Song Society, London, England
- Folk Research Center, St. Lucia
- Hogan Jazz Archive at Tulane University, New Orleans, Louisiana, USA
- Irish Traditional Music Archive, Dublin, Ireland
- The Royal Scottish Academy of Music and Drama, Glasgow, Scotland
- The School of Scottish Studies, University of Edinburgh, Scotland

Dissemination through digital repatriation is an ongoing project of ACE, and we propose it as a model that potentially could stimulate similar initiatives by other small archives and scholars.

IV.A Digital Archive for Profit?

For most of his career, Alan Lomax in one capacity or another was a producer: of radio programs, of 78 – and later LP – albums, of documentary films. Even while at the Library of Congress, Lomax argued that performers should be paid for their contributions. Working independently, and for the BBC in the years after that, Lomax made contracts with performers because they expected it – especially in the U.S. – and they wanted to make money from

their own recordings if possible.

Beginning work as he did in the period where most folklore scholars, ethnomusicologists, and collectors were aficionados without salaried university positions, Lomax had the idea that both the collectors and the performers should benefit from any profit that was to be had from recordings. By force of association, and also to disseminate the material more widely – which he did with his Columbia and Atlantic series, for example – Lomax had to develop an understanding of how the music business worked in order to deal advantageously with publishers and the sharks in the business. As long as his recordings were in print, he made it a lifelong practice to distribute the royalties that came his way, no matter how small, which kept him in communication with numerous friends in the field for decades. Another variation on cultural repatriation.

When the Rounder series began to come out, with newly re-mastered editions of the old recordings, there was an unexpected flurry of requests for licenses to films, which went on for several years. Lomax by then was retired, but his daughter set up a for-profit company called Odyssey Productions (named after Lomax's only grandson Odysseus, who is half Greek) to handle the agreements with artists and heirs and to receive and distribute royalties. While continuing to manage the production of Lomax-related CD and LP releases, Odyssey in the past number of years also has begun to focus its attention on placing Lomax's recordings, photos, and film-work in new film, television, and album productions, tapping into a revenue stream that far outstrips that generated by the sales of albums – especially in this age of declining sales – and that can provide extra financial support both to ACE and to the artists whose material has been licensed.

This has been made infinitely easier by having a digitized archive from which to draw requested sound, image, and moving image clips. We are able to direct the licensees to our online catalogs to do their own research, contacting us only when they know exactly what they need, which reduces the amount of time we spend on a request to a matter of hours, if not minutes.

Thus our digital catalogs are helping our licensing efforts (our for-profit efforts), which in turn have proven beneficial to both ACE and the heirs of the artists Lomax recorded. But what does it mean for the entity called the Alan Lomax Archive? Have we become merely a publishing house? Should an Archive be non-profit, pursuing dissemination, repatriation, and the mission of cultural equity on the one hand, while pursuing commercial use of its material on the other? These questions have a direct bearing on our treatment of the medium wherein the two constituents potentially intersect: namely, our website. Do we allow full, uncompressed versions of Lomax's photos and videos for download, or do we compress them, and watermark them? Do we offer full volumes of our audio media for free streaming, or do we limit the media to song samples to protect the rights-holders? For now, in both these instances, we have chosen the latter although there are very good cases to be made for the former.

A caveat to this discussion is the circumstances in which not-for-profit organizations often exist in the U.S. Many non-governmental, small organizations, such as ACE, depend on public and private donors in order to sustain operations. As we discuss ACE's hybridity, it is necessary to recognize that ACE achieved its current state through the financial generosity and support of a variety of independent for- and not-for-profit organizations and institutions, including government agencies as well as private and public corporations and foundations.

Bearing this in mind, is commerce a reasonable goal for archives undertaking digitization? Our digitization was – no doubt as it was or continues to be for many of you – a matter of necessity, and although we had album releases in mind for some of our material, they in no way ultimately could generate revenue equal to the cost of digitization. What revenue has been generated is only a happy side effect of that digitization. We are lucky in that our collections are the life's work of one of America's foremost folklorists, who recorded across the globe, and who has a name familiar to many music fans, scholars, and producers

around the world. But an online digital presence arguably can be a useful first step for other collections interested in this sort of pursuit.

V. ACE as an Archive?

Thus the question stands: is the Alan Lomax Archive still an archive? By disposing of our physical collections to a larger institution and placing digital surrogates in regional repositories around the globe, have we rendered ourselves obsolete? Or are we a new kind of archive, with our digital collections (and their natural link to the physical collections at the AFC) keeping us relevant and useful? Although the AFC are now stewards of Lomax's original materials, ACE and the Lomax Archive are still relevant as authorities on Lomax and his work. What are the limitations of analog collections that are primarily available in digital form? Will researchers ultimately wish to consult the originals? Will digital copies always be considered inferior to their original counterparts? Is there lasting value in ACE serving as digital liaison to original documentary materials? Are we merely a clearinghouse, as we said before – a publishing house – for digital media?

While answers to these questions with effort – or luck – will reveal themselves in time, asking the questions is helping us establish a model of what we hope the Alan Lomax Archive is, or will come to be.

In closing, here are three specific dimensions that our model suggests. We hope that they will remain viable for us and for our work, and that they may prove useful in theory or in practice to other small organizations like ourselves that are undergoing the analog-to-digital metamorphosis, peering as they might be into an uncertain future.

Collaborative and Symbiotic Partnerships

Digital technology encourages archives, libraries, and museums to plan for sustainable digital asset management, but it also provides new opportunities for independent repositories to sustain operational capacity. Small archives like ours can share financial and research burdens with larger partner-institutions while freeing themselves to pursue their specific missions in their specific communities and on behalf of their specific constituencies.

Flexible and Dynamic Outreach Projects

As archives become increasingly technologically proficient and similar in theory and in practice to libraries and museums, they are — owing to advances in technology — also capable of advocating for cultural outreach and social change through creative initiatives and dynamic projects. Our mission requires that of us; our flexibility makes it feasible.

Expanded Archival Reach

Diversification of archival practice leads to a diversification of archival reach. This kind of public involvement, we hope, can help promote the real (as well as the perceived) values of archives – be they analog or digital.

Hybridity is the Future: Negotiating Life as an Archive-Library

Aaron M. Bittel, Archivist-Librarian, University of California at Los Angeles, USA

I have chosen to title this paper with an intentionally bold statement about the future of archives; in the case of my home institution however, hybridity is just as much our past and our present. In this brief report I will describe our existence as a library-archive, and the present environment in which we and similar institutions find ourselves – that is, the environment of research libraries within the American higher education system. Finally, I will present my own ideas about how the UCLA Ethnomusicology Archive can navigate these waters going forward, suggesting some questions and observations that apply more broadly to research archives and audiovisual archives generally.

I. A Short History of the UCLA Ethnomusicology Archive

In the autumn of 1960, ethnomusicologist Mantle Hood established the Institute of Ethnomusicology at the University of California at Los Angeles. Although not the first center of study for this discipline – whether it was called ethnomusicology, *vergleichende musikwissenschaft*, or something else – the UCLA Institute of Ethnomusicology established a model for numerous other programs that followed it in the United States and elsewhere. The structure of the UCLA model distinguished it from its forerunners: a three-part formula emphasizing balance between performance, theory, and research (Hood 1972). This structure is reflected in components of the Institute: performance by the musical instrument collection, theory by the seminars, and research by the archive and laboratory. Thus, the Ethnomusicology Archive has been an integral part of the structure and philosophy of the Institute of Ethnomusicology (now the Department of Ethnomusicology) from its inception.

This bit of history is relevant to my topic here, because it has in large part defined the functions and roles of the Ethnomusicology Archive. We are a research archive to be sure, serving the needs of researchers in ethnomusicology and any number of other fields, from UCLA and beyond. But as part of an academic department that now teaches ethnomusicology majors at the bachelor's, master's, and doctoral levels – as well as hundreds if not thousands of students from other disciplines who take our survey classes – education holds a principal role in the archive's mission. And as part of a public university campus eager to engage with its home city (one of ten such campuses in the greater University of California) we have a mandate to reach out to our surrounding communities.

These conditions prompt us to probe the definition of an audiovisual archive, and whether our operation truly fits within that definition. We might start our questioning from the traditional notion of an archive as a repository of procedural records or other evidentiary documents generated by an individual or organization. Although we do serve this function for the Department of Ethnomusicology, these materials form only one among our many collections. But my consultations and conversations with fellow archivists, as well as recent visits to a number of audiovisual archives in Europe and Turkey, have underlined the point that there are as many formulations of audiovisual archive as there are entities that call themselves such. So why and how can these varied organizations consider themselves to be archives in the first place? Tony Seeger reminds me often that an archive, rather than being a place or a collection, can be understood as a set of functions. Although we have always called ourselves an archive, the UCLA Ethnomusicology Archive has assumed nearly as many library as archive functions. And in as much as we hold photo and textual documentation of the department's instrument collection and work toward making parts of it available in online exhibitions, we begin to serve some basic museum functions as well.

The hybridity of our Archive was in fact part of its design, if not explicitly stated as such. Both Institute founder Mantle Hood and founding archivist Ann Briegleb have indicated that the Ethnomusicology Archive was meant in the first instance to be a source of depth, collecting relevant sound and print documents in support of the research and studies of early graduate students and faculty in the Institute. For a student who wished to focus on Japanese Gagaku

court music, the archivist would respond by purchasing as many commercially available recordings and published books on the subject as possible, in order to create a resource library to support that student's study and eventual fieldwork. That student would in turn (it was hoped – this didn't always happen) deposit the results of that fieldwork in the Archive, providing more resource material for future students. However the long-term vision for the Archive was that it would achieve a kind of breadth as its collections grew in this manner, with each student passing through the program contributing a new area of emphasis or expanding a current one. It was never meant to be a comprehensive archive of the musics of the world, though, as Hood had more modest goals for the Institute itself (Hood 1972, Briegleb 1972). Thus the Ethnomusicology Archive was built to function more as a collection of small resource libraries. As collection development paralleled research and teaching in the Institute, the (perhaps unintended) result was a kind of record – an archive – of ethnomusicological activities at UCLA.

And while the collection has grown and our practices have evolved alongside the development of the audiovisual archiving field, the Ethnomusicology Archive has continued to serve simultaneously as a library and an archive. As an archive, we continue to accept collections of unique audio and video field recordings and associated documents, for which we perform archival processing and storage of the originals, digital preservation and access to the contents, and descriptive access in the standardized Encoded Archival Description schema. And as a library, we continue to develop a collection of commercially produced audio and video for which we create item-level, library-standard MARC cataloguing made available through OCLC's WorldCat, and we regularly provide access to the recordings for users in the archive as well as instructors in the classroom.

Alongside the library-archive hybridity we have come, as have most audiovisual archives these days, into an analogue-digital hybridity. While the migration of content from analogue to digital carrier and the resulting commitment to long-term digital stewardship are now long established as central to audiovisual archiving, few of us have reached the point where our primary job is that of digital curator. Even those of us who reach digital Nirvana (if such a state exists) will still have responsibility for the analogue originals for as long as they exist. To the members of IASA this is a statement of the obvious, but it has been my experience that for many of our colleagues in other information-related fields, not to mention the general public, this is a point that bears emphasis and repetition. A fundamental misunderstanding of the implications of an entirely digital information environment seems to define the current climate in which our archive and others like it must function.

II. That current climate, especially within US academic libraries

Putting aside for a moment our own functional hybridity, it seems to me that any collection that has entered the digital domain encounters another hybridity: that of digital libraries and digital archives. Separated – if not at times diametrically opposed – in philosophy and purpose, the two are increasingly subject to blurred boundaries and great expectations. To many, even professional “digital librarians,” everything that is digital is online, and everything that is online is freely available to all without regard to ethical consideration. Otherwise, they ask, why would you digitize it? And once it's digitized, why keep the analogue original, which after all is just taking up valuable space that could be used for a coffee shop or a student lounge? This viewpoint now appears to be dominant in American university libraries, which often control the purse strings if not the very existence of academic audiovisual archives. The result is increasing pressure for the digital reformatting activity of archives to serve more than just research and preservation functions. In some ways this is good, as it spurs us – particularly those of us with a hybrid mandate – to better engage our users as we pursue the education, access-provision, and outreach parts of our mission.

I should emphasize, however, that, as I've mentioned before, the Ethnomusicology Archive is not a part of a university library system, but rather a part of an academic department. This may seem a narrow distinction, but in our current climate it makes all the difference. Those who have some familiarity with the current direction of libraries within American

research universities will have some experience (perhaps first-hand) of just how politically contentious the situation is. The fact that I work for an academic department allows me a certain measure of freedom to speak on these issues affecting the field as a whole, that I would not otherwise have.

For those less familiar with the situation, you may have thought my remark about replacing collections with student lounges and coffee shops was a joke. This is in fact occurring at an alarming rate – usually over the objection of librarians, faculty, and yes, even students – at an alarming number of highly respected research universities, and despite the fact that there is most often already a coffee shop within a hundred meters of the library. A group of university library administrators calling itself the Taiga Forum has publicly released a number of predictions on the future of university research collections. These include the following directly quoted statements:

- Google will meet virtually all information needs for both students and researchers.
- E-books and e-book readers will be ubiquitous. Standards will have magically made this possible.
- Collection development as we now know it will cease to exist as selection of library materials will be entirely patron-initiated. Ownership of materials will be limited to what is actively used.
- Libraries will provide no in-person services. All services (reference, circulation, instruction, etc.) will be unmediated and supported by technology.
- Library buildings will no longer house collections and will become campus community centers that function as part of the student services sector.
- There will no longer be reference desks or reference offices within the library... Metasearching will render reference librarians obsolete.
- There will be no more librarians as we know them. Staff may have MBAs or be computer/data scientists... the average age of library staff will have dropped to 28.

[And perhaps most frighteningly,]

- Libraries will have abandoned the [analogue-digital] hybrid model to focus exclusively on electronic collections, with limited investments in managing shared print archives. Local unique collections will be funded only by donor contributions (Taiga Forum 2006, Taiga Forum 2009).

This group appears to be closely allied with library consulting firm R2 Consulting, which on its website advocates the removal of low-use collections that “occupy space that could be redirected to higher-value uses such as collaborative study spaces, information commons areas, writing centers, and even coffee shops” (R2 Consulting, at “The Problem”). In fact, while R2 claims to believe in the viability of what they call “unique content,” they make it quite clear that low-use collections are in their sights. Those of us who work with unique content on a daily basis know that they are, by their nature, low-use. **Archives of all kinds have good reason to react strongly to this line of thinking.**

While the Taiga statements are thinly veiled as predictions – or provocations, as they call them – we can see that they are in fact self-fulfilling prophecies or statements of intent; the very same class of library administrators represented by the Taiga Forum has acted aggressively in recent years to make these visions a reality. The closing of branch libraries and the merging of archival and other special collections into a single so-called “service point,” which often provides little service to users because the collections have been boxed up and sent away to storage with no digital surrogates for access, while subject specialist librarians have been reassigned to generalist or administrative positions, is only one of the more visible results of this movement.

Perhaps we should ask: can archives-as-function be entrusted to libraries? You’ll forgive me for including a reference to Greek mythology. It seems like the thing to do when you’re in Athens, so here we go. For hybrid institutions, our hybridity becomes the Scylla and Charybdis between which we find ourselves. On the one hand, as a library we are right to be wary of heads of Scylla: the first praises unique collections as a cherished resource, while a second devours library materials seen as unpopular (including a number of recorded

sound collections of historical value because they are on “passé” analogue grooved disc formats), and a third eyes us hungrily as a tasty morsel of cost-cutting. On the other hand, as a research archive, we risk being sucked into Charybdis’s abyss by being declared obsolete, useless, or (in current parlance) not sufficiently entrepreneurial.

Archive, library, museum... does it matter what you, an institution that is really just an idiosyncratic assemblage of these functions, is called? And is this focused hybridity model sustainable in an era of consolidated information mega-institutions?

III. The hybridity model going forward

We are navigating dangerous waters to be sure. Dramatic metaphors aside, I believe that in the end hybridity is our strength. I don’t feel I’m in the position to do any sort of fortune-telling or direction-setting for the audiovisual archives field, so instead, by way of wrapping up, let me explain how I see the future of our archive-library hybrid model. Because we exist as a bundle of specialized functions uniquely tailored to the needs of our specialized user bases, we fill a niche Google cannot. There is great value in such a repository being small and agile enough to adapt to changes in technology, environment, and most importantly the needs of our users, which are not to be confused with what is popular or trendy in the information technology and/or library world. There is equally great value in our remaining close to our users, rather than being hidden away in some giant agglomerated library entity. If the subject-specific collection (and the subject specialist to manage and provide access to that collection) is to survive in an age of mega-repositories, we will have to simultaneously take advantage of collaborative resources – especially in the areas of digital preservation management and distributed access – while remaining close to our home base of users and supporters.

For our archive in particular, I see the role of the teaching archive as one of our core missions. Not only will we continue to teach ethnomusicology students about archival research and fieldwork documentation, we hope to be actively preparing upcoming audiovisual archivists and preservation engineers. In our outreach efforts we will continue to teach (or re-teach) our users their cultural heritage, which implies a more active role than just being a repository. We will also be involved more and more, I hope, in teaching communities to document and preserve their own cultural heritage – a function already increasingly central to ethnographic archives as we seek to engage our communities. And as a specialized repository, we will serve as one node along the network of information and, more to the point, cultural content. After all, contrary to administrative vogue, we can’t all be generalists.

References

- Briegleb, Ann. Interview conducted in 1972 by Dustin Miller, Center for Oral History Research, Young Research Library, University of California, Los Angeles. Audio recording, tape no. 7, side 1; transcript, pp. 128-136.
- Hood, Mantle. Interview conducted in 1972 by Dustin Miller, Center for Oral History Research, Young Research Library, University of California, Los Angeles. Audio recording, tape no. 1, side 1; transcript, pp. 11-14.
- R2 Consulting. “Library Services. <http://www.ebookmap.net/pages/Library%20Services.php> (accessed 16 October 2009).
- Taiga Forum. 2006. “Taiga forum provocative statements.” <http://www.taigaforum.org/documents/ProvocativeStatements.pdf> (accessed 16 October 2009).
- Taiga Forum. 2009. “Taiga 4: Provocative statements (after the meeting).” <http://www.taigaforum.org/documents/Taiga%204%20Statements%20After.pdf> (accessed 16 October 2009).

Recording the environment: creating an archive of ambience

Budhaditya Chattopadhyay, Satyajit Ray Film and Television Institute, India

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This paper deals with archiving locative environmental sound; the intention is to propose the formation of a networked archive for environmental and natural sound by means of collecting locative audio media, particularly from developing countries like India where the audiovisual environment is under severe transformation.

Introduction

“In suggesting that ubiquitous Internet access would change our relationship with place by overlaying a second virtual world over the physical one, the Web movement was a seminal source for locative media’s ambitions.” (Mark Tuters and Kazys Varnelis, *Beyond Locative Media*, 2006).

We encounter our immediate environment in different ways; they are not only physical experiences, but become increasingly mediated in the contemporary context of pervasive digital media. A mobile phone user records sound and image from a place and sends it to another user out-of-place; one environment gets merged with another as we overhear a place on cell phones. We perceive place in YouTube videos, Google maps and closed-circuit surveillance television as we move, migrate and navigate from one environment to another, more virtually than we do physically. In the contemporary world of ubiquitous computing, locative environment requires to be perceived and understood in the context of digital media.

Perceiving a place and understanding its environment involves a number of factors; they are, however, fundamentally based on a dynamic interaction with the place. In view of communication theory, these interactions are medially locative and grounded in a contextual perspective; that’s how the perception can be studied through a mediatory approach to understand the place in terms of its locative media contents and their archival documentation.

According to theories of audio media, a place consists of an infinite number of sound events (Rick Altman, 1992). A listener focuses on certain events, and information extracted from a wide range of possibilities is essentially a partial image of the place. The cognitive process of selection and elimination is largely dependent on the sonic context of the recording strategy of the listener. The acoustic interaction with a place doesn’t limit itself in receiving aural information, but responds with an effort in archiving the audio media content prior to its mediation into an assortment of sonic events by recording methodologies.

Aural information of an environment is communicated on digital media by sound recording that transcends place to relocate it in the digital domain as recorded sound; subsequently formulated as a repository of sonic events collected from the place as sounds disembodied from the locative source; the repository is mediated in the digital domain as an archive of locative audio content which can be a mediated representation of the place as sonic construct. In this whole process the place is re-contextualized on sonic terms while getting relocated on the digital domain by means of archiving and curatorial dissemination of locative media content.

The questions arise: how an environment is translated in the digital domain or how an actual environment is mediated into a constructed sonic environment; and whether the methodology of recording can relocate vivid sonic characteristics and physical identity of the locative environment into the digital media environment. These questions should be answered within the theoretical perspective of locative media and sonic interaction, based on a methodology of gathering aural information by sound recording and subsequent archiving in the digital domain.

Sound connects us to the environment we belong to; this is the basic tenet of communication theory in terms of audio. Sound Media and Aural (Acoustic) Communication are relatively younger fields of study, although lately there has been a flux of academic activity in these areas. In the contemporary emergence of New Media, forms like soundscape and locative audio narrative are getting wider attention as sound media practices in the digital domain. Sound and listening are used as tools to narrate phenomena like place/space relationships, urban experience and urban environment incorporating media recording and design methods, while these phenomena are getting rephrased on the virtual space of digital media and ubiquitous computing. However, there is an evident gap between these practices, and theoretical pedagogies of communication and media studies. An interdisciplinary approach can bridge this gap between theory and practice in sound media.

The topic

Sounds are disappearing from our environment nearly every day. New sounds are replacing them – sounds that are monochromatic in texture and quality – initiating transfiguration within the sound world and turning it into a homogenized sound-space. However, the spectre of change has become all pervasive in the contemporary world severely reorganized by phenomena like globalization, urbanization, digitization and convergence. These phenomena are noticeably evident in developing countries such as India, where the places are rapidly transforming into industrial belts, special economic zones and landscapes of gross urbanization. The audiovisual world changes accordingly, creating lapses and lacunas within cultural memory.

Environmental sound or ambience of places is significantly affected by the processes of development: subtle and discreet sound objects stop producing sound under the pressure of a new hegemonic industrial soundscape. These sounds are gradually disappearing from the aural landscape as well as from collective tradition and associated sound culture. And this causes serious imbalance in the ecology of the places concerned. If we concentrate on a few chosen areas, these observations can be articulated with ease.

Case study 1. Tumbani

'Tumbani: a landscape in metamorphoses' – a locative media archiving project. Supported by the Prince Claus Fund, this is a project in progress to collect and archive locative media contents in terms of sound recording, video and photograph from a place called Tumbani, in eastern India, which is under severe change due to industrialization, hasty urbanization and development. The project started field recording from 2005 onwards to formulate an archive of environmental media to observe and study transformation within the audiovisual environment of the place. Tumbani is an area in the Bengal-Bihar border region of North-Eastern India, an area changing from a greener pasture into one of the busiest industrial belts of a resurgent India. The place is decaying as an intricate landscape and transforming into a homogenized surface, making the changes significant to grasp against the background of its traditionally rich history of audiovisual diversity. The narrative of Tumbani thus contributes to the overwhelming account of economic growth taking place in a developing India. But what remains unanswered is the effect these processes impose on the natural habitat and the ecological balance of the sound environment. As industrial growth accelerates, the acoustic space slowly changes from a rich environmental variety into a monolithic, static and oppressive industrial soundscape provided by machineries and technologies that intruded into the landscape initiating transfiguration of the texture, depth and tonal balance of an otherwise rich sound environment.

Case study 2. Kolkata

'Kolkata: a locative media study' is an observation through field recording and archival dissemination of locative media content into an audiovisual installation. The project has been commissioned by City One Minute Foundation and incorporates real-time recording of places to understand place-time-media relationships and the changing audiovisual

environment of an Indian city mediated by recording, archiving and curation. Recording has been done in the domains of video, still image and sound from four specific representative areas of the city during one hour of a twenty-four hour span. This includes digital recording with portable and handy recorders like mobile phones and flash-cards to map the places into a digital archive of locative media content, and subsequently curating into audiovisual pieces for installation.

These projects seek to address the larger issue of how the developing Indian landscape is undergoing hasty industrial growth and processes of sporadic urbanization, causing locative audiovisual content to disappear under a process of homogenization. If we listen to and analyze the recordings done in two successive years, 2006 and 2007, from the same area, we will find the volume of industrial noisescape on the rise in the overall soundtrack while sounds from the natural environments rapidly diminish. The list of disappearing sounds accumulates further as we conduct a thorough search of sound objects that stop producing sound. But the question is how the absence of a sound is influencing the cultural ecology. In the human habitat the effect of industrialization and urbanization is quite implicit, as the sounds of ancient rituals are replaced by the overwhelming sounds of television and radio; sounds of different indigenous, handmade and organic machineries are replaced by the electrical instrumentations introducing sounds of motors into many aspects of traditional life. The everyday ambience of a habitat is affected mostly in the following categories:

- Natural and environmental sound of everyday ambience
- Traditional objects and artefacts
- Insects, birds and other bio-diverse resources
- Household sounds
- Speech, dialects and oral resources.

Problem

The immediate question is how these sounds can be restored on recording media? How can an archive of endangered and extinct environmental sound be developed and maintained? How does an archive of environmental sound or locative ambience contribute to the ecological balance, and cultural integrity in the larger context?

We can consider the indigenous and personal archives created and maintained by the individual sound chroniclers, like field recordists, nature recordists and phonographers, who keep track of changing sounds. They are indeed forming a virtual repository, however discreetly, with their efforts in recording our environment with the help of digital recording gadgets and other digital media devices available with ease in the contemporary context of ubiquitous computing.

But these efforts are merely discreet, disorganized, personal, questionably amateurish, and haphazard. The recordings are mostly unprofessional, and prone to degenerate due to mismanagement. However, a sound that is yet to be recorded can fade away in this ever evaporating landscape of change, making it increasingly impossible to return to the sound source that eludes to be archived and kept for future reference.

Resolution

So the local and transient archives formed by these discreet sound recordings need to be networked as social hubs for exchange and access, and for raising awareness of archiving sounds from our surrounding environment and everyday atmosphere. This requires greater awareness of ambience as the repository of natural and ecological resources of the audiovisual heritage of places. The discreet efforts of individual media archiving need to be brought under one umbrella for organizational management. The organizational aim will be to further mediate the archive in terms of creating awareness in recording and archiving the immediate environment under change.

In today's world, when media is more flexible in its nature, we have immense possibilities to exploit its potential. With the advent of digital technology new media aesthetics have emerged. Inexpensive and easy-to-handle media recording devices have brought in fresh angles and varied forms in the field of media recording and archiving. It has spurred complex processes of convergence and hybrid expressions as well as methodologies of reinterpreting our own existence. At the same time existing and old media technologies and forms are being redefined and implemented towards understanding our contemporary realities in the new media domain.

Standing at this juncture it is very important to examine and understand the possibilities of media, especially its archival values. The archiving of everyday media allows us to reflect upon our social realities; criticize social injustices and discriminations prevailing in our society. It can also help us engage with and intervene in the continuous process of social transformation. Archiving everyday ambience and environmental media content can contribute to exploring the potential of media in collecting various elements, activities and candid moments of our daily lives. Such documentation and archival initiative not only keeps records of our contemporary transient audiovisual environment but it also creates an archive that is informal, dynamic and continuous. To address this issue, the organization of archival practice needs to be aimed at making the contributors aware of the archiving strategies – to practice how, as an activity, archiving can be used for keeping witness of our everyday actuality amid rapid change as mediated chronicles.

NaaD Media Collective is a cooperative endeavour to collect, archive and disseminate audiovisual media that are becoming extinct and endangered in a rapidly developing India. The indigenous and personal efforts to record and archive transient locative media content from the immediate environment are collectively represented by www.naadmedia.org. The archive is managed and maintained by individual audiovisual chroniclers, including amateur field recordists, hobby nature-recordists and local phonographers / photo-videographers, who keep track of changing sounds and images from this ever evaporating landscape. NaaD Media Collective intends to build a media repository by housing and organizing the contributions of volunteering media practitioners, ethnographers and students of media, to record the environment with indigenous efforts and to create spaces of archival dissemination of the found footage into media produce.

Methodology

As we approach recording audiovisual material from a place as locative media content, we might refer to “ubiquitous recording” as a methodology. The recording methodology incorporates handy digital devices capable of recording on the move. If we go through the development of media devices like mobile phones, we see rapid advances in terms of their recording capabilities. At the same time research funding on digital media storage systems and portability increases. Although the in-built microphones are still far from professional standards, ubiquitous recording, both video/still image and audio, in a mobile device will become a reality in the very near future.

In order to capture detailed aural information of a place based on comprehensive texture and depth, comprehensive audio fieldwork is necessary that includes field recording and digital archiving to retrieve locative AV content. Collected media content forms a digital repository (however discreet, in the sense of personal and disconnected archiving) for easy access of AV information to be used for locative media curation. A combination of recording techniques can achieve thorough collection and retrieval of locative audio content. For example, binaural microphones record the surrounding space, while a shotgun microphone chooses directional contexts of a sound environment; contact microphones or sensitive accelerometers capture minute vibrations emanating from a place. A combination of different microphones can capture inclusive aural information of a place in detail.

However, it's not only a technical or journalistic but also an aesthetic approach that's required to combine different recording techniques in order to mediate a particular place

into the digital archive. A place is recorded on digital media by ubiquitous recording to capture its varied sonic environment, for example, traffic; buildings and architectures; spatial arrangement and perspectives; home and household; media practice; language and dialect; or physical objects that are part of the larger sound environment. The field recordist will approach a methodology to search for a wide sonic variety, frequent unexpected aural juxtapositions, documentation of disappearing and new sounds and spatial associations. The collected sound and other media can contribute to recording our very own environment onto digital media in order to create an archive of locative ambience.

The stand-alone personal archives can be organized by peer to peer networking of discreet digital repositories on hard disc drives lying in separate places; in this way file sharing can be achieved. To disseminate the separate archives into collective archival practice, events like workshops and discussion sessions, joint field recording expeditions, sound walks and listening-recording sessions can be arranged under an organizational banner. The archiving methodology includes collecting media content recorded in the field, digitizing existing materials on other formats like MD and tapes, standardising practice in keeping original recording as BWF and dissemination into online sharing, like blogging, in MP3 streaming at 192 kbps stereo files. For the latter, maintaining authorship by data encryption including id3 tags can organize the distribution of AV files for sharing and access online and networking.

Conclusion

As ubiquitous recording pertains, archiving in the digital domain becomes an activism. When recording becomes part of everyday life, archiving the everyday transcends mere institutional frameworks and moves into the public sphere. This involves raising consciousness of locative audiovisual heritage and promoting a culture of archiving practices at large, which in turn broadens awareness about audiovisual media archiving and its contribution towards ecological balance.

Easy access to environmental and natural everyday ambience formulates spaces and provides scope for their valid dissemination into newer media outputs. Dissemination of locative media archives into new media productions like documentaries, soundscape works and media installations for commercial/non-commercial curation/reuse, opens up doors of archival practice in the larger public domain and raises the potential for new kind of archives.

References

- Altman, Rick (Ed.) 1992. *Sound Theory/Sound Practice*. Routledge, New York.
- Hassan, Robert, Julian Thomas. 2006. *The New Media Theory Reader*. Open University Press.
- Kyong Chun, Wendy Hui, Thomas Keenan (Ed.) 2006. *New Media Old Media: A History and Theory Reader*. Routledge.
- Liestøl, Gunnar; Andrew Morrison; Rasmussen, Terje (Ed.); *Digital Media Revisited: Theoretical and Conceptual Innovation in Digital Domains*. The MIT Press, 2004
- Manovich, Lev. 2001. *The Language of New Media*. The MIT Press.
- Messaris, Paul, Lee Humphreys (Eds) 2007. *Digital Media: Transformation in Human Communication*. Peter Lang.
- Morley, David. 2007. *Media, Modernity and Technology: The geography of the new*. Routledge
- Nyre, Lars. 2008. *Sound Media: From live journalism to music recording*. Routledge.
- Schafer, R. Murray [1977] (1994): *The Soundscape. Our Sonic Environment and the Tuning of the World*. Rochester: Destiny Books.
- Sterne, Jonathan. 2003. *The Audible Past: Cultural Origins of Sound Reproduction*. Duke University Press.

Wardrip-Fruin, Noah, Nick Montfort (Ed.) 2003. *The New Media Reader*. The MIT Press.
I Took the One Less Travelled By: DAT Migration at Radio New Zealand's Sound Archives / Nga Taonga Korero
Tim Bathgate, Radio New Zealand Sound Archives / Nga Taonga Korero

1. Introduction

A significant portion of the archival material held by Radio New Zealand's Sound Archives/ Nga Taonga Korero (SANTK) has been recorded on Digital Audio Tape (DAT). These recordings are regularly accessed for research, re-broadcast, and general interest and are considered to be a priority for migration.

The New Zealand state broadcaster has generated the vast majority of these recordings in-house, and the homogeneity of the recordings (both in content and quality) is evident. It is thought that the controlled nature of the recording environment; the contiguous and predictable content; and the sheer volume of material (approximately 6000 hours) will lend these recordings to mass, unmonitored migration.

SANTK has identified several possible solutions for migrating DAT data en masse, each with varying degrees of quality reporting, reliability and cost. This paper is a product of an internal effort to research and evaluate one of those solutions.

2. Proposed Solution

Based on the unofficial reports from other sound archives, and recognition in the professional literature (IASA, 2009, p. 67), it has been suggested that the use of Digital Data Storage (DDS) tape drives in conjunction with appropriate firmware and software could be an efficient and cost-effective means of migrating data from our DATs.

The aim of this paper is to determine whether or not the architecture of such a system is reliable enough for use in a sound archive: is the decoding, error reporting, error correction, and error concealment as robust as other, traditional methods of migration?

3. Alternative Solutions

3.1 Monitored Transfer

Although not an option for SANTK, it is worth noting that monitored transfer has been used to facilitate the preservation of small collections in the past. This technique sees DATs transferred one by one, and both the audio and the error display on the DAT machine are monitored to determine whether or not interpolation or muting occurs during the transfer.

This is seen as a valid migration method by many archives (Casey & Gordon, 2007, p. 32), but the size of our collection negated the possibility of adopting monitored transfer as the primary strategy for migrating our collection.

3.2 Mass Migration Solutions

There are a number of products on the market for handling the mass migration of audio from DAT. These systems tend to comprise a bank of DAT machines connected to a PC via a digital audio connection. These machines are typically modified to enable the transmission of error status data from the machine's Error Detection and Correction (EDC) circuitry to the host PC for interpretation and logging.

3.2.1 Benefits

The most obvious benefit of adopting such a system is the ability to log metadata pertaining

to error detection and correction directly from the EDC circuitry, as recommended by IASA (2009, p. 67). In addition, these systems are able to take advantage of the ability for digital connections to transmit sub-code data, which can be logged alongside EDC data in a metadata file, thereby producing a robust information package with little human intervention.

From an administrative perspective, these systems might be desirable due to the availability of support from vendors; institutions will have to make their own support arrangements whenever an alternative in-house solution for migrating DATs is adopted.

3.2.2 Limitations

There are obvious limitations to these systems. Firstly, these solutions are often marketed at a price point that is exclusionary for some institutions. This is usually due to the premium that is placed on generic (but mandated) PC hardware and supporting software, but it might also result from a diminished buying power, which will be dictated by the economy in which these archives operate.

In addition, the output of the EDC module can only be transmitted by Sony PCM 7030, 7040, 7050 and R-500⁶⁹ (Cube-Tec, 2009; NOAA Audio Solutions, 2009) DAT machines. As such, it forces institutions to purchase specific units, which might be sold at an inflationary price point due to the artificial scarcity that this situation dictates.

Finally, the DAT machines themselves impose two 'hard-wired' limitations. Firstly, the devices are limited to migrating audio data in real time. As such, an institution will need to purchase more than one machine and software license in order to achieve a substantial rate of throughput. Furthermore, the Sony PCM 70x0 series recorders do not, apparently, support replay of 32 kHz and 'long play' (32 kHz, 12-bit) DATs.

3.3 EDC Circuitry Interface

IASA TC-04 (International Association of Sound and Audiovisual Archives, 2009, p. 67) calls for '... measurement of the errors produced at the error correction chip of the replay machine and this information must be recorded in the metadata of the resultant audio file'. As such, any technologies that could enable such measurements were explored over the course of this research.

3.3.1 DAT Errormonitor

WPN Systems markets a solution for logging the error status data produced by the EDC circuitry, dubbed Errormonitor (WPN Systems, 2006). Unfortunately, Errormonitor is only capable of interfacing with DAT machines that employ the Sony CXD2601 error correction IC. The following machines have been identified as being compatible with Errormonitor:

- Sony DTC-55
- Sony DTC-57
- Sony DTC-77
- Sony DTC-670
- Pioneer D-500

SANTK was not able to benefit from this technology due to the unavailability of these specific devices.

3.3.2 Other Innovations

A more basic system, which reports uncorrectable errors using an LED, is described by Kaluza (1996). Once again, Kaluza's schematic is only compatible with DAT machines that employ the CXD2601 IC.

⁶⁹ Error output from the R-500 is enabled by circuitry designed by WPN Systems and licensed to NOAA Audio, etc.

3.3.3 Observations

It seems possible that, by reverse engineering other common ICs that are responsible for error detection and correction, a series of circuits could be designed for common archival DAT playback devices. Without further research, it seems unlikely that many sound archives will gain the ability to capture error status metadata.

4. Digital Data Storage

4.1 Overview

The Digital Data Storage (DDS) system was first mooted in 1989, six years after the DAT Conference was established and four years after the DAT technical specifications were first published (Goto, Asada, Chiba, Sampel, Noguchi, & Arakawa, 1989, p. 1). It was developed as a format for storing and backing up data onto magnetic tape. As of 2009, DDS is still a contemporary means of storing data, though the form factor of the tape was altered in 2007 with the advent of DAT 160, which uses 8mm wide tape instead of 3.81mm. 3.81mm tape was used for DDS-1 through to DDS-4, and DAT 72.

The DAT specification was chosen as a foundation for DDS due to the 'large capacity, high speed search function, and direct addressing by sub-data search' (ibid.) that are intrinsic in the DAT specification. To take advantage of these characteristics, the engineers of the system envisioned that the system would mimic a standard DAT device, but with a 'data processing unit' (Figure 1) handling a signal, rather than an ADDA converter (ibid. p. 661). The DDS system would employ the same error correction as a standard DAT machine, but with an added error correction code – dubbed C3. This error code differs from C1 and C2 error correction, in that it is interleaved over many tracks (Figure 2).

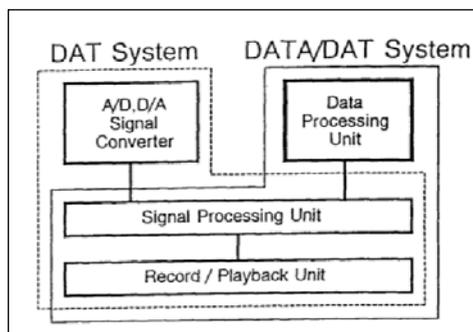


Figure 1: Comparison of DAT and DDS Input/Output (IO)

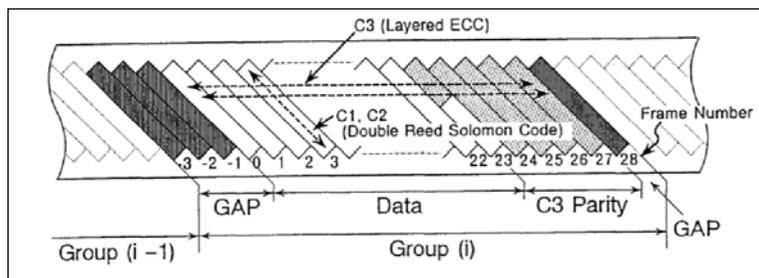


Figure 2: Arrangement of C1, C2 and C3 error correction codes

4.2 Comparison with Digital Audio Tape

The similarities between the mechanisms of a standard DAT machine and DDS drive are evidenced in Figures 3 and 4. These similarities are such that a DDS drive, when loaded with appropriate firmware, is able to interpret the unique arrangement of audio and subcode data and transmit that data across its SCSI interface. In addition, the firmware allows for some measure of control over the transport (i.e. fast forward, rewind, play, stop, record).

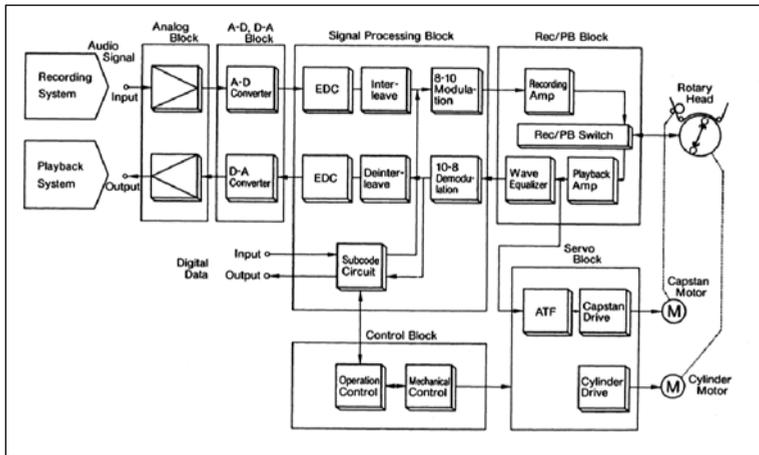


Figure 3: DAT Block Diagram

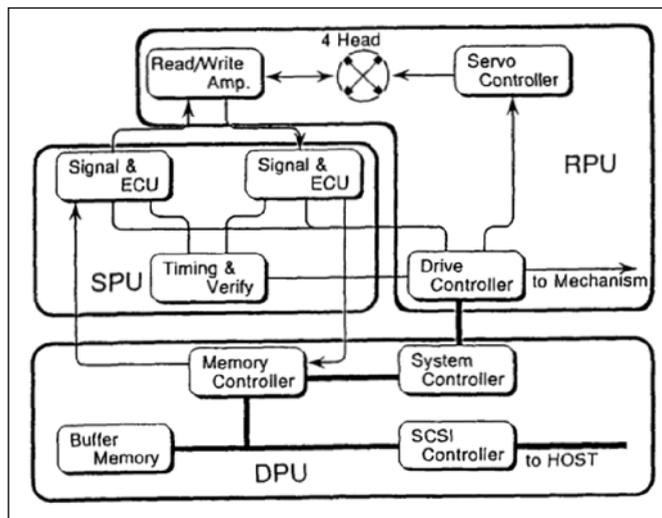


Figure 4: DDS Block Diagram

Aside from the substitution of a Data Processing Unit (DPU) for the Analogue to Digital/Digital to Analogue (ADDA) converter, there are two crucial differences in the implementation of the Error Correction Unit (ECU) and the rotary record/playback head in a DDS system.

In a standard DAT machine, the EDC circuitry is responsible for identifying and correcting correctable (C1 and C2) errors and concealing uncorrectable errors. Errors are considered to be inherent in the media, and are catered for by the error detection and correction

subsystem (Pohlmann, 2005, p. 216). Error concealment is employed whenever the capability to correct objectively is exceeded, and these errors are concealed using methods such as interpolation or muting (Pohlmann, 2005, p. 176).

Although an EDC circuit is present in the DDS system, this module is only responsible for correcting C1 and C2 errors. Corrupt data will be transmitted as is (usually with the value of the last known uncorrupt sample held), but flagged as uncorrectable.

This inconvenience is, perhaps, mitigated by a second distinction: the rotational speed of the record/playback head in a DDS system. The head in a standard DAT machine rotates at 2000 rpm, whereas the rotational speed of the head in a DDS system is 4400 rpm for DDS-2 and 8800 rpm for DDS-3.

Because the extraction of audio data is an 'offline' process (i.e. the system is not expected to produce an output that will be interpreted in real time, as with a standard audio DAT machine), the faster rotational speed allows data to be ripped at as much as 2.2 or 4.4 times speed.

There has been some concern over the stresses that the faster speed might have on degrading carriers (private communication with Jörg Hourpert, 2009), though there has yet to be any published investigation into this issue.

5. 'Literature' Review

5.2 DATHeads Digest

The DATHeads Digest appears to be the domain that first spawned discussion over whether a DDS-based solution was viable in a 'prosumer' setting. As early as 2001, the 'early majority' begins to enquire after other users' experiences with extracting audio data with DDS drives; the 'late majority' does not catch on until 2005.

The early adopters express enthusiasm over the new technology's potential to save time when duplicating recordings (Zuccaro, 2001) and make copies of DATs that are protected by the Serial Copy Management System (SCMS) (Shutz, 2001). However, there is an extreme dissatisfaction with the stability of the extraction software (Shutz, 2001).

Later postings are more positive, and this method of migration appears to be acceptable practice amongst DAT hobbyists and studio engineers.

5.2 ARSCList

A Google search targeting the archives of the Association for Recorded Sound Collections listserv for the term "DDS" returns several inquiries into the establishment of a DDS-based migration solution, and a handful of user experiences. The discussion in this forum appears to be concerned more with using a DDS-based solution in heritage institutions.

What comes across in these postings is that the difficulties in constructing such a system are rooted in the specificity of the hardware/firmware combination for the drives themselves (Irelan, 2009). In addition, we learn that the system has proven to be unreliable under certain conditions:

I don't have absolute faith in it, since I have found instances where the program fails to correct some errors, and some instances where it will skip a portion of the audio without flagging it, but this seems to happen when I am doing other things on my computer while extracting a tape... (Sohn, 2009)

However, the number of positive reports appears to outweigh the negative. A number of posters (Rice, 2007) laud the ability to extract data faster than real time, log corrupted

frames, split the resulting files according to their track markers, and extract recording creation dates (in some instances). This positive feeling is echoed by Prentice (2009), who sees an archival application for such a system:

Despite the problem with this approach, one big advantage... is the ability to accurately identify the presence and location of uncorrectable errors. Whether these errors are audible, or how you choose to address them having discovered them is another thing, but wherever it is possible to measure the success of a digital data rip in an archival environment, my feeling is it should be pursued.

5.3 Other

Aside from these listservs, the vast majority of information on this topic appears to be stored in the backwaters of the internet. Perhaps the most valuable resource for information on configuration is maintained by Computall Services – the developers of DAT2WAV. The site links to a number of resources, many of which are only accessible using the WayBack Machine at archive.org.

What this highlights is the ephemeral nature of information on fringe technologies such as this. Should archives adopt this method of migration, it seems important that this information is collated and verified.

6. Implementation

6.1 Procurement

Based on recommendations from other archives, Ultra Tec – ‘A UK-based distributor specialising in stocking end-of-life and discontinued storage products’ – was chosen as a supplier for DDS tape drives as they were able to provide the drives with the appropriate firmware already installed.⁷⁰ As of August 2008, these drives were priced at £125 each.

We purchased eight drives – the rationale being that the SCSI bus can support seven devices, so we could keep one in reserve – and we were sent eight Seagate CTD8000R-S drives, each annotated with the Compaq OEM part number 199464-201. The EEPROM had been flashed with the ARCHIVE Python 01931-XXX5AC firmware.

The CTD8000R-S is a DDS-2 device that was produced using technology from Archive under ownership of Seagate. In hindsight, it might have been better to search for Sony SDT-9000 DDS-3 drives, which are capable of extracting at a higher speed due to the faster rotational speed of the head.

6.2 Installation

The system was built by Radio New Zealand’s IT department over a period of approximately nine months. The installation period could have been much shorter, but there were a number of issues and inefficiencies in the way the project was handled.

The reliance on legacy SCSI components complicated matters. Given that a modern IT department is unlikely to encounter SCSI when interfacing devices with office PCs, it is only natural that the process of building a legacy system will require some degree of research. For this reason, the identification, procurement and installation of PC components caused major delays. These issues might have been simplified by using a SCSI to USB converter, or, perhaps, more invested personnel.

⁷⁰ There has been some criticism regarding sourcing DDS drives from suppliers such as these. Unpublished research by one company suggests that the supplied drives are typically refurbished units, and are prone to failure or inconsistency across drives (private communication with Jörg Houpert, 2009). These issues were not adequately covered by the research, and it should be recognised that one of our drives did fail after only 15 hours of operation; consistency across drives demands further investigation.

In addition, a series of software glitches slowed progress. These issues were largely due to conflicts between the software and the installed Adaptec ASPI driver.⁷¹ On the advice of the VDAT developer, we installed the Adaptec ASPI driver 4.60 build 1021, which cured the issues.

7. Experimentation

7.1 Tools

7.1.1 Wavelab

In the following experiments, Wavelab 6.10 was used as the primary analysis tool; in particular, the Audio File Comparer and the Bit Meter.

The Audio File Comparer was used to count the number of discrepancies between two otherwise-identical Wave files. It was also used to generate a 'delta file' – a file that is produced by reversing the phase of one Wave file and subtracting it from the other to produce a file exhibiting only the discrepancies .

The Bit Meter was used to sample-align Wave files and compare the binary values of specific sample positions.

7.1.2 Bit By Bit

Bit By Bit is a utility that was built specifically for this project. It was commissioned after we determined that the comparison functions of Wavelab could not offer enough data to quantify the differences between two Wave files.

Bit By Bit takes two Wave files and compares the values for each PCM sample. It then generates a log file that reports any discrepancies. The log file lists the sample number and time at which a discrepancy occurred, and displays the binary and decimal values of the conflicting samples.

This tool was instrumental in determining *just how different* two near-identical bitstreams were, and measuring the consistency of error correction operations.

Wavelab has a similar function, which allows a user to output sample values as ASCII, though it lacks functionality for carrying out comparisons.

7.1.3 Extraction Software

VDAT

VDAT is a Windows application that is designed to extract audio data from an array (i.e. as many as are available) of audio-capable DDS drives (private communication with Eduard Ungemach, 2008). The software is written by a German developer, Eduard Ungemach, and the latest version (0.6h) was released during 2007. As of 2009, VDAT is still being sold for 100 Euros directly from the developer, though his website is apparently defunct.

VDAT is set apart from other software packages for its ability to manage many streams of data. This feature is of paramount importance in most archival environments , due to the volume of data the needs to be migrated.

⁷¹ Despite recognising the tape drives, the latest version of the driver would cause Visual Basic C++ runtime error; 'command aborted' error; an Application Error stating "The instruction at "0x10001130" referenced memory at "0x10001130". The memory could not be 'read'"; and errors that didn't say anything.

In addition, VDAT is controlled via a Graphical User Interface (GUI), which makes operating and monitoring a transfer very simple. The interface comprises transport controls; displays for Absolute Time (ATime), Program Time (PTime) and Running Time (RTime); sample rate; and SCMS status.

The extraction can be executed in three ways. VDAT can respond to subcode data, and split the resulting files according to track number; VDAT can ignore track IDs and generate a single Wave file; or VDAT can ignore subcode altogether and extract data from every frame on the tape (even when that data is outside the bounds of the first Start ID and the End ID).

VDAT creates a log file that will record events that might compromise the quality of the resulting bitstream. The most important of these is the BadFrame event, which indicates that a frame could not be recreated using C1 or C2 error correction.

DAT2WAV

DAT2WAV is a DOS application that is manipulated using the command line. The latest version of the software (1.3b) was produced in 2007 by Computall Services and is currently marketed as freeware.

DAT2WAV performs similarly to VDAT, though it tends to fail when more than two extractions are carried out at once. The most noteworthy feature of DAT2WAV is its error concealment feature. A user is able to choose whether error concealment is applied to corrupted frames, and this action is written into a log file.

A small sample experiment suggested that the error concealment algorithm of a Tascam DA-40 was more likely to mute corrupted frames, whereas the DAT2WAV algorithm interpolates by substituting a sample value that is the average of the uncorrupted samples on either side. Interpolation by this method tended to sound less obtrusive than muting. Whenever interpolation was used by both the DAT machine and DAT2WAV, the average discrepancy was +/- 11 869 levels of quantization (approximately 5.5% of the resolution of a 16 bit sample).

What this suggests is that, in some instances, a software tool may be more appropriate for mending corrupt data than the error correction circuitry of a DAT machine. Experience suggests that the error concealment logic of an EDC circuit is not ideal and that DAT error concealment might be a task that is better suited to human intervention.

DATXtract

DATXtract is a Mac OS X based application, produced by Peter DiCamillo and marketed as freeware. DiCamillo has also posted the source code for his application online, and encourages modification by third parties (private communication with Peter DiCamillo). The most recent version (1.3) was released in November 2007.

Like VDAT, DATXtract is controlled via a GUI. In addition to standard transport controls and position data (i.e. ATime, etc.), DATXtract reports errors in real time, allowing an operator to monitor any abnormalities during the transfer process.

Unfortunately, DATXtract is only capable of extracting data from one device at a time. However, communication with the developer suggests that it would be possible to implement support for parallel extraction (private communication with Peter DiCamillo).

Comparison Chart

Software	Platform	Cost	GUI	Output Format	Support for Multiple Ingest	C1 and C2 Error Reporting	Uncorrectable Error Reporting	Error Concealment	One WAV Per DAT / One WAV Per Track
V DAT	Windows	100 €	Yes	WAV	Yes	No	Simple	No	Yes
DAT2WAV	DOS	Free	No	WAV	Some	No	Cryptic	Yes	Yes
DATXtract	OSX 10.2-10.5	Free	Yes	AIFF	No	No	Simple	No	Yes

7.2 Experiment One: Ideal Conditions

7.2.1 Aim

To determine whether a standard DAT machine produces a different result to the DDS-based extraction method when reading a DAT produced under controlled, ideal conditions.

7.2.2 Method

A commercially released Compact Disc was selected and played using a Tascam CD-RW2000. The resulting signal was transmitted to a Tascam DA-PI DAT machine via S/PDIF, with synchronisation supplied by the Tascam CD-RW2000, and recorded. This was expected to generate a bit-identical copy.

The CD was then ripped using Exact Audio Copy, which would verify the integrity of the rip by comparing the checksum of the resulting Wave files to an online database containing a series of checksum values for the same CD.

The DAT was played back using a Tascam DA-40 (a different playback machine was used to negate any bias that might have occurred from using the same recording device for playback) and the output was transmitted over an AES/EBU connection to a Lynx L22 soundcard and captured as a Wave file by Wavelab. The Tascam DA-40 was used as a synchronisation source.

Immediately afterwards, the same DAT was migrated using a DDS drive and the VDAT software.

The two files were aligned and compared.

7.2.3 Results

Wavelab's Audio File Comparer indicated that the two files were identical.

7.2.4 Conclusion

The results of this experiment suggest that, under ideal conditions, there is absolutely no difference between the output of a standard DAT machine and a DDS drive. This verifies the integrity of the system's architecture, and justifies further investigation.

7.3 Experiment Two: Ideal Archival Conditions

7.3.1 Aim

Having proven that the DDS method is viable for recordings generated under ideal conditions, it was important to determine whether the method might be suitable for migrating DATs that have been created and stored in a manner that could be considered 'ideal' from the perspective of an archive.

The aim of this experiment was to compare the bitstream produced by a DAT machine and a DDS drive when decoding a DAT tape created and stored under ideal conditions.

7.3.2 Method

A sample of DATs produced by Radio New Zealand and stored by SANTK was identified and transferred using the method outlined in 6.2.2. The bitstreams were then compared with Wavelab and Bit By Bit.

7.3.3 Results

The VDAT log files for each bitstream reported 'bad frames'.⁷² Upon listening to the Wave files, it was discovered that the corrupted data was not audible; this is probably due to the very short period and relative isolation of each corrupt frame.

When compared with the audio DAT machine derived bitstream, it was shown that inconsistencies were minute: the number of non-identical samples did not exceed 0.0087%.

Of particular note, a file resulting from one of the DATs that was transferred with a standard DAT machine presented with significant digital artefacts at several points. Bit By Bit revealed that this was due to the application of muting by the DAT player; the DDS-based drive was able to interpret these samples successfully.

7.3.4 Conclusion

A DDS drive interprets and transmits data as well, if not better, than a standard DAT machine when decoding DATs that have been stored under archival conditions for a period in excess of 17 years. These findings suggest that uniform collections could be reliably transferred using a DDS drive as long as the error logs are checked and the bad frames auditioned.

7.4 Experiment Three: Non-Ideal Conditions

7.4.1 Aim

The viability of the DDS migration method has been demonstrated for recordings that have been made and stored for posterity. This experiment will determine whether or not the DDS method is suitable for recordings whose error rates exceed the capabilities of C1 and C2 error correction.

7.4.2 Method

The DATs produced for Experiment One were fast-forwarded to 00:25:00:00 and ejected. The cartridge was then opened to reveal the tape. Approximately one metre of tape was pulled out and strewn across a clean surface (so as not to introduce dust into the cartridge which could damage or dirty the tape heads of a playback device). This section of tape was then subjected to a tape degausser for several minutes, then scrunched into a ball and wound back into the cartridge.

The tape was then played back between 00:20:00:00f and 00:30:00:00f using a Tascam DA-40 while the error count was displayed on the front panel. The error readings and their Absolute Time position were recorded by hand in a log.

The entire tape was then migrated using a DDS drive in conjunction with the VDAT software.

⁷² A 'frame' is a pair of adjacent tracks with azimuths of opposite polarity that comprise approximately 1440 samples (30 milliseconds) at 48 kHz. A 'Bad Frame' is reported by VDAT whenever C1 or C2 error correction cannot be applied successfully.

The positions where high error counts were logged were checked in each file, and a delta file was generated to examine the positions at which error correction was not applied in concert by the two devices.

7.4.3 Results

Analysis of the two files revealed that 2.05% of the samples from each bitstream differed in value. This is a significant discrepancy when compared with the results in Experiment Two. This suggests that the error concealment of the two systems, predictably, is dramatically different.

Surprisingly, aural analysis of the two files suggested that the DDS system produced a more coherent bitstream than that of the standard DAT machine. In many instances, it appears that the DDS drive was able to interpret the 'corrupted' samples whereas the DAT machine chose to mute or interpolate. This is consistent with a posting on the DATHeads Digest (Campbell, 2005), which suggests that the DDS drives might be able to read data when a standard DAT machine cannot.

This test was repeated using different DAT machines and similar behaviour was observed.

7.4.4 Conclusion

The results of this experiment have challenged commonly held preconceptions of the viability of DDS-based DAT migration. It would appear that allowing a DAT machine to employ its own error concealment algorithm is not ideal, and, assuming that a DAT player is a 'trigger-happy' system, error concealment might be more appropriately applied by humans as part of an offline process.

8. Pilot Project

8.1 Overview

The testing described in Section 7 suggests that the underlying architecture of a DDS-based migration system is not inappropriate for use in an archival setting. As such, it was decided that a pilot project should be carried out to determine whether it was possible to adopt such a system for a large-scale migration programme.

A collection of 100 DATs was chosen for the pilot project and an operator was charged with migrating those DATs using any of the tools outlined in Section 7.1. The operator's primary directive was to migrate the collection to BWF, and append any metadata that might attest to the integrity of the bitstream in the future. In addition, errors would be checked and concealed (if appropriate) and the operator would document their actions.

The operator would keep a diary to document their experiences and log their throughput.

8.2 Results

It was found that, using only two drives, which extracted PCM data in parallel, an operator was able to migrate roughly four hours of audio per working hour. This included spot-checking of data, concealment of any data that was flagged as corrupt and did not manifest as an inaudible corruption of the least significant bits, manual grooming of error logs, and attachment of metadata to the BWF header.

By extrapolating these results (inferentially, not mathematically), it was determined that a lone operator, working with a stable system comprised of seven DDS drives and a single terminal, might transfer between 10 and 12 hours of audio per working hour.

9. Conclusion

Inductive logic suggests, based on these observations, that Digital Data Storage technology is not categorically inappropriate for use in an archival setting: that is to say, an archive that employs DDS drives to migrate its collections could assume that the DDS drive would produce an output that differs from that of a standard DAT player by no more than 2.05%, even under the most extreme conditions. Whether this is an appropriate discrepancy or not will be dictated by the archive, probably under advisement from other practitioners and the professional literature.

In reality, the disparity is likely to be much lower, and a DDS-based migration may even result in better transfers if the software is able to identify and report uncorrectable errors with absolute accuracy (i.e. where error concealment is applied by a human, rather than an EDC circuit).

This is an important conclusion, both for audiovisual archives with significant DAT collections and for our sector as a whole, and its implications will be discussed in the following section.

10. Discussion

10.1 Institutional Relevance

As has been discussed, there are several options available to archives that intend to migrate their Digital Audio Tapes. However, it is likely that there will be several issues affecting a given institution that will determine which solution is most practicable.

For small institutions with limited resources, or large institutions with relatively small DAT collections, it is inevitable that a commercial solution is unlikely to be viable, due mostly to cost. In these instances, we can assume that there are several possibilities for migration: unmonitored transfer, monitored transfer, outsourcing, or DDS-based migration.

It is obvious that the DDS-based solution would be particularly relevant to this institutional configuration, mostly because the benefit-cost ratio of the hardware is very favourable, and the system is capable of migrating DATs with an efficiency and efficacy that might not be available with monitored or unmonitored transfer. Moreover, the solution allows DATs to be migrated on-site, which saves an archive from putting their recordings through the stresses of transit that might occur if outsourcing were chosen.

For medium-sized institutions with collections that demand mass-migration of DATs, the only realistic options are a commercial solution, outsourcing, or DDS-based migration. In this instance, the viability of a commercial solution or outsourcing is likely to be much higher, though there are still non-financial pressures that might prevent the adoption of these strategies.

Firstly, it might be difficult to justify investment in a mass-migration solution for DATs, given that the format was only popular in certain circles, and only for a very short period; if an investment were to be made in this technology, an archive might consider that its resources would be put to better use in acquiring technology that could be used to digitise a more prevalent format, such as open reel tape. This is certainly true at SANTK, though it seems likely that a satisfactory compromise could be reached whereby DDS-based migration would be adopted for stable DATs, and those that present with high error counts would be farmed out to a small-scale commercial system.

With regard to outsourcing, there are issues aside from that of transit that are concerning or a medium-sized institution, which seems more likely than most to be reliant on

specialised personnel,⁷³ the impact on staff of outsourcing work (and taking it away from those who probably know the collection best) must be given due consideration. In instances where outsourcing is impossible for this reason, DDS-based migration might be a suitable compromise.

In large institutions, whose collections span many tens or hundreds of thousands of DATs, I cannot see that a DDS-based migration solution is possible. The 'preservation factory' approach that these institutions are forced to adopt rely on simple, stable systems that are backed by automated data management processes, and the DDS-based system cannot offer these features.

However, there is at least one exception to this assertion: the BBC archive is known to have employed DDS technology (using four DDS drives per terminal in conjunction with VDAT software) to migrate some of their vast DAT collection with considerable success (personal communication with Simon Rooks, 2009).

10.2 Ongoing Research

10.1.1 Extraction Software

The major failing of this solution is the software that controls the migration process. This is often a source of massive skepticism amongst archivists, and is often cited as a fatal flaw (personal communication with Memnon, 2009). It is clear that better extraction software should be developed if this solution is to instill confidence in archivists.

At SANTK, we have explored the possibility of modifying DATXtract to meet our needs. My discussions with the developer of the software, and several software engineers, have suggested that the software is relatively simplistic and the improvements that we might expect would be trivial to implement.

Whether this project gains any traction or not remains to be seen. In the meantime, however, it is crucial that we attempt to preserve the software and related resources that already exist. It is already difficult enough to gather the disparate software components that the system requires, and the dissolution of any of the hosts of these resources would probably nullify the prospect of adopting or improving the technology.

10.1.2 Integration

To date, the software that controls the migration process has been built without regard for standards, or any of the demands of an archival community. As part of any development to the extraction software, integration with other tools and standards should receive significant attention. In carrying out these improvements, it would be best to look at the features of alternative systems for inspiration. For instance, specifying metadata prior to extraction and storing it in conjunction with quality data in a useful format is an absolute necessity.

In addition to these basic features, it is clear that a tool for carrying out interpolation is also crucial to improving the viability of this system.

10.1.3 Availability

Of course, there is little use in carrying out any development if the hardware is not available in sufficient quantities. Before any other research is carried out in this field, the question of availability has to be addressed.

In carrying out this research, it would be particularly useful for the researcher to ascertain how the availability of DDS drives that are capable of being impregnated with an audio-

⁷³ Rather than one or two dedicated staff members, in the case of a small institution, or a division of labour approach in a large archive

capable firmware compares to the availability of DAT drives whose EDC circuitry can be probed to derive an activity output.

If neither suitable DDS nor DAT drives are available in sufficient quantities to satisfy the demand of our community, then we have a host of issues to address. These range from the practical issues, which are outlined below, to the philosophical questions, mostly ethical, that might arise upon learning of this reality (institutions and companies hoard DAT players to support their own institutions and products, for example).

10.1.4 Reverse Engineering

Should an extreme lack of availability be discovered, one cure might be to reverse engineer the most-available device to facilitate error logging. It is thought that this would be very difficult, but not impossible, for a DDS drive (personal communication with David Olson, 2009), and we can see evidence for successful reverse engineering of standard DAT players in the solutions that are outlined in section 3.3.

It is difficult to foresee how such a project might be funded, who might be responsible for carrying out the work, and how the benefit of this work should be shared. My expectation, in sharing this research, is that we will resolve to research these issues as a community in order to produce a solution that serves everybody. If we maintain the status quo – commercial solutions and outsourcing for some; monitored or unmonitored transfer for everyone else – it is inevitable that the collections of our neighbours will continue to languish in their vaults.

References

- Campbell, R. (2005). *Best way to convert DAT to computer*. Retrieved June 23, 2009, from DAT-heads digest: <http://www.solorb.com/dat-heads/digests/V7.400/D410#Msg0>
- Casey, M., & Gordon, B. (2007). *Sound directions: Best practices for audio preservation*. Retrieved July 7, 2009, from http://www.dlib.indiana.edu/projects/sounddirections/papersPresent/sd_bp_07.pdf
- Cube-Tec. (2009). *DAT-Inspector module*. Retrieved July 7, 2009, from Cube-Tec International: <http://www.cube-tec.com/quadrige/modules/datmodule.html>
- European Computer Manufacturers Association. (1996). *Standard ECMA-236: 3,81 mm wide magnetic tape cartridge for information interchange – helical scan recording – DDS-3 format using 125m length tapes*. Retrieved 2009 July 3, 2009, from <http://www.ecma-international.org/publications/files/ECMA-ST/Ecma-236.pdf>
- Goto, H., Asada, A., Chiba, H., Sampel, T., Noguchi, T., & Arakawa, M. (1989). A new concept of DATA/DAT system. *IEEE transactions on consumer electronics*, 35 (5), 660-671.
- International Association of Sound and Audiovisual Archives. (2009). *TC-04: Guidelines on the production and preservation of digital audio objects* (2nd ed.). Johannesburg, South Africa: IASA.
- Irelan, K. (2009). *Some DAT questions*. Retrieved July 1, 2009, from ARSCLIST archives: <http://palimpsest.stanford.edu/byform/mailling-lists/arsclist/2009/01/msg00135.html>
- Kaluza, O. (1996). *Error LED*. Retrieved July 7, 2009, from <http://www.geocities.com/Hollywood/2274/errorled.html>

NOA Audio Solutions. (2009). *MediaLector*. Retrieved July 7, 2009, from NOA Audio Solutions: http://www.noa-audio.com/index.php?option=com_content&task=view&id=34&Itemid=54

Pohlmann, K. (2005). *Principles of digital audio*. New York: McGraw-Hill Professional.

Prentice, W. (2009). *Some DAT questions*. Retrieved July 1, 2009, from ARSCLIST archives: <http://palimpsest.stanford.edu/byform/mailling-lists/arsclist/2009/01/msg00137.html>

Rice, D. (2007). *12 bit non-linear DAT and Sony LP mode*. Retrieved July 1, 2009, from ARSCLIST archives: <http://palimpsest.stanford.edu/byform/mailling-lists/arsclist/2007/10/msg00113.html>

Shutz, M. (2001). *DDS on a Windows PC*. Retrieved July 6, 2009, from DAT-heads digest: <http://www.solorb.com/dat-heads/digests/V6.100/D129#Msg10>

Sohn, M. (2009). *ARSCLIST Digest - 16 Jan 2009 to 18 Jan 2009 (#2009-16)*. Retrieved July 1, 2009, from ARSCLIST archives: <http://palimpsest.stanford.edu/byform/mailling-lists/arsclist/2009/01/msg00130.html>

WPN Systems. (2006). *DAT Errormonitor*. Retrieved July 7, 2009, from WPN Systems: <http://www.wpnsystems.com/datermon/datermon.htm>

Zuccaro, N. (2001). *DDS drive experiences*. Retrieved July 6, 2009, from DAT-heads digest: <http://www.solorb.com/dat-heads/digests/V6.100/D128#Msg1>

The need for specialized audiovisual archives in the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA)

Ruth Abankwah, Botswana Institute of Administration and Commerce

Introduction

This paper gives a picture of the way AV materials are kept in the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA). The discussion is based on findings based on the author's study on the management and preservation of AV materials in the region. The study was conducted during the period of 2004-2007. The findings revealed that AV materials in the region were depreciating due to inadequate storage conditions, lack of qualified staff, lack of policies that specifically address AV materials and most importantly, the absence of specialised AV archives (with the exception of South Africa). While some national archives such as the National Archives of Zimbabwe, the Botswana National Archives and Records Services (BNARS), the Kenya National Archives and Documentation Services and the National Archives of Namibia had AV units housed under the same building, the National Archives and Records Services of South Africa, has a specialised AV archives. Others such as the National Archives of Tanzania and Swaziland National Archives, relegated the management of AV archives to media organisations. This paper, therefore, argues that the management of AV archives should be the sole responsibility of national archives. This is best done through specialised AV archives (under the aegis of the national archive) or specialised AV units which meet recommended storage conditions for AV materials. They must therefore be kept under ideal conditions to preserve them.

The need for specialized audiovisual (AV) archives in any country is justified by the fact that AV materials are unique, fragile and fugitive. AV materials differ from textual records in format and characteristics. The chemical nature of audiovisual carriers makes them susceptible to damage, destruction and loss. For instance, tapes can easily get entangled in machines; needles or styluses easily scratch discs and cylinders. Artefacts are susceptible to scratches, dust and surface noise. Sound recordings are dependent on complex technology, which deteriorates at a rapid rate. It is therefore important that AV materials are kept in storage rooms which meet the recommended storage conditions, to prolong their life span. It is equally important that AV materials are stored in specialised national archives or specialised AV units.

The state of AV archiving in most countries in the region is beset with political and socio-economic factors which have a bearing on the placement of National Archives. This invariably impacts on the priority accorded to AV materials. While some countries such as the Republic of South Africa (RSA) can afford a specialized national archive for AV materials, some countries in the region do not have facilities to keep AV materials. There is a general tendency for national archives in the region to relegate the management of AV materials to media organizations. This is an opportunity that needs to be encouraged, since most of the national archives in the region do not have the facilities to store AV materials. Such an arrangement would curtail the ongoing dissipation of AV materials. This paper discusses the development of AV archives in ESARBICA and the administration of AV materials. The paper ends with a section on the best approach to managing AV materials in the region.

Background to the Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA)

The Eastern and Southern Africa Regional Branch of the International Council on Archives (ESARBICA) is a regional body comprising of the following countries: Angola, Botswana, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Lesotho, Malawi, Madagascar, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, South Africa, Tanzania, Zimbabwe, and Zanzibar. Established in 1969, ESARBICA represents the Eastern and Southern Africa charter of the International Council on Archives (ICA). Its mission is to advance the archives through regional co-operation. It organizes annual conferences and workshops for its member states and publishes a bi-annual journal on archives and records management. These interactions strengthen relations between archivists in the region and professional institutions.

Background to the development of AV archives in ESARBICA

The concept of preservation of AV archives arose from the need to re-use audiovisual documents for educational, commercial and historical purposes. This seems to have been the trend in developed and developing countries, as evidenced by various authors (Connors 2000; Edmondson 2004; Forgas 1997; Matangira 2003; Mwangwera 2003; Ombiti 1990). While Edmondson (2004) saw the need for officially designated and recognised national audiovisual archival institutions, he noted that the physical location of the AV archives varied from country to country and from institution to institution. Edmondson felt that the administration of audiovisual archives depended on whether or not the service was offered by government, semi-private or private firms. Chavula's (1988) study of the National Archives Act of East Africa revealed that only the Lesotho and Sudan national archival Acts indicated the ministries to which the archival services belonged. The above author concluded that the administrative structure of a national archive depends on the emphasis that the government places on the national archives.

AV archival services developed at a slow pace in the ESARBICA region. Mazikana (1997/98) pointed out that a large part of the continent could not afford to operate an AV unit. Matangira stated that most of the archival institutions in the region were "still struggling to develop their audiovisual collections" (2003:45). She further stated that although the National Archives of Zimbabwe (NAZ) were established in 1935, the audiovisual unit (AVU) was only established in 1988. Prior to that, "materials were dumped in a room with no temperature and humidity control required of films and other audiovisuals objects, and were catalogued second class to traditional library material" (ibid.). However, this situation improved with the establishment of an AV unit. Although NAZ has an AV unit, it is unable to acquire or preserve AV materials due to the current political and economic situation (Zinyengere, 2008). In Lesotho, archives materials including AVs are kept in the National University of Lesotho Library, the Thomas Mofolo Library (Qobo 2004).

Malawi, Zimbabwe, and Zambia had the oldest collection of films. The film unit known as the Central African Unit (CAFU) was a regional film unit sponsored by the three governments and it operated during the period of 1948-1963 (Mukotekwa, 2002). In addition to CAFU, films were produced by the Zimbabwe Information Service, International Television News, British Broadcasting Corporation Television, British Gaumont, and Pathè (Mukotekwa, 2002). The collections consisted of political broadcasts, travel films, instructional films, propaganda films, news reels, and documentaries. CAFU produced the bulk of films in the National Archives of Zimbabwe (NAZ) but it was very expensive for NAZ to purchase the films in reel form due to budgetary constraints (Mukotekwa, 2002). Zinyengere (2008) reported that prior to the development of the AV unit at NAZ, AV materials were kept in the library (Zinyengere, 2008:37). The National Archives of Zambia was founded in 1947 as a depot of NAZ (Mutiti, 1999). In 1950, all the records were transferred to Zimbabwe. This prompted the opening of a new national archive in Lusaka in 1950. Zambia's National Archives had about 200 films, 2,500 microfilms, 200 microfiche, 25 videos and 200 audiotapes (Matangira 2003).

In the case of Swaziland, Mamba reported that "earlier surveys of Swazi traditions indicate that they probably contain the richest data on the pre-colonial past yet extant in Southern Africa" (1986:251). Mamba revealed that the National Archives of Swaziland had instituted an oral history project, which preserved oral testimonies of Swaziland history (including pre-colonial history). The materials included a photography section with a collection of photographs of national events dating from the pre-independence era (Swaziland Government, Ministry of Tourism 2005). Nonetheless, the National Archives of Swaziland also has a very small collection of AV materials (Matangira 2003). Abankwah (2007) lamented the plight of AV materials in Swaziland when she observed that some of the AV materials at the Swaziland Broadcasting Information Services (SBIS) were in danger of destruction from sunlight. The AV materials were kept in a caravan. This temporary 'shelter' does not meet standard conditions for preserving AV materials. This could be attributed to the fact that the National Archives of Swaziland does not have facilities to keep AVs.

In the case of Tanzania, the responsibility of preserving AV materials was relegated to the Audiovisual Institute of Tanzania, known as Tanzania Television (TVT) (Matangira 2003). In Zanzibar, the National Archives collaborated with the Department of Broadcasting and Television to open a Sound Archives unit in the Main Library of Radio Zanzibar in 1989 (Matangira, 2003). The project covered all institutions that produce audiovisual materials in the country. It was later given a legal mandate for caring for and preserving all Zanzibar records in 1988 (The United Republic of Tanzania 2007). This Sound Archives Unit could have been developed as a specialised national sound and audiovisual unit similar to the National Film, Video and Sound Archives (NFVSA) of South Africa.

Botswana's audiovisual materials are kept under the same environmental conditions as traditional archives (Abankwah, 2007; Kukubo, 1986; Matangira, 2003). The Botswana National Archives and Records Services (BNARS) obtain some of the AV materials from Radio Botswana. Piet (2004) reported that BNARS has an arrangement with the Ministry of Information and Broadcasting, where Radio Botswana and Botswana Television Services ensure that programme producers deposit copies in the BNARS (Piet 2004). Matangira (2003) reported that Kenya National Documentation Services has a separate AV unit, which mainly houses AV materials from government institutions. The archival Acts for the Tanzania and Zanzibar National Archives (The United Republic of Tanzania, Act, 2002), National Archives of Zimbabwe (Department of National Archives 2006), Swaziland National Archives (Swaziland Government, Ministry of Tourism 2006) and National Archives of Namibia (Government Gazette of the Republic of Namibia 1992) are all silent on the preservation of audiovisual materials. This shows a weakness in some of the archival Acts, which may have a negative impact on the administration of AV archives in the region. It leads to a depreciation of AV materials as they are not kept under ideal storage conditions.

It appears that RSA is ahead of the other ESARBICA member states in terms of audiovisual preservation. In 1964, NFVSA was formed (National Archives and Resource Service of South Africa 2004). NFVSA is a specialized repository for audiovisual materials, with a mandate to collect and preserve AV materials that are produced in South Africa (ibid.). It preserves different formats of AV records and related materials such as films, videos, CDs, DVDs, scripts, posters, slides, music, sculpture, paintings and other artefacts. NFVSA's oral section promotes indigenous music, art and South African history (ibid.). NFVSA is a model to other countries in the region.

Placement of AV national archives World-wide

Harvey and Moosberger noted that the location of archival materials is an important aspect of public service.

The determination of which archives have what materials...can affect a researcher's decision about whether or not to visit an archives, especially if sought out materials are small or split fonds are held by several different repositories in various locations (Harvey and Moosberger, 2007:41).

An AV Archive may be a unit of a centralised national archive, a subject-centred national archive, or a private, specialised media archive (Schuursma 1997). The administrative structure of a national archive depends on the emphasis that governments place on national archives (Chavula 1988). This arrangement invariably impacts on the placement of AV units. Schuursma (1997:81) suggested three approaches to managing AV materials:

- A medium-centered approach, which gives priority to the preservation of specialised sound recordings;
- A content-centered approach, which focuses on the content of the recordings for research and educational purposes; and
- A multi-media approach that is a combination of all media. It aims at giving maximum service to the user.

According to Bantin (2002), the centralised custodial approach has the following advantages over the distributed collection approach:

- i. Mission and competencies – The creating agencies' (or media archives') mission is not to safeguard the authenticity of non-current records (including AV archives). Moreover, their staffs do not have the necessary skills to preserve non-current records.
- ii. Ability to monitor compliance – It is difficult to have enough trained archivists to monitor or audit records.
- iii. Cost to monitor compliance – It is likely to be more costly to monitor recordkeeping practices in a distributed environment.
- iv. Changes in work environment – Changes in staffing and departmental priorities are likely to place records (particularly AV archives) which are in the hands of creating departments or media organisations, at risk.
- v. Vested interests – It is important that AV materials are taken from those who are bound to neglect or corrupt them. It should be noted that media organisations are commercial entities. They do not hesitate to erase tapes/recordings, thereby destroying the cultural heritage!!

The proponents of the distributed custody approach argue that it is more practical and less costly to preserve electronic records within the creating offices, provided policies and procedures are in place to ensure that records can be managed from anywhere. While Schuursma (1997) insisted that there was a need to make a distinction between the two approaches, he acknowledged that, in some instances, a multi-media approach was common. Such an approach aimed at giving maximum service to the user. The multimedia approach requires "a larger part of the budget to be directed towards the acquisition and preservation of audiovisual media" (Schuursma 1997:82). The author had reservations about the multimedia approach, since it was difficult to give this required priority to AV materials due to financial constraints (Schuursma 1997). This was the case in most countries in the region (Abankwah, 2007; Dlamini, 1999; Matangira, 2003; Zinyengere 2008). Schuursma (1997) explained that, in reality, most archives were medium-centred, or content-centred, or a combination of both. Abankwah (2007) observed that most national archives in the region attempt to follow the multimedia approach, albeit unsuccessfully.

Kofler (1997:45) suggested that AV archives should be legally designated, mandated and appropriately equipped to "...collect, restore and preserve audiovisual materials of national or international importance..." The author saw a need for countries to formulate a legal framework, in order to make a clear distinction between AV archival institutions, which are officially appointed and are recognised, and other types of AV organisations. He emphasised that a statement of the purposes, objectives and responsibilities of all archival institutions in a country should back up such a framework.

Harrison (1997) stated that a combination of AV materials in one setting was a common practice in Australia. Similarly, Germany Sound Archives are kept under one administration. The practice is different in the United Kingdom (UK) where "...the BBC has archives of separate materials under different heads of department and scattered all over London and beyond..." (Harrison, 1997:3). Cook (1986) reported that the BBC was responsible for providing technical services for written archives, sound recordings and visual recordings in the U.K. In Canada, AV materials were decentralised to heads of departments which manage specialised AV materials. Similarly, the Library of Congress and the National Archives in Washington DC operate under a decentralised set up. Harrison (1997:4) reported that most of the archives were "... developing into function-based archives rather than material or media-based archives." Saintville (1986) said there was a similar approach in the case of France. In Spain, the AV materials were the responsibility of film archives and organisations which were responsible for producing radio and television programmes. The Spanish Film Archives fell under the Film Department of the Ministry of Culture (Labrada 1986). The section that follows examines the placement of various national archives in ESARBICA.

Placement of AV national archives in the ESARBICA region

The administration of AV archives in ESARBICA does not differ much from the developed world, albeit with resource constraints. A few cases of separate media archives are reported in ESARBICA. These include Botswana, Malawi, South Africa, Swaziland, Tanzania, Zanzibar, and Zimbabwe (Abankwah 2007; National Archives and Records Service of South Africa Act No. 43 of 1996; Matangira 2003; Mwangwera 2003). According to Mnjama (2005:459), "experience gained in other commonwealth countries such as Ghana and Gambia indicates that where the national archives are placed in a ministry without wide ministerial powers their operations are bound to suffer". This invariably impacts on the operation of the AV unit/ independent national AV archives.

The 1985 RAMP report states that a national archive should be placed in a way that can best serve its objectives. This means that "archives should be aligned with the highest level of inter-ministerial or supra ministerial authority" (Parer 2000:10). While the RAMP report realized the need to place archives within a bureaucracy, it stated that the placement of archives within government depends on whether emphasis is based on heritage or record keeping. In this regard, the levels of autonomy given depend on whether the archive is:

- i. A section within a department;
- ii. A separate department in its own right reporting direct to a minister;
- iii. A statutory authority, an executive agency, or even a government corporation (Parer, 2000).

While each of the above choices has advantages and disadvantages, each country decides what suits their needs. "Legislation does not normally nominate the placement of the archives within a bureaucracy or specify the responsible minister" (Parer, 2000:11). Nonetheless, the 1985 RAMP report clearly states that an archive should be placed in such a way that:

prevents the submission of competing interests..., eliminates blurring of functions with other professional agencies and disciplines; protects against interference within agency programme responsibilities under the color of coordination authority; and eliminates the hampering supervision and control by having little or no professional knowledge of its program responsibilities and operations (Parer, 2000:11).

It appears that different member states have different ways of administering AV materials. For instance, in Botswana, all public records are the responsibility of the BNARS, which aims at providing efficient and effective economic management of all public records throughout their life-cycle, as well as their preservation (Ministry of Labour and Home Affairs, Government of Botswana 2005). The BNARS was later restructured and placed under the Ministry of Youth, Sport and Culture. The majority of the national archives in the region fell under the Ministries of Education, Sports, Art and Culture, as well as the Civil Service Department (Mazikana, 1997/98; Mnjama, 2005). However, there were extreme cases, such as the National Archives of Swaziland, which fell under the Ministry of Tourism, Communication and Environment. Dlamini (1999) explained that the aims of the above ministries differed from those of the national archives. Such a structural arrangement poses problems for the National Archives of Swaziland. These included shortage of funds, shortage of personnel and lack of machinery and equipment. This author observed that it was difficult to convince administrators to release funds because they "lacked knowledge, understanding and importance of the information kept in archives" (Dlamini 1999:27). The National Archives of Swaziland was moved recently to the Ministry Information, Communication and Technology. In Lesotho, "the national archives are a small component of the Department of Culture, which fall under the Ministry of Tourism, Sports and Culture" (Mnjama 2005:459).

Mazikana (1997/98) pointed out that a few countries in the region had appointed boards/committees to assist the national archives. "In South Africa, the management of audiovisual collections is directly under the national archives..." (Mnjama 2005:466). It appears that

the structural placement of National Archives has a direct bearing on the way AV materials are managed. National Archives which are administratively well placed tend to accord more financial resources to the management of AV materials. This explains why countries such as South Africa have a fully fledged National Film and Sound Archives while others such as Tanzania and Swaziland do not even have an AV unit due to lack of facilities to keep AV materials. On the other hand, countries such as Zimbabwe which had a well equipped AV unit have failed to maintain it due to political and economic factors.

UNESCO emphasizes adherence to archival legislation in the management of AV materials. This means that by relegating the management of AV materials to media organizations, most of the national archives in the region fail to enforce the required archival legislation. This paper challenges ESARBICA countries to put their act together before they seek funding from international organizations. International organizations such as International Association of Sound and Audio Visual Archives (IASA), International Federation of Television Archives (IFTA), International Federation of Film Archives (FIAF), International Federation of Films and Archives (FIAT), South East Asian and Pacific Audio Visual Archives Association (SEAPAVAA), and United Nations Educational, Scientific and Cultural Organization (UNESCO) continue to offer training scholarships and expertise to developing countries. This has been acknowledged by AV archivists such as Zinyengere (2008). Nonetheless, the onus is on archivists to play a more proactive advisory role in their respective countries. They should not merely settle for the traditional custodial role.

What is happening at the moment is that whatever funds are granted to national archives are allocated to services other than the preservation of AV materials. Biblically, it is documented that the servant who could not manage little had it taken away and given to the one who could manage it better, hence the saying, the 'haves will have more'. International organizations should reward those national archives which are managing their AV materials well. Countries which do not make any attempt to develop AV units should not benefit from any assistance. Ultimately, all countries in the region should be encouraged to have an AV national archive. This should be a requirement set by the International Council on Archives (ICA). That is, *NO AV ARCHIVE, NO NATIONAL ARCHIVE*.

Advantages of specialised national audiovisual archives

Keeping AV materials in a central location has various advantages. It is cost effective and users can easily access the collections from one place. This arrangement also makes maximum use of available resources which include skilled AV personnel, equipment and space.

Conclusion

This paper maintains that AV archives should either be managed through a centralised custody approach, or a semi-custody approach (which is a combination of centralised custody and distributed custody). This will grant national archives, which do not have the facilities to preserve AV materials, to keep them in various other institutions while at the same time having control in terms of policies and specialised archivists. The major observation is that currently, AV materials remain a neglected resource in the region, and where efforts are being made to manage these materials, these efforts are rudimentary (except for South Africa). Unlike the developed world, there has been little effort to have specialised national archives for AV materials in the region. The paper therefore makes the recommendations:

Recommendations

- i. National archives should be placed under an influential ministry, which will grant national archives more funds.
- ii. National archives in the region should take a cue from the developed world. While a combination of AV materials may suit some countries, other countries could opt for a decentralised set up. The latter should ultimately prevail.
- iii. Directors of National Archives should be granted more autonomy in decision

- iv. Assistance should be rendered by way of expertise. Experts could be attached to various archival institutions in the region. Such experts should train AV archivists and play an advisory role in the running of specialised AV units/archives.
- v. National Archives in the region should follow a medium-centred approach. Media organisations should be permitted to manage AV archives under professional guidance of archivists. (A good example is Botswana, which has various storage places such as the Department of Information and Broadcasting, Radio Botswana, Botswana Television and the Department of Surveying and Mapping).
- vi. All national archives in the region should appoint boards/committees to assist with the operations of the national archives. There should be a representative from one of the media organizations on these boards/committees.
- vii. There is an urgent need to form a regional committee which should see to the training of AV archivists and the formation of specialized AV archives in the various countries (regionally).

References

- Abankwah, R. M. (2007). The management of audiovisual materials in the member states of the East and Southern Africa Regional Branch of the International Council on Archives (ESARBIACA). Ph. D. diss. Pietermaritzburg: University of KwaZulu-Natal.
- Chavula, S.W.D. (1988). Archival legislation in East and Central Africa: how effective? *ESARBICA Journal* 10:24-30.
- Connors, T. (2000). Appraising public television programs: toward an interpretive and comparative evaluation model. *The American Archivist* 63 (1-2): 151-174.
- Department of National Archives (2006). About the National Archives of Zimbabwe. \<<http://www.moh.gov.zw/index>> Accessed 20 May 2006.
- Dlamini, T. (1999). Strategic planning in the National Archives of Swaziland. *ESARBICA Journal* 18:26-28.
- Duranti, L. (2007); *Archives as a place: A Journal of Interdisciplinary Research*; Vol. 1 no 0 (March 2007): pp. 445-466
- Edmondson, R. (2004). Audiovisual archiving: philosophy and principles. \<<http://unesdoc.unesco.org/images/>> Accessed 16 May 2009.
- Forgas, L. (1997). The preservation of videotape: review and implications for libraries and archives. *Libri* 47:43-56.
- Government Gazette of the Republic of Namibia. (1992). *Promulgation of Act of the National Assembly. No. 12 of 1992: Archives Act, 1992*. Windhoek: Office of the Prime Minister.
- Harrison, H. P. (1997). Records management in sound archives. In Harrison, H. P. *Audiovisual archives: a practical reader*. Paris: UNESCO, PGI-97/WS/4. pp. 93-97.
- Harvey, K. and Moosberger, K. (2007). "Theatre Archives' Outreach and Core Archival Functions". *Archivaria* 63, Spring 2007. Pp. 36-54.
- Kofler, B. (1997). Legal issues facing audiovisual archives. In Harrison, H. P. (ed.) *Audiovisual archives: a practical reader*. Paris: UNESCO, PGI-97/WS/4. pp. 43-54.

- Kukubo, R. J. (1986). The historical development of archival services of Botswana, Lesotho and Swaziland. In Kukubo, R. J. (ed.) *Historical development of archival services in Eastern and Southern Africa*. Roma: National University of Lesotho. pp. 161-190.
- Labrada, F. (1986). The preservation of audiovisual material in Spain. In Hanford, A. (ed.) *Panorama of audiovisual archives*. London: IFTA, BBC Data Publication. pp. 13-16.
- Mamba, R. S. (1986). The Swaziland oral history project. In Kukubo, R. J. (ed.) *Historical development of archival services in Eastern and Southern Africa*. Roma: National University of Lesotho. pp. 251-259.
- Matangira, V. (2003). Audiovisual archiving in the third world; problems and perspectives : an analysis of audiovisual archiving in the East and Southern African Region Branch of the International Council on Archives (ESARBICA). *ESARBICA Journal* 22: 43-49.
- Mazikana, P. C. (1997/98). Africa: archives. In Large, A. (ed.) *World Information Report*. Paris: UNESCO. pp.144-154.
- Mnjama, N. (2005). Archival landscape in Eastern and Southern Africa. *Library Management* 26 (8/9): 457-470.
- Mukotekwa, M. C. (2002). Film Archives of the National Archives of Zimbabwe. *ESARBICA Journal* 21: 56-58.
- Mutiti, N. (1999). ESARBICA in the next millennium: the perspective of the National Archives of Zambia. *ESARBICA Journal* 18:13-16.
- Mwangwera, M. (2003). Report on audiovisual archives in Malawi. Paper presented at the FIAT/IFTA workshop, Lusaka, 8-11 April 2003.
<http://www.Fiatifta.org/aboutfiat/members/archive/Malawi_nat_arch.html>
Accessed 29 April 2003.
- Ombiti, K. (1990). Review of the Kenya National Archives and Documentation Service: 1980-1990. *ESARBICA Journal* 12: 35-44.
- Parer, D. (2000). *Archival Legislation for Commonwealth Countries*. Cairns: Association of Commonwealth Archivists and Record Managers.
- Piet, B. (2004). Botswana recovers migrated archives. *Mmegi* 16 Jan.: 3.
- Poncin, P. (1986). The preservation of videocassette material. In Hanford, A. (ed.) *Panorama of audiovisual archives*. London: BBC Data Publishing. pp. 95-98.
- Qobo, C. K. M. (2004). Preservation and conservation of library and archival materials: lessons from Thomas Mofolo library of the National University of Lesotho. *ESARBICA Journal* 23:99-107.
- Saintville, D. (1986). The preservation of moving images in France. In Hanford (ed.) *Panorama of audiovisual archives*. London: BBC Data Publication. pp. 3-7
- Schuursma, R. (1997). Approaches to the national organisation of sound archives. In Harrison, H. P. (ed.) *Audiovisual archives: a practical reader*. Paris: UNESCO, C11-97/WS4.
- Swaziland Government, Ministry of Tourism (2005). National Archives.
<<http://www.gov.sz/>> Accessed 21 February 2005.

The United Republic of Tanzania, The Records and Archives Management Act, 2002,
<<http://bunge.go.tz/polis/PAM/docs/3-2002/pdf>> Accessed 6 July 2009.

Zinyengere, I. (2008). African Audio-Visual Archives: Bleak or Bright Future, A Case Study of the Situation at the National Archives of Zimbabwe. *International Preservation News*, IFLA PAC. 46:37-41

AVIN: Jamaica's Solution to Memorialising its Cultural Patrimony

Maureen Webster-Prince, National Library of Jamaica

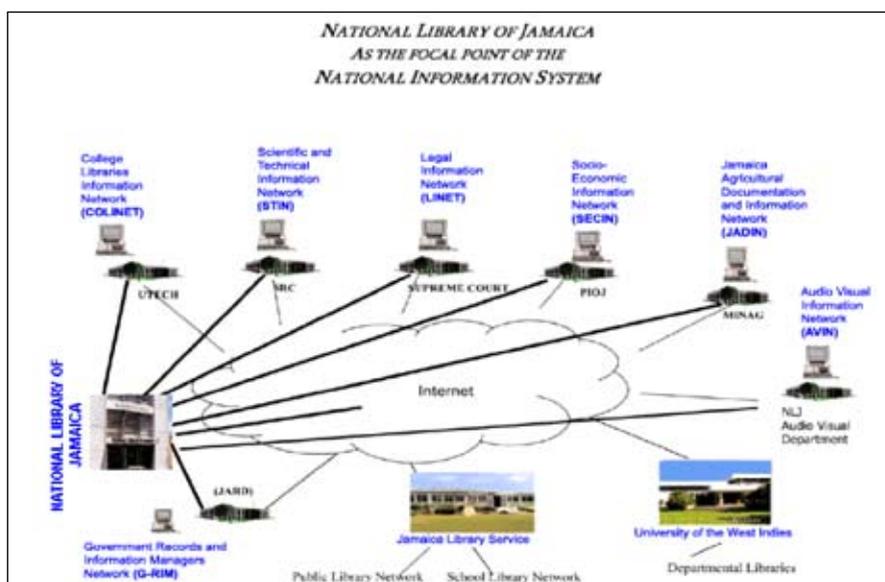
The National Library of Jamaica (NLJ), which was established in 1979, is the Government Agency that has the responsibility for coordinating the National Information System (NATIS). Formerly, this function was carried out by the National Council on Libraries, Archives and Information Systems (NACOLAIS) which was formally dissolved in September 1999. At the time of this dissolution, the Government allocated the functions of NACOLAIS to a number of ministries and agencies. The National Library was given the responsibility to:

Coordinate and advise the Government on the continued development of an integrated National Information System" in order "to ensure the orderly growth and development of the Networks which comprise the NATIS.

Collaborate with the Jamaica Archives and Records Department to develop policies and standards for proper management of information resources in the new electronic environment" in order "to ensure standardization and authenticity.

In fulfilling its responsibilities as the focal point of NATIS, the NLJ has undertaken various developmental activities, including the management of an Advisory Committee for the National Information System (ACNIS). This Committee has quarterly meetings during which specific issues are discussed, recommendations tabled and resolutions ratified. The composition of ACNIS includes representatives from various segments of the information industry, such as IT specialists, coordinators of networks, heads of the subsystems and policymakers. The networks referred to are the Socio-Economic Information Network (SECIN); Science and Technology Information Network (STIN); College Libraries Information Network (COLINET); Legal Information Network (LINET); Jamaica Agricultural Development Information Network (JADIN); and the Audiovisual Information Network (AVIN).

AVIN, the most recent formation, was officially launched in April 2003 as the sixth subsystem within the National Information System (NATIS). Originally, the mapping of NATIS revealed clusters of libraries defined by subject interests. The formation of AVIN created a new kind of dynamism in this well-defined pattern of network organisations in that, whereas membership in the first five is defined by subject interests, AVIN's membership is based on information carriers, irrespective of subject content. Thus AVIN's constituency includes representatives from all other networks as well as media institutions and practitioners, researchers, cultural historians, librarians, archivists, entertainment lawyers, producers, promoters and others with vested interests in generating, using and preserving sound and image recordings.



AVIN's organisational base and focal point is the NLJ's Audiovisual Department and its Coordinator is the Head of this Department. By virtue of its position, AVIN is the only network that falls directly within the framework of the NLJ's governance.

The National Library of Jamaica has a national mandate to collect and preserve in perpetuity, Jamaica's documented cultural heritage, including sound and image recordings. Although Jamaican music has gained international recognition and is populating the archives of individuals and institutions globally, there are numerous challenges in ascertaining what audiovisual recordings are generated, collected and archived locally. For example, over the past ten years there has been exponential growth in the number of broadcast houses and other media entities. Additionally, there are approximately 200 recording studios, including several state-of-the art home facilities engaged in audiovisual productions. To further compound the issue, some Jamaican artists have overseas production bases. There is also no structured mechanism in place to inform the AV archiving community about new releases. This information often becomes available through the print media and TV popular music programmes as well as in incidental references in reports on related issues. As the national repository, the NLJ must tap into the various markets worldwide to ensure that the musical recordings of our nationals are caught in its collection net.

Memorialising Music

In the Jamaican context, music captures the oral expressions of the folk culture, as heard in folk tales, proverbs and *Anansi* stories. Various studies and reports, including ones from the UN agency have shown "Jamaica's music and entertainment as the best solution for economic growth, export expansion, youth employment creation and the reduction of poverty".⁷⁴ As early as the 1980s the fledgling NLJ launched an intensive campaign and established a committee to strategise how best to develop a project to collect and preserve Jamaica's musical heritage. This early sensitisation project resulted in some recording studios becoming aware of the NLJ and making periodic donations of musical items to the NLJ. One decision taken was that the NLJ's music collection would be accessible primarily for research, study and consultation by scholars, aspiring singers, song writers and other interested persons.

Living Legend

The Honourable Robert *Bob* Nesta Marley, Jamaica's world renowned musical icon, has left an extensive legacy of musical recordings that continue to impact people's lives and archives. Yet, regrettably, the national repository has very few of these recordings. Several attempts have been made to expand the holdings, but with limited success. Negotiations are on-going with some private collectors to acquire copies of their collections. Recently the Marley family donated digital copies of some early work.

AVIN

The Audiovisual Information Network (AVIN) of Jamaica provides a community for rallying the cause to develop comprehensive collections of AV productions. Thus the proliferation of Jamaican cultural industries, the potential economic and social benefits, the hundreds of audiovisual documents generated annually, the dearth of trained media librarians/archivists, combined with the continued and increasing demands for these resources by researchers are among the various factors that influenced the formation of AVIN.

The NLJ is also responsible for guiding the establishment and maintenance of national standards in the management of information resources. It is therefore not unusual that stakeholders in the AV industries consult the NLJ on issues pertaining to the management of AV recordings. There is a constant stream of enquiries to AVIN units for sound and image resources which often lead to a trail from one organisation to another in a quest to

⁷⁴ Stanbury, Lloyd. Music and Jamaica's Inner City Development Programme. http://www.jahworks.org/music/features/inner_city_development.htm

identify the resources needed. These information seeking patterns are regarded as further indicators that the nation's AV resources need to be properly documented to facilitate access. This realisation prompted the NLJ's AV Department to conduct a series of mini-surveys among persons in the industry to determine the extent to which this observation is real, as well as to ascertain how best to serve the various groups in this creative community.

Surveys conducted within AVIN units revealed certain commonalities, namely how to increase collection, standardize the organisation of information, enhance preservation and provide access to the vast wealth of much sought after Jamaican audiovisual productions. Budgetary allocations to the institutions surveyed ranged from functionally adequate to totally inadequate. The media archiving community understands that the proper execution of these activities requires access to funds, but many media managers seem unaware of how costly it is to keep the archive viable. Hence, there is a tendency to include the archive's budgetary allocation within the production activity. Some respondents referred to the misconception of some persons that AV productions do not constitute research material. The results also revealed that in some instances the keepers of these collections offered unrestricted access and in other situations the collections are locked away. In several cases the collections were inadequately organised and respondents expressed the need for assistance. The underlying reason for denial of access reflected the need to organise the collections. AVIN took on the challenge to identify a suitable system for organising the collections.

AVIDA

In September 2001, two AV librarians visited the British Library Sound Archive and in discussion with its management team was exposed to CADENSA which is used for organizing its sound collections. This system was so impressive that permission was sought and granted to use CADENSA database definitions as a basis for the development of a system for Jamaica. After many deliberations, pilot testing, refining and publicising, the Audiovisual Information Data Access system (AVIDA) was officially introduced to Jamaica, during primetime news, in March 2002, as a tool for organising and providing access to Jamaica's sound and image recordings.

The AVIDA database developed by the NLJ provides a viable option for the documentation and electronic management of audiovisual collections in a constantly evolving media environment. Over the years, the original basic AVIDA structure has evolved into expandable modules for organising photographs, sound recordings and moving images. During the process of refining the database, a number of training sessions were held with different stakeholder groups as a measure to ensure that the interests of these groups were adequately represented.

CDS/ISIS is designed as an integrated menu-driven computerised Information Storage and Retrieval System which enables easy exchange of data. NLJ has been the national distributor for this UNESCO designed database management system since 1989 and it now has over 300 registered users of the product. Cost considerations were also important and the availability of CDS/ISIS free of cost provided an additional incentive for applying it to AVIDA. Consequently, AVIDA was developed using as its platform UNESCO's CDS-ISIS system, which is widely used in Jamaica and also taught in the local Library School.

AVIDA's Flagship Project

Since 2002, when AVIDA was officially launched, various workshops have been held to refine the system and promote competency in using AVIDA. In 2007, a pilot project was undertaken by the NLJ and the Main Library of the University of the West Indies to develop as a prototype an AVIDA database of the Bennett-Coverley collection at the NLJ. This project was deemed necessary because of the repeated requests to both institutions for information related to Louise (affectionately referred to as *Miss Lou*) Bennett-Coverley's contribution to national development. Miss Lou is recognised internationally as Jamaica's foremost storyteller, folklorist and cultural icon, who dedicated her life's work to promoting Jamaican folk aesthetics.

The project was presented in January 2008 at the UWI's international conference to honour the Hon. Dr. Louise Bennett-Coverley (Miss Lou) and also at the regional Association for Caribbean Universities, Research and Institutional Libraries (ACURIL) Conference held in Montego Bay in June 2008. This project, which was presented in a paper entitled *Preserving the National Audiovisual Heritage: AVIN, AVIDA and the Bennett/Coverley Collection of the National Library of Jamaica*, received **The Albertina Pérez de Rosa Information Units Alliances and Collaborative Projects in the Caribbean Award 2008** (ACURIL, Puerto Rico Chapter). The award was given for excellence in the endeavour to preserve the national audiovisual heritage.

On October 27, 2008 the Bennett-Coverley Database was officially launched to commemorate UNESCO's AV World Heritage Day. This launch was staged in the broadcast studio of Jamaica's first TV station where Miss Lou hosted many shows. The proceedings were chaired by a media manager and attended by many persons in the media fraternity. The launch was aired on numerous occasions.

Description of The Bennett-Coverley Collection

The Bennett-Coverley Collection consists of texts, sound recordings, photographs and moving images donated to the National Library of Jamaica by Dr. Louise Bennett and her husband Eric Coverley in 1987. The Collection has been sorted into approximately 352 files and placed in 96 boxes. These items represent a valuable part of the Jamaican national heritage in that they chronicle the literary, dramatic and professional development of the Hon. Louise Bennett and Mr Eric Coverley over a fifty year period of contribution to the cultural development of the nation. These documents include personal papers of Ms Lou and her husband, literary works by Ms Lou, which reflect her social work as well as her theatre involvement. Mr Coverley's involvement in stage production is also covered in the papers. The Collection also includes correspondence, pantomimes, scripts of radio and television programmes, plays, lists of proverbs and folk songs. The aim of the project is to preserve the original material while making its content accessible to researchers in digital formats. This project consists of three complementary components. These are:

- 1) the creation of a digital repository of texts, still, sound and moving image recordings;
- 2) the compilation of a searchable bibliographic database with multiple access points. The database will include a physical description as well as a brief abstract of each item.
- 3) inclusion of hyperlinks from the bibliographic database to the digitized collection. This will enable researchers to search the bibliographic database and retrieve, by clicking on the hyperlink, files in the digital repository.

Users of AVIDA are able to search the Bennett-Coverley database by title, subject, theme, characters, date of broadcast (where available) and any combination of these fields. Retrieval produces hyperlinks to sound, video and transcript. Users can read and listen to the commentaries simultaneously.

This collaborative project between the University of the West Indies Library and the National Library of Jamaica will provide electronic access to the Bennett-Coverley bibliographic database. However, only the NLJ will provide in-house access to the digital repository. The project will facilitate use of the Collection while preserving the original documents for posterity. It will enable in-depth study of Miss Lou's invaluable literary and cultural contribution to the understanding of Jamaican culture.

In the words of Miss Lou, *Bright sun shine through little bit a key hole*. In other words, we will continue to take small steps toward the total preservation of this national treasure.

Rights Issues

Rights issues present numerous challenges for Jamaica's media librarians who in the course of their work are pressured, especially by researchers/producers who request archival material for use in commercial ventures; or to make decisions about the use of the collections they have inherited without proper documentation. In addition, failure to establish rights often impacts on the preservation measures implemented in some AVIN libraries. The NLJ, on the other hand, is allowed by both the Copyright and Legal Deposit Acts to preserve and provide access to its collections. Though the Legal Deposit Act does not include the deposit of broadcast material, the Copyright Act allows the NLJ to capture off-air broadcasts. However the NLJ does not have the resources to do extensive recordings of TV and radio programmes; it targets specific ones to add to its heritage collections. The NLJ is therefore in an advantageous position to develop a modified broadcast archive.

In its continued quest to memorialise Jamaica's cultural heritage the NLJ also purchases copies of broadcast programmes to enhance its AV collection. In some instances the conditions for managing the items are not in keeping with the NLJ's mandate to provide continued access. In the absence of a broadcast archive, the NLJ is embracing this responsibility to preserve these items. The NLJ has been in discussion with media houses to purchase items for access and preservation purposes. As a result of these discussions, through AVIN, the NLJ has been sensitising media managers to the relevance of proper archiving of their sound and image recordings both to enhance the nation's cultural patrimony as well as their own economic viability.

Among the various deterrents to the provision of access to AV items are issues related to the number of rights holders in each work and the attendant problems pertaining to identifying precisely with whom to negotiate for access rights. Illustratively, cultural institutions including archives and libraries are concerned primarily with developing and preserving collections for public use. In many instances these institutions neither own nor administer the intellectual rights for the AV items in their collections and therefore require users to obtain permission from copyright owners. Conversely, industry organizations consisting of creators in the culture industries which include producers, distributors and broadcasters, usually administer intellectual rights for their AV collections. These issues will form the basis for AVIN to establish a *Rights Registry for AV Works*.

Existing Facilities

Generally, existing AV library facilities are inadequate to fulfil their research and administrative needs. AVIN units tend to be located in available spaces that are often unsuitable or inadequate for proper archival operations. In some instances, where there is adequate space, sections are often partitioned to create additional office to accommodate other members of staff or to expand the production section.

Many libraries also have what are considered interesting titles on AV formats that are both obsolete and unknown and for which they have no replay equipment. Opportunities are created at meetings to familiarize AVIN members with the various AV formats and equipment that are available. The NLJ's AV Department often assists with the reformatting of its members' collections. For example, some members had Umatic tapes with interesting titles but are unable to access the data. The NLJ was able to assist in creating digital formats of these recordings.

The NLJ, though faced with its own space challenges, now offers very limited back up storage for two media organisations. Recently a TV studio was partially destroyed by fire which barely missed the library. When its manager was interviewed the comment was made that if there was total devastation, there would not be total amnesia because its *prestige* tapes are in storage at the NLJ. This incident caused the network members to face the reality that proper facilities for off-site storage and archival management activities need to be treated as a national imperative. This matter has become a live item on the agenda of AVIN meetings.

The NLJ, in recognition of this problem, has reactivated its Relocation Committee which is headed by AVIN's Coordinator. This Committee has identified a number of alternative venues and is now formulating strategies to expedite the acquisition of a suitable facility in the short term and the acquisition of a purpose-built facility to house the nation's AV heritage collections. It also maintains an active regime of tape and film inspection as well as monitoring the temperature in the storage area.

Training

As AVIN's focal point, the NLJ's Audiovisual Department is responsible for spearheading the setting, monitoring and maintenance of national standards for managing audiovisual archives. In light of the concerns among stakeholders about managing AV collections and the impact of Jamaican culture globally, the continued development of AVIN is regarded as a national imperative that must be energized to prevent irreplaceable data loss and to reclaim Jamaica's rich cultural patrimony. It was also recognised that strategies need to be devised to facilitate the effective management of Jamaica's audiovisual archival collections.

Within the context of the survey findings outlined earlier in this paper, the NLJ/AVIN is seeking constantly to identify and implement *best practices* in managing audiovisual collections in order to facilitate the identification, collection, organisation, preservation and access to the collections in the various audiovisual units. To this end membership is maintained in international audiovisual associations as well as networking with international service providers. Information gleaned from such encounters is filtered to colleagues within the network and to others with vested interests.

AVIN is not deterred by the fact that Jamaica's audiovisual collections belong to numerous public and private sector entities and that each unit (whether public or commercial broadcasting station or collecting institution) must conform to its organisation's mission and internal policies. To further compound the issue, those in the public sector report to different ministries. There are also tensions between users and providers of services in distinguishing between what is considered *public good* and commercial ventures. The NLJ has no blueprints to offer for wholesale resolution to these issues. Thus, it remains resolute to facilitating the formation of a dynamic AVIN as a mechanism for colleagues with like interests to collaborate in identifying mechanisms for tackling such issues. In the absence of consensus among stakeholders about critical issues, such as what constitutes a national audiovisual archive and where this should be located, Jamaican audiovisual units will continue to operate within a decentralised mode with each unit managed by the organisation's designated officer. Ultimately, each archive will apply agreed principles and established national standards for managing their collections.

Major Activities

Since the formation of AVIN, some of the major activities undertaken have been:

- **CAVIC 2003**

In November 2003 AVIN hosted the first Caribbean Audiovisual Information Conference (CAVIC 2003) in Kingston, under the theme, *Audiovisual Archiving: Our National Heritage And History*. The issues examined in the deliberations and the knowledge gained provided a stimulus that is still sustaining AVIN's developmental activities. For example, it was out of this experience that a Cataloguing sub-committee was formed and the AVIDA system developed and refined. The *Rights Group* was another by-product of CAVIC 2003. The exposure gained from the close encounters with the representatives from FIAT/IFTA, IASA, AMIA and UNESCO's umbrella group, the Coordinating Council of Audiovisual Archives Associations (CCAAA), propelled AVIN members to a higher level of appreciation for their responsibilities for the nation's AV collections. Increasingly, members are making deposits to the NLJ as part of their contribution to nation building.

- **Business Meeting for Media Managers**

Generally, it was felt that the message to preserve AV productions was having negligible impact on Media Managers because very few were becoming involved in network activities. Another strategy was applied and on November 23, 2005 AVIN hosted a *Brunch and Business Meeting for Media Managers* at the Courtleigh Hotel in New Kingston. The room was filled to capacity and the business section, which was ably chaired by a media manager, received high commendations from those in attendance.

This Business Meeting for Media Managers also provided an opportunity for AVIN's Coordinator to propose to potential partners the network's plan to establish a **National Audio-Visual Registry**. The aim of this Registry is to provide a net for safeguarding Jamaica's diverse sound, still and moving image heritage within a contextual framework while highlighting the creativity and inventiveness of Jamaicans. Among the criteria identified for a work to qualify for inclusion is that it must have sustained cultural, historical or aesthetic significance. Additionally, each item named in this Registry will be preserved in perpetuity, either through in-house measures or collaborative efforts. Some persons were familiar with this concept and endorsed it but others felt that the existing conditions did not predispose us to undertaking this responsibility and that the idea should be put on hold until there are infrastructural changes.

As an interim measure AVIN members are encouraged to use AVIDA to document information pertaining to type of collection, description of holdings, location of items, access, and ownership and rights conditions.

Repatriation

Another activity that emerged out of the discussions between archivists and other stakeholders in AVIN was the vexed issue of film footage held in archives overseas. The lobby group for this activity includes film producers and script writers. A decision to pursue the repatriation of Jamaican film footage held in overseas archives was reached. This matter was examined in the context of affordability/accessibility. Since the announcement about the pending closure of Film Images (London) Limited, where most of the early films of the former British colonies are held, plans have intensified and have generated much communication between a senior media manager and the NLJ and also between this persona, on behalf of NLJ/AVIN, and the manager for Film Images. The dialogue was spearheaded by someone who was instrumental in the production of these films and who is keenly interested in the repatriation exercise. In the process of negotiating the most cost effective and efficient way to repatriate copies of some of the essential titles the company ceased operations.

Discussions have been held with overseas independent producers/collectors and in some instances items have been purchased. There are problems in that these items are very expensive and are often of inferior quality.

Strategies for Preservation / Access

AVIN recognises that preservation and access measures cannot be applied automatically to all documents but must conform to the internal policies of the generating institutions. These copyright and related rights issues are discussed constantly because of their relevance to the range of services that can be offered.

- **Workshops**

Over the years AVIN has hosted a number of workshops to sensitise stakeholders to their individual and collective responsibilities in ensuring accessibility and preservation of Jamaica's still, sound and moving images cultural productions that fall within the scope of AVIN. Workshops have been held to:

- (i) discuss the implications of the Legal Deposit Law for AV items;
- (ii) highlight how stakeholders can contribute to AV archiving;

- (iii) introduce the AVIDA system for providing access to AV items;
- (iv) demonstrate how to convert analogue sound recordings to CDs.

Seminar on Managing Image Collections

In August 2006 AVIN responded to another expressed need for training in the management of image collections. A three-day seminar was held on Image Collections as Cultural Heritage with the theme: "Connection Camera, Culture, Challenges and Commerce". One of the high points of this encounter was the sequential presentations on: (i) Copyright and Related Rights in Images; (ii) Challenges in Accessing Image Collections.

These presentations were enriched by the informed input from the participants, especially the legal persons working in media organisations. The discussions, though very energised and engaging, served to underscore the need for national policy guidelines to guide the processes for providing access, especially to digital productions (i.e. both born digital and reformatted works).

Digitisation

AVIN's digitisation project has been scaled down because of a number of technical problems including lack of availability of some playback equipment and inadequate staffing. During the pilot project a Sound Conservation Laboratory was set up to rescue and preserve the wealth of sound recordings on obsolete carriers. Many of our priceless sound recordings are on reel-to-reel tape. The NLJ is actively pursuing the acquisition of a functional reel-to-reel player to access sound data.

The NLJ has been digitizing its moving images, but some film footage has deteriorated beyond recovery. Fortunately, transcriptions were done for many of the earlier recordings, thus creating another type of resource. AVIN now understands that good stewardship is critical to proper AV archival management. This includes safeguarding the integrity of the item and complying with the requirements of rights management when embarking on a process of digitizing the collections in our custody.

In order to ensure that any digitization measures introduced conform to international standards, a Senior Conservation Technician undertook a three-month internship at the British Library Sound Archive, from October to December 2008. Since his return, he has been conducting workshops and advising stakeholder groups on how to proceed with the digitization of their collections.

Collaboration / Cooperation

AVIN provides a forum for media archivists and other stakeholders to share knowledge, define policies and implement measures that will foster adherence to proper archival management. The example of the NLJ/UWI collaboration to facilitate access to the Bennett-Coverley collection provides a prototype of what can result from effective cooperation.

Proposed National Audiovisual Conservation Facility (NAVCF)

The proposal for the establishment of a National Audiovisual Conservation Facility (NAVCF) always generates lively discussions about how to proceed towards the acquisition of this facility. One critical issue that is pertinent to the realisation of this facility is how to make NAVCF a viable entity, but the overriding problem concerns how to finance its construction.

NAVCF is envisaged as a solution to forging partnerships with the AV community so that all stakeholders, including media houses, photographic societies, recording studios and libraries, can pool their resources to safeguard the cultural patrimony. As AVIN continues to promote its cause it remains resolute that inputs from these various groups will strengthen the case

for the adoption of national guidelines and standards for preservation and methodologies for appraising contents. This facility will provide ideal storage conditions, adequate security and optimum access to items. This envisaged state-of-the-art facility will be equipped with fire protection devices and will have conservation operations grouped closely to maximise measures and treatments. It will offer on-going training opportunities for AV staff in areas such as documentation, preservation techniques, access options and rights management. It will also facilitate the keeping of a National Registry of AV holdings as well as the maintenance of a skills bank of technocrats and partners.

As a strategic asset, it is envisaged that NAVCF will enable income generation in various ways, including the renting of studio facilities, systematic training of clients, preservation of original formats and public outreach programmes. Another benefit is the improved capacity for electronic storage and the attendant delivery of digital image and sound to clients upon request. Digitisation is critical to the success of such a facility and if done centrally, it will relieve persons who manage individual units to optimise the services they offer. Access to digital copies will improve research and retrieval options while creating additional space as archival items are deposited, as stipulated in a retention policy, in NAVCF.

It is hoped that AVIN's constant pursuit of initiatives will facilitate the transition to a National Audiovisual Conservation Facility (NAVCF). Archival management is very costly and is more effectively undertaken by persons with expertise in the relevant area and within a purpose built facility with proper environmental conditions. Most AVIN units lack the required financial resources to undertake operational activities. The costs of data migration for preservation and access are also prohibitive.

Conclusion

The AVIN network coalesces around the collection of media houses and institutions in the music and other entertainment industries. However, the National Library sees itself as the focal point of AVIN, not by virtue of natural affinities to the media of audiovisuals, but because of the pragmatic concern of ensuring that all recorded information emanating from Jamaica or about Jamaica or by Jamaicans is systematically identified, stored, described and made accessible, within established parameters. Additionally, the strengths and biases of particular media, communications or entertainment entities in and towards particular types of audiovisual materials can be effectively coordinated by an entity such as the National Library of Jamaica, which has a national perspective within a global framework and commitment toward the development of information networks.

AVIN is more than a concept. It is a mechanism that is charting the course for the full acceptance of audiovisual recordings as crucial primary source documents. It is hoped that measures will become formalised to stem the loss of AV documents as preservation strategies are refined and appropriated by all. Individual units will continue to harvest and archive the nation's cultural patrimony of AV productions. The focal point will concentrate on getting ideas translated into actions that will yield the much anticipated overdue purpose built facility. AVIN is the vehicle that provides the solution and channel to memorialise Jamaica's rich cultural heritage. AVIN is indeed Jamaica's best solution to memorialising its cultural patrimony.

The “digital butterfly net” of ethnomusicologists and its impact on audiovisual archiving

Gisa Jähnichen, *Universiti Putra Malaysia*

The paper discusses the changing self-understanding of ethnomusicologists from enthusiasts pioneering in forgotten areas of the world to a species of networking researchers using all facilities of the World Wide Web and audiovisual databases. Aside from some unclear interpretations of user rights, there are important ethical challenges to observe, which are based on a fast re-positioning of humanities in the actual field of scientific efficiency. What will remain from the sublime discoverer's attitude and what will be the substance of another quality in ethnomusicological research? Talking about the “digital butterfly net” we should focus on what we call a “butterfly” and how it changes its shape, rather than re-examine its digital being. Finally we have to re-examine our supposedly universal parameters of “scientific efficiency” from different viewpoints, and we should become aware of prospective demands which need to be met by audiovisual archivists and ethnomusicologists in their socio-functional context.

Introduction

In the last decades, ethnomusicologists have continuously changed their aims regarding the material they gather for their own scientific purposes.⁷⁵ From today's point of view, it is hard to recall the prevailing sound environment as well as the revolutionary changes regarding sound capture and conservation around a hundred years ago, when the only way to reproduce music was through a further live performance. The option of listening to music and sound from places outside the average living space of developed areas in Europe and Northern America seemed to be unaffordable. Thus the quite awful sound of a cylinder recording was the window to the unknown sound world, and was deemed worth keeping. Compared to first class live sound, the sound was a fascinating mystery. Thus field recordings inherited an aura, which came to take on a life of its own.

In the very first days of field recorded sound, some musically interested people – not yet musicologists – recorded music just because the possibility existed. They carried equipment and material over long distances to challenge technology and to prove their ability to deal with it. The shape of that butterfly seemed to be determined by adventures that had to be survived getting to the field and getting back in ‘civilization’.⁷⁶ Gouda describes the package coming with the aura:

Europeans have depicted native peoples as unruly children, for example, or as mystics who wallowed in a spiritual harmony with nature revealed in an existential freedom that most citizens of the modern Western world had long since lost. In this construction native people became idealized ‘strangers in paradise’, who lived their daily lives without conflicts and contradictions and were unhampered by private property or divisions of labor. (Gouda 2008: 119).

The recorded music and the performing people were more or less a confirmation of the geographic distance travelled and the apparent strangeness of their cultural expressions. Today, while talking with sound engineers or technicians who sometimes accompany field excursions, a few of these attitudes can still be observed. However, real enthusiasts were growing in the shadow of the presumed business, who – although wrongly – aimed at a revived philosophy of musical universality through technological progress:

⁷⁵ Some of them strongly assert their difference from comparative musicologists. This seems to be fully understandable insofar as comparative musicology is strongly identified with the early Berlin school. On the other hand – just discussing the method of comparison – this association between today's ethnomusicologists, and comparative musicology, does not seem to be a necessary one. Fortunately, such aversions do not affect other fields of the humanities such as comparative linguistics or comparative sciences of cultures. The method of comparison, which is always our independent presumption, between issues we already know and issues we learn later, cannot be blamed for limited world views and resulting wrong directions that emerged from a few ideas of the early Berlin school of Comparative Musicology. However, even those so-called wrong directions were not completely useless.

⁷⁶ As for example, Cecil Sharp, one of the first ‘hunters’ or his predecessor Francis James Child, who was robbing rather than hunting.

...it will not become so as long as our musical vision is limited to the output of 4 European countries between 1700 and 1900. The first step in the right direction is to view the music of all peoples and periods without prejudice of any kind, and to strive to put the world's known and available best music into circulation. (Grainger, Percy, broadcast over radio WEVD, New York, 20 June, 1933 – quoted according to Balough 1982: 113).

Rank growth with principles

When sound recorded in the field became available via broadcasts and on records, the particular aura of field recordings was strongly kept alive, although more than a few recordings were done in well-equipped studios or under comfortable staged conditions all over the world.⁷⁷ The guild of early ethnomusicologists – who were not yet called as such, but were emerging in those years of technological news on account of their desire to organize their sublime studies even more effectively, or at least for their wish to ease hard field work consisting of long hours spent with the transcription diary on their knees in strange surroundings and under strange conditions – was initiated by ethnographers such as Jesse Walter Fewkes⁷⁸ or Béla Vikár,⁷⁹ described by Bartók as “the well-known man of letters and folklorist, who, without any musical knowledge, was the first to have recourse to a phonograph” (Bartók, Suchoff 1992: 60). Bartók learnt, possibly from Percy Grainger, the importance of the phonograph as a working tool in research. Far more influential on later ethnomusicological studies was the work of the Russian folklorist Evgeniya Lineva, who “was perhaps the first person ever to use the phonograph for field recordings, in 1897” (Bird 1999: 121), which is not true (since we know that Fewkes recorded in 1890), but nevertheless it seemed to be important in the competitive relationship among nations of that time. Unfortunately she started to de-personalize recordings through grouping of recordings and averaging out in simplified transcriptions. Hence she had a certain influence on creating musical nationalism, as seen in Stravinsky's compositions, which occasionally incorporate her “scientifically proven” folk chorus style as an indication of being truly Russian (Cross 2003: 16). Her documentation practice was widely adopted among East European ethnographers and later ethnomusicologists.

In Great Britain, as Bird describes in his Percy Grainger biography, the

system of collecting was almost ideal, but it proved to be a source of argument in subsequent years between Grainger, Cecil Sharp and other members of the folk-song ‘establishment’. Not only did it throw into bold relief a sharp divergence of attitude to the basic folk-song material, but it threatened to expose the frequently hit-and-miss and sometimes dishonest techniques of other collectors. Grainger had little faith in the pencil-and-pad approximations of his contemporaries. (Bird 1999: 121f.).

Despite the wide and wild collecting of whatever was accessible, the main purpose of collecting musical expressions as well as spoken folktales, poems or childrens' rhymes of that period was the “scientification” of musicology using the measuring tools of the so-called exact sciences. Frequencies were one of the important areas of discussion. Nowadays some of the very early outcomes appear ridiculous as for example the insight of Ellis himself in co-operation with Alfred James Hipkins, who found that the prevalent notion that pentatonic scales had developed in Asian cultures because of insensitivity to the subtleties of the semitone: “It is found that intervals of three-quarters and five-quarters of a Tone, and even more, occur. Hence the real division of the Octave in a pentatonic scale is very varied”⁸⁰ But it did not prevent later errors arising, for the earliest seem always to be the most enduring.

77 For example, Ellis and Hipkins, specialists on temperament and pitch of the Broadwood Piano Company, measured non-diatonic and so called non-harmonic tunings of Asian instruments that were brought to Europe. They studied Central Javanese music during a gamelan appearance at the London Aquarium 1882 and Chinese court music at the International Health Exhibition in 1884.

78 Fewkes made the first ‘field recordings’ in 1890 among the Passamaquoddy Indians of Maine. He tried to document the existing lifestyle and rituals of the Zuni and Hopi tribes, and made the first phonograph recordings of Zuni songs.

79 The Hungarian Béla Vikár (1859–1945) began recording in the field in 1896.

80 Journal of the Society of Arts, 1884, Oxford University. No page number.

So, we still find similar expressions in many modern scientific works (Gramit 2002: 53; Jackson and Pelkey 2005: 145, 162).

As well as the first musicological insights, a major focus within the Berlin school, early records were made for eternity. The year of production was rarely printed on the record label. The belief that the transitoriness of music, dependent on real-time, could be captured on a wax cylinder or on a disc, resulted in the delusion that music could be captured and measured for eternity. Another misconception resulting from the aim of recording for eternity was that these captured musical expressions are fixed for ever and the material itself becomes eternal as well. From the viewpoint of audiovisual archivists who deal with early collections it can be said:

Both the collectors in the field and those whose sources were totally eclectic were intent on publishing the fruits of their work. It is therefore necessary to make a distinction between the means of collecting and between the kinds of song collections that were published. It is also necessary to distinguish between the collecting of songs, by whatever means, and scholarship about collected songs. Although it may appear paradoxical, the first published collections of traditional songs were drawn from eclectic sources, and were followed later by the results of collecting in the field. The term 'song collections' is therefore used for an anthology of songs from various sources; and 'song collector' for a person who collects and edits such songs for publication. A compilation of songs gathered from 'live' informants and performers in the field is regarded as a volume of 'collected songs', and the gatherer and compiler of such a collection is referred to as a 'collector of songs'" (Shepherd 2003: 43).

Increasingly, the world of ethnomusicological research became a world of recorded material rather than of live music practice. Charles Seeger advised Sidney Robertson... "record everything! ... Don't select, don't omit, don't concentrate on any single style. We know so little! Record everything!" (Pescatello 1992: 141; also Baranovitch 1999: 159). Unfortunately, many recordings, which were completed in the trance of new technological possibilities, experienced not only a technical but also a descriptive abstraction. Questions like "do you have any Tasmania?", were standard.

Another observation is that collected material was more closely identified with the collector than with the collected subjects, hence it included not only the common abstraction according to regions but also the collector's conceptualisations, and it gained a life of its own. Thus the ethnomusicological butterflies already had to be taxidermically prepared, and this process was done by lower-level colleagues or enthusiastic students.

Early ethnomusicology, which is nowadays often interpreted as an extension of colonial intervention (Bohman in New Grove 2005: Ethnomusicology, Post 1945 developments), was an eclectic and individualistic field of research, invented to prove emotional presumptions with evolving systematics, rather than a well established scientific fundament of cultural colonialism, or, worse still, of cultural proselytizing. Personal interest, professional and cultural orientations crossed each other in a way that national or other lineages could be (and unfortunately were) constructed from various perspectives. The assumed knowledge was monopolized in private research archives or university libraries; the competition took place in written form. Through those discussions, rather than through real joint achievements of fieldwork and connected recording techniques, came a theory and subject of diverse arguments that followed diverse directions, as, for example, Jeff Titon seems to suggest, stemming from *the one and only*: "fieldwork relied on in-person observation and on data gathering through structured interviews, a method derived from the Trobriand Island practice of anthropologist Bronislaw Malinowski during World War I" (Titon 1997: 88).

At the same time, ethical considerations circulated, appealing to the researchers' responsibility:

In all cases, though, 'ethnography' denotes both intensive and extensive study of a human population. While it may involve formal or informal interviewing, it is distinct from journalism in that it is not "covering a story" but 'accounts for lives'. Ethnographers may focus, for example, on one class fraction or ethnic or racial population, one age group or one gender, but they do so within the context of overarching class and racial/ethnic formation, of the specificities of life course, of prevailing gender relations for that population. They may account for lives in the present, but they do so (or at least good ethnographers do nowadays) in a larger historical context" (Leonardo 2006: 207; (see also Shelemay 1997: 189-204).

Developments from that practice existed namely in the approaches of Mantle Hood, Alan Merriam, John Blacking, Gerhard Kubik, Artur Simon and several others, who were pointing to ethnomusicology as a new science worth incorporating into university curricula. Thus

the identity of ethnomusicology in the practices and products of its scholars and in its academic and pedagogical structures became increasingly canonized in the decades after World War II, while in the decades approaching the end of the 20th century disciplinary boundaries began to blur in new ways, especially in the 1990s, precisely at a historical moment in which ethnomusicology was enjoying its most influential presence among the humanities and social sciences" (Bohlman *ibid.*).

This recognition had effects on recording institutions and on the recorded subjects themselves, as Aubert and Ribeiro describe:

Some specialist publishers dedicate themselves to this domain with expertise and discernment;⁸¹ others, mostly concerned with the mass market, make occasional incursions according to the economic potential that such-and-such a fashionable genre or famous artist represents. But these are rare exceptions, and most recordings only have an insignificant financial impact on the market, and therefore on the owners; or rather the performers of the genres in question. It is always useful to proclaim that a part of the royalties and other profits from such-and-such a disc has been given to the community of origin, and that a copy of the recording has been scrupulously restored to them or, if they do not have the means to use it, that it has been transferred to a local expert or representative institution" (Aubert and Ribeiro 2007: 66-67).

Here, the impact on audiovisual archiving becomes clearly evident. The scientific by-product is recorded sound and/or moving images, which make audible and which visualize the past of something that the common ethnomusicologist as well as the common ethnographer tries to understand. This "something" is the aim – the audiovisual outcome serves that aim, but it is not the aim itself. Although Aubert and Ribeiro describe an average case, the real practice seems to apply also to those audiovisual recordings, which were used for research far from their place of creation. Most of these recordings – whatever adventures were connected to their making – are entombed in audiovisual archives of the world with the same gesture of futility for inheriting scholars and their small community.

Controlled growth without principles?

As foreseen by Bohlman (2005) and several other ethnomusicologists, the 'ethno' in ethnomusicology became inconsistent itself due to the enormous growth of technology and migration dynamics which did not only involve living space, but, more importantly, social changes and re-definitions of socio-cultural identities. The discussion about authenticity is becoming ludicrous. Order and distinctiveness are questioned. How can musical expressions as products characterise cultural affiliations in today's world? How representative of

⁸¹ Footnote of the author: for example Nonesuch records, Ocora, Pan-Records and others (Post 2004).

diversity in human life is the recorded manifestation? It seems that the more boundaries blur, the more categories rigidify in ethnomusicological discussions.⁸² Ethnic pigeonholes still play a central role in many respects and recorded audiovisual material provides evidence even to sometimes contradictory interpretations. Again the material does not represent the recorded subjects, but rather the strength of evidence according to the researcher's opinion.

Blacking once said about Grainger's visions:

The widely used label of 'ethnic' music implicitly denies the existence of the individual creative impulse, which has enabled people throughout history and in all parts of the world to produce infinite varieties of beautiful music. Percy Grainger hoped that knowledge and appreciation of this variety would become commonplace, so that music might become a universal language (Blacking 1989: 2).

Bearing in mind the actual situation, individualising – or re-individualising in view of early instances of recorded sound – instead of universalising musical language could be a step worth considering.

So, let us accept that butterflies can mutate individually. How does it affect audiovisual archiving?

In the era of growing internet facilities, the average ethnomusicologist, and especially the student ethnomusicologist, finds the most interesting mutations on the internet; the recording quality may be poor but the metadata that can divulge the whole recording, description, storage and access environment of a single recorded item. Networking groups of students can reach all corners of the world and find out where the best ukulele players or *belian*⁸³ singers are concentrated, which repertoire they play or sing, how often, with which cultural ideology they sympathise, and other less important matters – parts coming together in a completely different butterfly model. Observing this community of modernised researchers, Malinowski might well cry in his diary of structured interviews.

The role of audiovisual archivists, finally, is to provide the wild horde of a new ethnomusicological generation with sound and moving images of respectable recording quality. The more knowledge of environmental and technical details is shared in a welcome democratic way via the internet, the more sophisticated become qualitative demands. Archivists turn into networking networkers and have to manage a huge amount of (more or less competent) requests. Nowadays, everybody seems to have become a little ethnomusicologist.

In the past, access was controlled through "hardware" institutions. Now, access is controlled through a barely comprehensible software market. Collected sound is ordinarily distributed outside of institutions, and cannot be classified or peer reviewed. The amount of possible subjects to be studied is countless. Thus institutionalised audiovisual recordings take on a new function in guiding interests, and promoting – finally – the recorded subjects. For researchers are no longer limited by territorial access, unaffordable recording equipment or travel difficulties, and their aim is changing accordingly. They get away from monopolised knowledge areas of schools and lineages and come closer to the very practice they were claiming as their primary subject: the musical life of people in its vast diversity, embedded into a thoroughly-investigated context of time and space, slowly leaving the cultural circle of ethnic determination and encountering a more holistic view of the music's real environment, not only with regard to actual music practice, but also considering historical reviews and individual fates. This process is no less contradictory, as Aubert and Ribeiro comment:

82 See discussions on cultural 'ownership' of genres, musical instruments, even single songs or pieces, especially as a discursive tool of post-socialist foundations of nationhood.

83 A kind of chant of the Kenyah people on Borneo.

The music genres of the world have certainly acquired merchant values; but they remain above all human values, in the noblest sense of the term. Their appearance in our immediate environment returns to us today an echo of society we live in: a society in crisis, questioning its foundations due to the recent eruption of plurality, but especially a society in mutation... (Aubert and Ribeiro 2007: 67-68).

Conclusion

Thus audiovisual archivists have to move on to become qualified guides and promoters. Although they always act as individuals, they are called on to respect the whole scientific background. That means the end of generalisation and the end of those once-so-comfortable universal audiovisual archivists who just had to consider all rules of TC-03 and TC-04 and did not need any further updates. The audiovisual archivist, still maintaining the best quality of audiovisual sources, becomes the most important controlling factor due to their competence. S/he should be the butterfly net him/herself. Therefore we urgently need to encourage archiving ethnomusicologists and ethnomusicological archivists to create a new species: the "sound environmentalist".

References

- Aubert, Laurent and Carla Ribeiro (2007): *The music of the other: new challenges for ethnomusicology in a global age*. Farnham, Ashgate Publishing.
- Balough, Teresa (1982): 'A Musical Genius from Australia. Selected Writings by and about Percy Grainger'. *Music Monographs*, 4. Nedlands, University of Western Australia Press.
- Baranovitch, Nimrod (1999): 'Anthropology and Musicology: Seeger's Writings from 1933 to 1953'. *Ibid*: 150-171.
- Bartók, Béla, Benjamin Suchoff (1992): *Béla Bartók essays*. University of Nebraska Press.
- Barz, Gregory F. and Timothy J. Cooley, eds. (1997): *Shadows in the Field: New Perspectives for Fieldwork in Ethnomusicology*. New York, Oxford University Press.
- Beck, Guy L., ed. (2006): *Sacred sound: experiencing music in world religions*. Waterloo, Wilfrid Laurier University Press.
- Blacking, John (1989): 'A Commonsense View of All Music': *Reflections on Percy Grainger's Contribution to Ethnomusicology and Music Education*, Reprint from Cambridge University Press Archive.
- Bohlman, Philipp V. (2005) "Ethnomusicology. Post 1945 developments. New Grove Dictionary of Music and Musicians. Online edition.
- Child, Francis James, ed. (1962 [1882-98]): *The English and Scottish Popular Ballads*. 5 volumes. New York, Cooper Square.
- Gouda, Frances (2008): *Dutch Culture Overseas: Colonial Practice in the Netherlands Indies 1900 – 1942*. London, Equinox Publishing.
- Gramit, David (2002): *Cultivating music: the aspirations, interests, and limits of German musical culture, 1770-1848*. Los Angeles, University of California Press.
- Jackson, Jeffrey H. and Stanley C. Pelkey (2005): *Music and history: bridging the disciplines*. University Press of Mississippi.

-
- Leonardo, Micaela di (2006): *Mixed and Riformous Cultural Studies Methodology – an Oxymoron? Questions of Method in Cultural Studies*. Edited by Mimi White and James Schwoch. Oxford, Blackwell Publishing: 205-220.
- Pescatello, Ann M. (1992): *Charles Seeger: A Life in American Music*. Pittsburgh: University of Pittsburgh Press.
- Post, Jennifer C. (2004): *Ethnomusicology: a guide to research*. New York, Routledge.
- Sharp, Cecil J. (1905): *Folk Songs from Somerset*. 2nd edition. London: Simpkin, Marshall, Hamilton, Kent.
- Sharp, Cecil J. (1960 [1924]): *English Folksongs from the Southern Appalachians*. London, Oxford University Press.
- Shelemay, Kai Kaufman (1997): 'The Ethnomusicologist, Ethnographic Method, and the Transmission of Tradition'. *Shadows in the Field: New Perspectives for Fieldwork in Ethnomusicology*. Edited by Gregory F. Barz and Timothy J. Cooley, New York, Oxford University Press: 189-204.
- Shepherd, John (2003): *Continuum encyclopedia of popular music of the world*. London, Continuum International Publishing Group.
- Titon, Jeff Todd (1997): 'Knowing fieldwork'. In *Shadows in the Field: New Perspectives for Fieldwork in Ethnomusicology*. Edited by Gregory F. Barz and Timothy J. Cooley, New York, Oxford University Press: 87-100.
- Williams, Sean (2006): *Buddhism and Music*: 169-189.
- Yung, Bell and Helen Rees, eds. (1999): *Understanding Charles Seeger, pioneer in American musicology*. Urbana and Chicago, University of Illinois Press.

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Editor: **Janet Topp Fargion**, The British Library, 96 Euston Road, London NW1 2DB, United Kingdom. Fax +44 (0)20 7412 7427 - email janet.toppfargion@bl.uk

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Editor: **Janet Topp Fargion**, The British Library, 96 Euston Road, London NW1 2DB, United Kingdom. Fax +44 (0)20 7412 7427 – email: janet.toppfargion@bl.uk

Secretary General: **Ilse Assmann**, The South African Broadcasting Corporation (SABC) Media Libraries, P O Box 931, 2006 Auckland Park, South Africa. Fax : +27 (0)11 714 4419. email: assmanni@sabc.co.za

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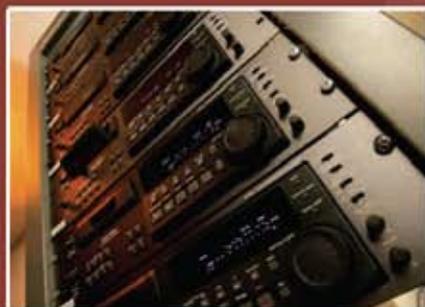
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