

ervation and access to digital objects in a repository.² This model remains a foundational document of the digital preservation community in 2008.

The libraries were also surveyed about which formats were ingested into their digital repositories, in which versions, with what metadata, and whether the digital file's content alone or its "look and feel" should be preserved. Some libraries restricted ingest to specific storage formats in the hopes of forestalling the need to conduct format migration, and several had already employed migration as a preservation strategy. Policies differed on which versions to retain: Some considered only master preservation copies for long-term storage, while others created and stored a duplicate of the master file as well, and still others made room for access copies derived from the master or duplicate. Preservation metadata, which derives from administrative and technical metadata, were acknowledged as important in the survey analysis, but standards that were emerging at the time have been further developed; the PREservation Metadata: Implementation Strategies Working Group (PREMIS) released version 2.0 of its data dictionary in March 2008.³

The question of whether to focus on bit-level preservation of the digital file (preserving its content, which may not be renderable in future versions of hardware and software) versus the file's context, structure, appearance, and behavior (preserving its "look and feel") received special focus from Verheul, who, along with her employing institution, appears to be a proponent of emulation as a preservation strategy: as of 2004, only the KB among the national libraries had experimented with it, but its absence received frequent mention, indicating that it had been a survey question. Other strategies, such as distributed digital preservation (in which I am particularly interested), received only passing mention in the profiles of Denmark, New

Zealand, and the United Kingdom, so did not appear to have been included as a survey question.

Part 2 of the book, with its in-depth descriptions of the fifteen national libraries on all of the topics for which the responses had been summarized in part 1, is long past its shelf life and would have been irrelevant to many readers even if the information were current. Many of the R&D projects described in this section as forthcoming have already completed at least one phase and published their findings, and some organizations are no longer in existence, so links to their Web pages may not work (for example, the Research Libraries Group merged with the OCLC Online Computer Library Center in July 2006).

While I admired the thoroughness with which Verheul approached her research, I feel that busy librarians and archivists interested in this topic would make better use of their time by following electronic discussion lists and blogs, attending sessions on digital preservation at conferences, and taking the online Cornell Digital Preservation Management Tutorial or five-day workshop,⁴ as all are likely to provide considerably more up-to-date information.—*Rachel I. Howard* (*rachel.howard@louisville.edu*), *University of Louisville, Ky.*

References

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Sound Savings: Preserving Audio Collections. Ed. Judith Matz. Washington, D.C.: Association of Research Libraries, 2004. 158p. \$45.00 softcover (ISBN 1-59407-663-4).

Sound Savings: Preserving Audio Collections is a compendium of papers that were presented at the symposium of the same name held in Austin, Texas, July 24–26, 2003. The symposium was co-sponsored by the School of Information, Preservation and Conservation Studies, University of Texas at Austin, the Library of Congress (LC), the National Recording Preservation Board, and the Association of Research Libraries. For two-and-a-half days, experts on many facets of audio preservation gave presentations on topics ranging from assessing the preservation needs of audio collections to creating, preserving, and making digitized audio available to the public. The attendees came from across the United States, and most represented audio collections housed in universities and colleges. They came seeking information on how to best deal with the deteriorating tapes and lacquer discs that have become a part of almost every institution housing a large sound archive. I attended the symposium representing the Institute of Jazz Studies at Rutgers, the State University of New Jersey and found the gathering very helpful at the time. Reading the papers five years later, I was struck by how much from that symposium is still relevant today.

“Review of Audio Collection Preservation Trends and Challenges” was presented by Samuel Brylawski, at the time head of the Recorded Sound Section of the Motion Picture, Broadcasting, and Recorded Sound Division of LC. He talks about the death of analog preservation methods and the adoption of digital formats to preserve audio. He goes on to talk about digital repositories and mentions LC’s creation of the National Audio-Visual Conservation Center in Culpepper, Virginia. Of course, today that facility is now up and running. Brylawski proposes collaboration with other institutions as a way to ensure that the vast amount of audio material held in the different archives will be digitized and stresses how these “archives should be exploring legal, as well as technical, methods to collaborate on preservation projects and share the products of those projects” (25). He mentions that Congress has charged the Library of Congress with building the National Digital Information Infrastructure and Preservation Program (NDIIPP) to help provide the legal and technical blueprint for institutions looking to establish legal means to share files as well as establish and administer storage and server networks. NDIIPP currently has more than ninety partners in its growing digital preservation network, which includes institutions both in the United States and abroad.

The chapter “Surveying Sound Recording Collections” by Hannah Frost provides a very useful guide to documenting audio collections and offers advice on how to proceed in preserving collections. Five years later, this paper is still useful for those doing a survey of their collections with the intent of launching a preservation program.

“Risk Reduction through Preventive Care, Handling, and Storage” by Alan F. Lewis is yet another chapter that holds up today. In it Lewis first lays out what he calls some “basic training,” surveying the basic elements

involved in machine-based audiovisual recording systems. Using laymen’s language, he talks about audio recordings (or as he calls it the “stuff on the shelf”), the playback equipment, and the standards developed as a part of the invention of the system. After a brief discussion on the components of a typical audio recording medium, he launches into his “Nineteen Conservation Concerns.” Without listing every concern, I can attest that such things as environment, physical security, and fire and water protection, are of great concern to any audio archive.

“The Case for Audio Preservation” by Karl Miller also addresses a number of concerns that confront audio archives today, the most important of which centers around the economics of audio preservation. For a multitude of reasons, today’s economic climate is a lot bleaker than it was in 2003. Lack of financial support from the federal government and many state governments has resulted in cuts and layoffs in many colleges and universities dependent on those funds. More and more institutions are vying for grants from agencies like the National Endowment for the Arts and the National Endowment for the Humanities to fund audio preservation projects. Mr. Miller intelligently presents the economics of audio preservation by talking about essentials like hiring qualified staff to operate and maintain playback equipment, building a proper work space to do the transfer work, standards for audio storage, equipment, and the possible decision to outsource the work to a professional sound studio. Like the previously cited papers, this one also can be quite useful because the information is as valid today as it was in 2003. For example, Miller cites figures for outsourcing as costing between \$90 and \$100 an hour. Remarkably, according to one of my sources (Seth Winner Sound Studios) those figures have not changed much at all. Under the section on standards Miller states, “There are no mutu-

ally agreed upon standards for audio storage” (85). That may have been true five years ago, but in the interim the International Association of Sound and Audiovisual Archives’ Technical Committee, IASA-TC04 has produced *Guidelines on the Production and Preservation of Digital Audio Objects: Standards, Recommended Practices, and Strategies*.¹

As I stated in my opening paragraph, I am pleasantly surprised at how much of the information contained in the various papers that comprise *Sound Savings: Preserving Audio Collections* is still relevant to the field of audio preservation today. It is an essential contribution and a useful document that should be on the shelves of all audio archives.—Vincent Pelote (pelote@andromeda.rutgers.edu), Rutgers University, New Brunswick, N.J.

Reference

1. International Association of Sound and Audiovisual Archives, Technical Committee (IASA-TC), *Guidelines on the Production and Preservation of Digital Audio Objects: Standards, Recommended Practices, and Strategies* (Aarhus, Denmark: IASA-TC, 2004)

Subject Access to a Multilingual Museum Database: A Step-by-Step Approach to Digitization Process. By Allison Siffre Guedalia Kupietzky. Westport, Conn.: Libraries Unlimited, 2007. 165p. \$45.00 softbound (ISBN 978-1-59158-444-5). Third Millennium Cataloging.

Subject Access to a Multilingual Museum Database is a guide to automating the collection management and cataloging functions for collections of artifacts that offers a survey of the environment and a detailed case study helpful to any museum or other cultural heritage institution at any stage of the automation process. The compact work “contains the ‘whos, whats, wheres, whys, and hows’ of choosing