recordedsound
Society of American Archivists

Spring 2012

Accidental Audio Archival Education

Robin C. Pike

Colleagues in libraries and archives frequently ask how I was trained to do what I do. While a set of requirements exists for archival education, and numerous institutions offer masters' and certification programs, no one set of requirements or one training program has been designed for people interested in audiovisual archives. Most of the audio training that does exist is highly technical and frequently geared to serve audio engineers. This is unfortunate, because few institutions have audio engineers on staff in their archives. Many audio archivists start out either as audio engineers or subject specialists who have learned to work with the formats presented to them. Audio engineers are adept at creating production systems and predicting the technology needed for projects, and they often set professional standards (such as standards created by the Audio Engineering Society, the Technical Committee of the Association of Recorded Sound Collections, and the Technical Committee of the International Association of Sound and Audiovisual Archives). After learning what is needed from a digital preservation and archival perspective, these individuals frequently have an easier time in the field because they are more familiar with the technical side of equipment and materials. Being a musician and former music educator, I fell into the category of subject specialist. However, because of my love of media, I decided to pursue this track, unlike many archivists who find audiovisual problems in their collections and have no prior training.

> ***"Most of the audio training that does exist is highly technical and frequently geared to serve audio engineers."***

I was exposed to legacy media and equipment at an early age. When I was two, I somehow managed to take apart my Fisher-Price cassette player (without breaking any parts) because I wanted to see how the insides worked. My first formal training occurred when I was in college, as a music education major—I was required to take a course on commercial music technology that could be helpful in the classroom. While attaining my MLIS, I took a course titled "Sound and Moving Image Archives," though it was limited in scope and did not cover practical aspects of digitization and digital audiovisual collections.

For four years, I worked as the Audiovisual Archivist at The Catholic University of America—a small university in Washington, DC—and was responsible for photographic, audio, and moving-image media in the manuscript collections and university records. During that time, I enhanced my experience by taking workshops on audiovisual analog preservation and audiovisual digitization specifications, reading numerous papers and other resources published by leaders in the field. I also networked with audio engineers and other specialists who created the set-ups and standards. With this experience, I created policies and procedures for audio archiving and created an audio digitization station. Like everyone else I've known in the field, by picking up information from a variety of sources, I was able to gain enough knowledge to succeed.

(Continued on page 2)

Inside this issue:

Continued from page 1

I recently started working as the Digital Collections Librarian and head of the new Digital Conversion and Media Reformatting unit at the University of Maryland, College Park. I was brought to the university namely for my skill with audio digitization but also for my experience with archives and special collections materials as well as digital collections. Already I have had numerous conversations with curators and collection managers concerning their collections' needs. My job is to establish uniform standards and workflows for all the conversion and reformatting done across numerous library units (and I look forward to the challenge!); my additional responsibility is to educate my new colleagues on these standards and processes, explaining why they are necessary for the longevity of audiovisual materials and content. The accidental audio-archival education cycle begins again …

For archivists wishing to further their own audio-archival education, two helpful workshops are offered semi-regularly (check the organizations' websites for more details):

- Conservation Center for Art and Historic Artifacts, "A Race Against Time: Preserving our Audio-visual Media"
- Lyrasis, "Preservation and Salvage of Audiovisual Materials"

Less technically-worded resources are currently being developed at: http://www.digitizationguidelines.gov/audio-visual/ . Another helpful resource that will lead to many other resources is Conservation OnLine: http://cool.conservation-us.org/bytopic/audio/ .

More Than Meets the Ear

Arjun Sabharwal

Recorded sound represents different things to different specializations in the archival profession and, in fact, to others in the information profession. In an environment dominated by new media, file-sharing networks, mobile devices, and other digital technologies, sound recordings represent more than just content; they are cultural artifacts and primary-source documents containing recorded knowledge of places, events, people, and organizations that no longer are around. In most cases, this knowledge is not accessible in print form. A predicament is created by our diminished capabilities to play recordings on diverse historical-media formats and to reformat recordings for digital access. Shrinking budgets and shrinking archival staffs further prevent researchers from processing the knowledge contained on rare media. What then is the meaning of recorded sound in a "digitally" saturated society with an accessibility divide between media formats that are or are not digital? What about prevailing attitudes towards pre-digital formats? Popular attitudes reduce the value of knowledge on the basis of its format: If something is not accessible through a mobile device, it does not exist. Copyright law as well as legal and ethical obligations stated in deeds of gift may, after all, hinder or prevent the full-scale digitization of such recordings.

"If something is not accessible through a mobile device, it does not exist. "

(Continued on next page 3)

Continued from previous page

Repositories holding recorded sound in diverse media formats must consider two fundamental aspects of such collections: (1) research, and (2) intrinsic value, where the former refers to providing access to knowledge and the latter aims at preserving the media format (preserving both content and media) for its own sake. We undoubtedly have much to learn from recording technologies that produced mono, stereo, and quadraphonic sound, and from the media types and the equipment compatible with them. Recordings document not only the information shared but also the industries that produced and marketed the formats. A record jacket containing the vinyl, liner notes, and poster presents information about the large networks of industries involved in the production—an element that is missing entirely from downloadable media today.

Explicit and tacit aspects to knowledge merit a thorough and holistic strategy in developing a metadata record. Explicit knowledge, in this context, would include the information obtained from the recorded speeches, interviews, and other orally transmitted content; tacit aspects speak about the industrial, political, intellectual, cultural, and economic contexts of those recordings. Copyright law protects such content, so even if reformatting is necessitated by the deteriorating condition of the media itself, public access to the content may not be as automatic as technophiles expect.

"Recorded sounds represent culture, industry, commerce, and knowledge..."

As cultural artifacts, sound recordings are salient members of special and archival collections. They speak volumes to attitudes shared about media—values associated with ease of use, portability, economic status, and other intangible characteristics of society. Eight-tracks, for instance, represent Americans' attachment to the automobile—the media was designed to suit the lifestyles of people who spent an increasing amount of time in commuting to work, school, entertainment venues, and shopping. Likewise, the CD—in contrast to the various vinyl formats (33, 45, 78 rpm)—presented a significant advantage in portability, akin to cassettes being more portable than reel-to-reel tapes. With these formats came walkman-type players, gradually replaced by MP3, mini-disc, and other digital players that testify to people's desire to carry less around. Today, however, they are testaments to consumers' attachments to (if not altogether dependence on) the cloud, the Web, and other shared platforms.

Such developments also speak to an evident degree of social disengagement in the public space, where headphones and ear buds hinder and even prevent social engagement. Communication devices combined with media players furthers social isolation in the public space as users often speak on the phone between listing to music, radio, or other programs. Perhaps one consolation for pre-digital media enthusiasts is that reformatting the old recordings for digital players may help in the preservation efforts; but we still may be far from seeing youngsters listening to oral histories, presidential speeches, and interviews on their portable devices on weekends in the shopping malls.

Recorded sounds represent culture, industry, commerce, and knowledge—all of which will be extremely valuable to researchers, regardless of format, if sound is diligently identified, collected, and preserved. Individuals, corporations, civic organizations, and academic institutions may never overestimate the value of their collections, as there always will be more than meets the ear. Recorded sound therefore remains a deep subject.

THANKS TO NANCY MAYSMITH FOR PROVIDING OUR ROUNDTABLE WITH A BEAUTIFUL LOGO. WWW.MAYSMITHDESIGN.COM

recordedsound
Society of American Archivists

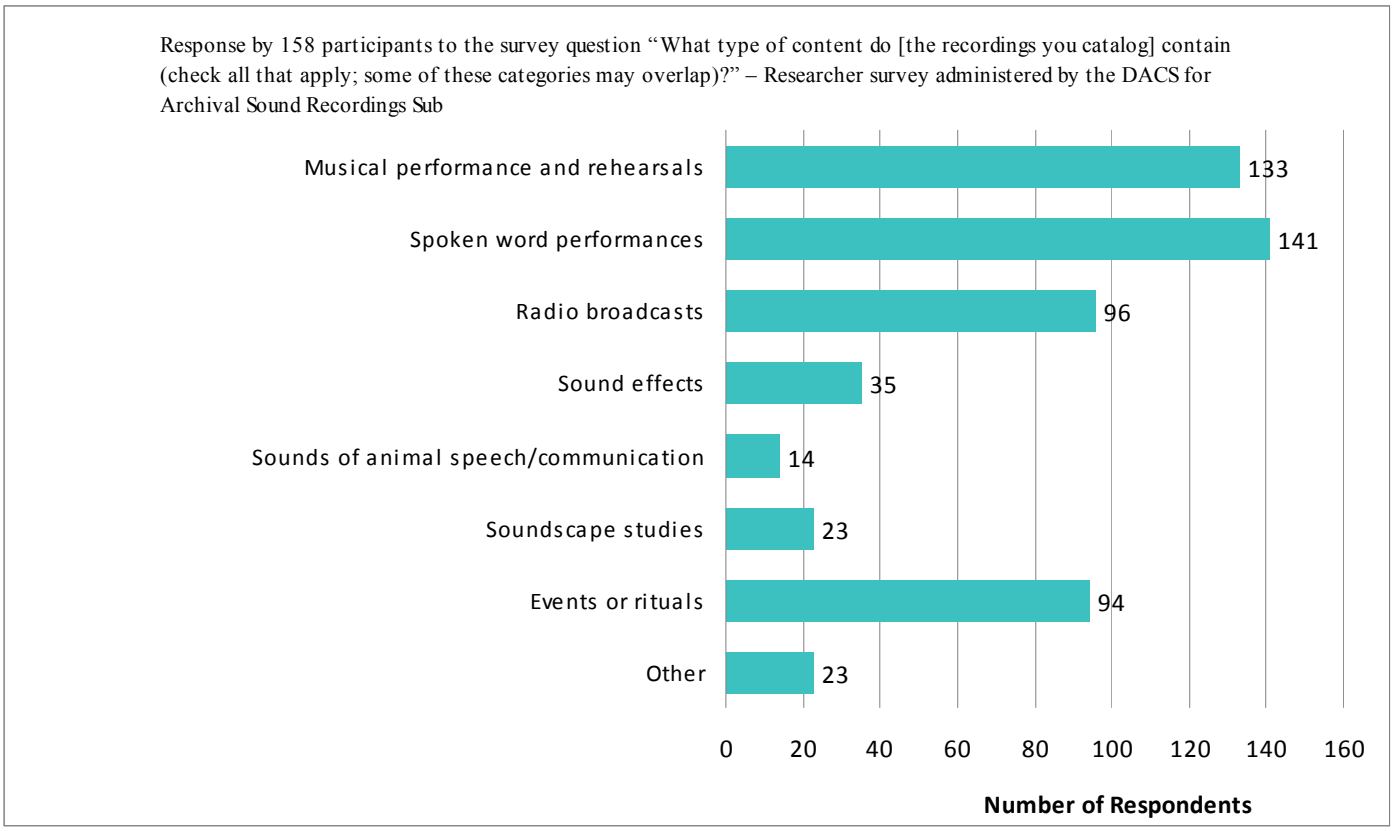
recordedsound
Society of American Archivists

Descriptive Challenges of Audio Archiving

Ronda L. Sewald

In December 2011, the SAA Recorded Sound Roundtable Discussion List considered expanding the Roundtable to include all audiovisual materials. Arguments in favor included shared preservation concerns and the desire to pool energy and resources. However, audio materials pose unique challenges for their custodians.

One area where sound recordings currently lag behind print materials—and even, arguably, moving-image materials—is that of "bibliographic" access and control. Commercially published recordings of Western art music have received the most attention in this regard, although extant descriptive records still present obstacles to discovering and retrieving these materials. The results of a 2010 survey administered by the DACS for Archival Sound Recordings Subcommittee of the Association for Recorded Sound Collections (ARSC) reveal that a large number of catalogers must describe non-music recordings (see survey graph). With the exception of oral history, catalogers tackling these audio materials must rely upon a mix of standards: standards such as DACS and AACR2, designed primarily for print and manuscript materials; standards created by ARSC ad the International Association of Sound and Audio-



Continued on next page

Continued from previous page

"...how do we supply titles for recordings when a label is indecipherable or misidentifies the content?"

visual Archives (IASA); and in-house guidelines.
One challenge of describing archival sound recordings is determining what constitutes the item, or the unified entity forming the basis for a single descriptive record. This is problematic with commercial publications, since sound recordings often function more like anthologies. The problem can be exacerbated by a mismatch between physical container and intellectual content. A tape may contain several interviews; or a recorded event may span multiple carriers. Larger events may also contain nested series of smaller events, which in turn may contain multiple works (e.g., several songs composing a concert, which composes a musical set during one day of a festival). In such cases, determining what constitutes an item, subseries, and series proves difficult.

Sound recordings seldom exist as independent entities. Transcripts, field notes, release forms, video recordings, photographs, track lists, and tape logs may be relegated to separate series in finding aids or lumped into the category of "accompanying documentation." At the same time, unifying principles, such as the event underlying a field recording, suggest that all pieces comprise one intellectual entity. Furthermore, how do we supply titles for recordings when a label is indecipherable or misidentifies the content? How do we identify the content of a poorly documented recording in an important collection when the cataloger is unable to play back a damaged, fragile, or obsolescent carrier? Based on the aforementioned survey, AACR2 and DACS do not adequately address conundrums such as these, and already there is a clamor of dissatisfaction over the unified cataloging standard, Resource Description and Access (RDA).

"Targeted professional training would be highly desirable..."

We must establish best practices that address data of importance to end users: take numbers; performance dates; the names of performers, producers, and engineers; and writers of accompanying documentation. This mandates the review and compilation of reference guides for identifying numbers, dates, and contributor names; and the related authority work must also be supported. We must pressure the creators of national standards and guidelines to take these issues seriously. Competition between secondary standards (those created by ARSC and IASA) has historically bred confusion, resulting in the abandonment of quickly-outdated publications in favor of DACS, AACR2, or in-house standards.

Targeted professional training would be highly desirable—a program that offers courses in the description and preservation of commercial, archival, and rare-sound recordings. Coursework might include "discographic" instruction as well as the history of recorded sound and courses oriented toward creating specialists in various formats, eras, subjects, and genres. In addition to preservation and access, sound archivists face challenges in rights management, understanding user needs, creating search and delivery tools, and outreach. In short, our roundtable has plenty to keep us busy for decades. A next step for our group may be to expand our focus beyond audio carriers and toward challenges posed by their intellectual content.

recordedsound
Society of American Archivists

Columbia Records Manufacturing Process: 1946

John Coakley

This past fall I interned at the Rodgers & Hammerstein Archives of Recorded Sound at New York Public Library's Library for the Performing Arts. The experience was excellent, so I continue to volunteer while looking for work (having recently graduated from Long Island University's Palmer School). My most involved project was researching 12 photographs that were taken inside a Columbia Records manufacturing plant. I eventually was able to understand—and thus describe—the process shown in the images. Then I created a detailed display that is still encased on the third floor of the library.

Photographs were taken during a 1946 tour of the Bridgeport, CT, Columbia Records factory. The photos provide a fascinating look at how music was reproduced in those days. In the picture accompanying this article, the records we see being made, inspected, and shipped are 10-inch discs that would have been played at a speed of 78 RPM (revolutions per minute). Today, collectors refer to them by their speed—78s—but back then they were simply called records.

1946 marked the approaching end of one era of record production and the beginning of another. In two years—and in this very plant—Columbia would begin producing the first commercially viable long-playing, $33^1/_3$ RPM, 12-inch records (LPs). Unlike the typical one-song-per-side limitation of 78s, a number of popular songs or a full movement of a classical piece could now be heard in one sitting, without interruption. In 1949, RCA Victor introduced the 7-inch, 45-RPM single, and the format war was on. Curiously, RCA Victor had already created a different version of the $33^1/_3$ RPM LP, but in 1930 it failed to catch on with the public in part because the Depression had inhibited consumer interest in new technologies. That early version of the LP was still commonly used for commercial purposes, especially as a means of recording radio programs for later broadcast.

Photo courtesy of the Rodgers and Hammerstein Archives of Recorded Sound

Both the LP and the 45 were made of vinyl, unlike the 78s that we see here, which were made from shellac. Both materials have pros and cons: vinyl records are flexible and capable of higher fidelity, but the surface is easily marred by scratches or even direct sunlight; records made from shellac are less prone to scratches but are comparatively heavy and brittle.

Technology in the recording studio was on the cusp of changing as well. Magnetic tape had yet to become the recording norm; instead, music was directly translated to the grooves of a lacquer or acetate record by a special needle that actually cut the grooves as the performance happened, hence the musical slang for recording, "cutting sides." The lacquer or acetate disc was then placed in the aptly named "gold sputtering machine," an electroplating apparatus that would coat the lacquer with a very fine layer of gold, creating a negative, convex impression of the record's grooves. Thicker layers of nickel and copper were then added to the disc in electroplating baths,

(Continued on page 7)

Continued from previous page

and when the desired strength was achieved, the lacquer disc was carefully stripped away from the metal, and the gold surface would be plated with nickel. That would become the master disc, also known as the matrix. From that disc a few so-called mother discs would be created, providing the molds for a large number of "stampers" that would be used to actually press the grooves into blank, pre-cut rounds of shellac. But even at that stage, the manufacturing process was far from complete.

To see all 12 photographs and other aspects of the manufacturing process, visit http://www.nypl.org/blog/2011/11/18/columbia-records-manufacturing-process-1946.

[This article is adapted from John's original blog post, November 18, 2011.]

THE ROUNDTABLE SERVES AS A FORUM FOR DISCUSSING ARCHIVAL ISSUES RELATED TO THE CREATION, MANAGEMENT, PRESERVATION, AND USE OF AUDIO AND AUDIOVISUAL RESOURCES IN ARCHIVES AND OTHER CULTURAL HERITAGE

What is the Secret in That Ketchup Sauce?

***Editor's Preface**: This message was part of a discussion thread from the Oral History Association's email list (H-OralHist) and is printed with the author's permission. Elinor responds to another writer's query about the Livescribe Smart Pen as an oral-history recording device. Perhaps our roundtable members aren't interested in the Smart Pen, but Elinor's comment on proprietary software is pertinent to any discussion of "distant-future" accessibility.*

A quick look at the Livescribe Smart Pen website suggests that the recording format for audio (and hand-written text and images) is proprietary and requires use of the bundled software to play back, edit, or otherwise access. If this is the case—and it almost certainly is for a multifunction device of this size—the Smart Pen is completely inappropriate for oral-history interview recording. Oral-history interview recordings are created for the long run. They must be suitable for the archives, which means that they must be created in an audio format that has a good chance of being accessible in the future, even the very distant future. At present, suitable, (almost) universally accessible, and (more or less) open formats are WAV, or AIFF, or BWF. Proprietary recordings—audio or video recorded with devices that use a manufacturer's own, closely guarded recipe to create recording files—are at the mercy of the market and fashion. As soon as the company goes out of business or market tastes dictate a change of product, access to the original recording is lost. This happens about every hour-and-a-half in this era of dizzying technological change.

Some proprietary recorders and software provide conversion functions, with which the original, secret-sauce recording can be converted to ordinary ketchup (i.e., file in #@$ format can be converted to WAV). But the massive compression and other secret abstractions that created the original proprietary recording are not undone by this conversion, and the resulting audio-recording file is an exceedingly poor representation of the original interview event. All of this, and the fact that the microphone in the Smart Pen is certainly not up to high fidelity, make this gizmo an unlikely candidate for oral-history recording. Adorable—all but irresistible for many purposes, perhaps—but not a good choice for oral history.

Elinor Mazé
Baylor University Institute for Oral History