



SOUND SAVINGS: PRESERVING AUDIO COLLECTIONS



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THE SAVE OUR SOUNDS PROJECT

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The use of sound recording equipment in ethnographic fieldwork has been part of folklife research for well over a hundred years. In fact, the Library of Congress holds Jesse Walter Fewkes's wax cylinders of members of the Passamaquoddy tribe that he recorded in 1890—probably the first ethnographic field recordings (Fewkes 1890; Gray and Lee, eds. 1985:221-32). Since then, ethnographers have preserved the voices and performances of countless people from virtually all the world's cultures, and the American Folklife Center's Archive of Folk Culture is the largest repository in the country of this type of material. What makes the library's collection particularly valuable is that many of the field recordings are accompanied by other documents, making each recording a context-rich package of information. These documents range from notes written on cylinder housings, disc sleeves, and tape boxes, to recording logs and long narrative field notes, to correspondence and other manuscript material related to the ethnographer's fieldwork. As well, photographs, drawings, and other graphic material often accompany these documents, making the sound recordings part of a truly multi-media package of information.

There are, of course, many problems associated with the archival maintenance of multi-media collections, but among the most serious of these is the potential deterioration of all or part of these packages of information. No sound recording was meant to last forever and each recording format presents its own set of preservation issues. Likewise, paper and photographs need their own preservation treatments if they are to remain accessible to researchers. In answering these problems, the American Folklife Center has embarked upon a pilot digitization-preservation project called the Save Our Sounds Project.

Save Our Sounds is a joint initiative between the American Folklife Center of the Library of Congress and the Center for Folklife and Cultural Heritage of the Smithsonian Institution. The project is financed through the *Save America's Treasures Program* of the White House Millennium Council and the National Trust for Historic Preservation, and administered by the National Park Service (see National Park Service and National Trust for Historic Preservation n. d.). Because of legalities involved in government agencies applying for funds from other

government agencies, the Smithsonian is the receiver of monies from the National Park Service, and these funds are then dispersed to the Library of Congress through an inter-agency cooperative agreement. The grant totals \$750,000, of which the Library of Congress share is \$285,000.

This particular arrangement between three government agencies—the National Park Service, the Smithsonian, and the Library of Congress—was to a great extent uncharted territory. Establishing the details of the agreement, including procedures for fund sharing and expense reporting, was a time-consuming affair. Adding to the complicated nature of this agreement, both the Smithsonian and the Library of Congress were expected to raise matching funds in order to access the earmarked funds from the National Park Service. Here as well, agreements had to be established on procedures for shared fundraising, as opposed to the separate fundraising ventures of each institution.

The legal and bureaucratic components of this project extended from the announcement of the award in July 2000 to April of 2001, which may seem like an inordinate amount of time, but this type of inter-agency agreement was as much a pilot for possible future agreements as the project itself was a pilot for digitization procedures. Both the Smithsonian and the Library of Congress learned much about what was, and what was not, possible in a joint agreement and the Save Our Sounds Project will undoubtedly smooth the way for future shared initiatives.

The project itself called for the digital preservation of 8,000 recordings, with the Smithsonian digitizing 5,000 of these and the Library of Congress responsible for the other 3,000 recordings. What constituted a “recording” was kept fairly loose—it could be a two-minute cylinder or a two-hour tape—but it was generally agreed that the operative unit would be a single sound storage artifact. This artifact could be in any format. The Smithsonian’s selected recordings were instantaneous discs and audio tape recordings. The Library of Congress cast a wider net, including wax cylinders, instantaneous discs, wire recordings, audio tape (both open reel and cassette), DAT tape, and video tape (both open reel and cassette).

The recordings selected at the Library of Congress were all from collections held by the Archive of Folk Culture of the American Folklife Center. The strategy for selection involved a number of criteria, but the guiding principle was that the American Folklife Center would save collections, rather than individual recordings. The reason for this principle is that digitizing should be seen as a part of the processing schedule of any collection, rather than as a hunt-and-pick activity. After a collection has been donated, accessioned, inventoried, stabilized and rehoused, described and catalogued, the next processing step would, in ideal circumstances, be the digital preservation of the collection.

Obviously, each of these processing steps involves decision making, and each collection demands its own customized processing plan. Regarding digitization, the first question to ask is whether the entire collection should be digitized, or only a selected portion. Given a particular collection, certain administrative files, duplicate material, or published material may not be part of the digitized collection—in essence, for each collection a decision was made as to what part of the collection was “it” and what was not “it” from the digital point of view.

I will further describe this decision making below, but the first task of the archive staff was to select the collections that would be part of the Save Our Sounds Project. As I stated earlier,

there were a number of criteria for selection, ranging from the technical to the political.

- **Content.** The *Save America's Treasures Program* required that the material to be digitized should have American content. In effect, the recordings should be of American traditions or should reflect an American perspective on folklife. This criteria was political, in that the Americanness of any part of the archive is not normally a criteria for preservation. We are the Archive of Folk Culture, not the Archive of *American* Folk Culture, and our collections policy extends to traditional material from any of the world's cultures.
- **Historical or cultural significance.** All of our collections are culturally or historically significant, and it is a mug's game to distinguish between more and less significant collections. However, archive staff were aware that certain collections were in high demand, or were well known within the scholarly community, or were likely to gather a readership, once they were made accessible in digital form. This criterion was, of course, subjective and demanded that, in order to arrive at their decisions, archival staff needed to apply their experience and knowledge of the center's archival holdings, as well as the habits of researchers.
- **Present state of accessibility.** Another criterion involved how accessible a collection was, in practical terms, for use by researchers. As is standard practice, we do not serve original sound recordings, but many of the listening copies in our archive are of poor quality and are deteriorating. In many cases, we have no listening copies for collections that have been in the archive for years—making these recordings almost entirely inaccessible. As well, although we do serve original manuscripts and photographs, certain items may be held back from researchers because of their fragility or deteriorated condition.
- **Fragility and deterioration.** A major criterion was the physical state of the recordings in a collection. Some sound recordings are, by their nature, more unstable than others—and this is not always a matter of age. A 100-year old cylinder may be more stable than a 1970s audio tape.
- **Variety of sound recording formats.** Because Save Our Sounds is a pilot project, we were intent on trying out our procedures on a variety of formats. Thus, we selected collections that called for the digitization of cylinders, discs, wires, audio and video tapes, and born digital recordings.
- **Complexity of collections.** Again, because the project was a test of our capabilities, we chose collections of varied complexity. Some were composed of sound recordings and little else, while others were multi-media in the extreme, consisting of several kinds of recording formats, manuscripts, and images.
- **Diversity of material.** The project depended upon raising matching funds from outside sources. To maximize our chances of attracting donors, we understood the necessity of including a variety of kinds of collections that would appeal to different kinds of donors. It was important that we keep in mind the ethnic and national traditions represented by the collections, their genre, their region of the country, and gender issues, among other aspects of diversity.
- **Other political considerations.** In the case of one collection—the Pearl Harbor

Collection—which I will describe more thoroughly below, the decision was of a political and practical nature. After the September 11th tragedy, the center staff gathered to decide how we might respond. The result was a collection of audio and video recorded first reactions of Americans from around the country; these interviews were carried out by a number of ethnographers, students, and interested citizens. The project was inspired by a similar project carried out by the Library of Congress sixty years earlier. The day after the 1941 Pearl Harbor attack, Alan Lomax of the Library of Congress called on folklorists across the country to conduct man-in-the-street interviews in order to document first impressions of the event. The timeliness of these Pearl Harbor recordings—in light of the September 11th tragedy—combined with the knowledge that the Franklin and Eleanor Roosevelt Institute had an interest in the Pearl Harbor material and the American Folklife Center had recently initiated its high-profile Veterans History Project, made the Pearl Harbor Collection a good choice for the Save Our Sounds Project. Beyond its obvious historical significance, the collection would make the project that much more of interest to donors and to the media—and would give the entire project a heightened political profile that would benefit future fund-raising efforts.

No one collection received top marks in all of these criteria and deciding on which collections to choose for the project was a matter of balance and compromise—and the collective wisdom of the reference and processing staff of the American Folklife Center. With these criteria in mind, however, eight collections were chosen for the project:

◦ **Eloise Hubbard Linscott Collection.** Linscott was a collector of traditional music and song in New England. She began her collecting with a cylinder recorder, graduated to a disc-cutting machine, and eventually used a tape recorder over her collecting career which extended from the 1930s to the 1960s (Baker 1979). The variety of discs that she used included aluminum discs and lacquer discs with aluminum, glass, and paper bases that varied in dimensions and quality. In addition to approximately 450 sound recordings, her collection includes over 100 photographs and 6,000 pages of manuscript. All of this material is slated for digitization. Her collection also includes a copy of her book, *Folk Songs of Old New England* (Linscott 1939), that she modified with inserted photographs and notes—all of which makes it an “association copy” of the book—and this too is part of the digitization project. The collection also consists of hundreds of pamphlets, booklets, and other printed and published ephemera that fall outside of the scope for digitization. They are not “it” as far as the Save Our Sounds Project is concerned.

◦ **James Madison Carpenter Collection.** Carpenter was an American folklorist who went to the United Kingdom in the late 1920s to record sea chanteys, ballads, songs, dance tunes, and traditional dramas. He also recorded songs and narratives in the southern United States. His collection includes approximately 180 cylinders, 200 instantaneous lacquer discs, over 400 photographs in several formats, and over 13,000 pages of manuscript. All of this material, with the exception of some of the discs (which are partly transfers from the cylinders) is being digitized. Nine thousand pages of student papers that Carpenter kept from the classes he taught, however, are not scheduled for digitization. This collection has the potential of attracting researchers who have become aware of Carpenter’s work (Bishop 1999), but who have been frustrated by the poor quality and general inaccessibility of the current analog copies of Carpenter’s original materials. A team of British researchers has recently created an online catalog to the Carpenter collection that will greatly add to the value of the digital presentation of this material (Bishop et al. 2003).

- **American Dialect Society Collection.** In the early 1930s, the American Dialect Society conducted recorded interviews with New Englanders in order to gather samples of dialect (Kurath 1939-43; Dialect Collection for Folk Archive 1985). The result was approximately 880 aluminum instantaneous discs and 1,000 pages of transcriptions and notes—all of which are scheduled for digitization.
- **Don Yoder Pennsylvania German Collection.** In the 1950s, folklorist Don Yoder used a wire recorder to document Pennsylvania German songs and narratives. This collection is made up of 32 wire spools. Transcriptions taken from these wires have been used in publications (see Boyer 1951; Buffington 1974; and Yoder 1961), but the sound recordings have never been accessible to researchers.
- **Eleanor Dickinson Collection.** Eleanor Dickinson researched the Holiness and Pentecostal churches of Appalachia and in the process made 169 black and white, open reel video recordings of church services, tent meetings, interviews, and other aspects of mountain religion (Dickinson 1974; Maguire 1981). These videos are part of the Save Our Sounds Project, but not her 200 audio tapes and several hundred manuscript pages.
- **Zuni Storytelling Collection.** This collection consists of 222 audio tapes. Recorded in 1966 and 1967 in Zuni Pueblo, New Mexico, 19 Zuni elders tell over 800 stories, including seven or eight narrators relating hour-long *telapna:we*, a traditional form of Zuni folktale (for similar material, see Tedlock, 1999).
- **International Storytelling Foundation Collection.** This organization is responsible for the annual National Storytelling Festival, as well as other public events. The collection comprises a comprehensive documentary record of every year of the Jonesborough, Tennessee, festival that began in 1973 (National Association for the Preservation and Perpetuation of Storytelling 1991; Smith 2001). This collection consists of 5,221 audiotapes and DAT tapes, 1,161 videotapes, 27 CDs, 174 LP discs, 1,200 volumes of books, 18 binders of the serial *Yarnspinner*, and approximately 196,000 manuscript leaves. The Save Our Sounds project will digitize all of the 678 open-reel audiotapes and 400 DAT tapes, as well as any manuscript documents directly related to these tapes.
- **Pearl Harbor Collection.** As explained above, this collection has special political significance. Following the December 7, 1941 attack on Pearl Harbor and the subsequent declaration of war, the Library of Congress organized “man on the street” interviews around the country to document people’s reactions to these events. Alan Lomax and other experienced fieldworkers conducted interviews in Washington, D.C., Tennessee, New York City, and Texas, among other locations, on December 8–10, 1941, and again in January and February 1942. A number of these discs were used for radio programs during World War II (Gevinson 2002). The collection contains 77 acetate discs and 90 pages of manuscript material, all of which are part of the Save Our Sounds Project.

Digitizing the sound recordings in these collections follows a strategy worked out in consultation with the Motion Picture, Broadcasting, and Recorded Sound Division of the Library of Congress. Audio engineers will first examine the physical condition of the individual recordings and perform any necessary cleaning of surfaces and grooves. This is the only type of cleaning done to

recordings, which are otherwise recorded flat without any attempt to clean them electronically or enhance their sound. In this way, a recording is treated as an artifact—cracks, clicks, and all—with as much of its recorded information as possible available in digital form. Using the same philosophy, discs are recorded in stereo, even though they are mostly monographic recordings, since slightly different information might be found on one groove wall as opposed to the other.

Each recording is transferred to three digital files: one preservation master and two service copies. The preservation master is transferred at 96 KHz/ 24 bit word length as a WAV file. The high service copy is a 44.1 KHz/16 bit “CD quality” WAV file; and the low service copy is an mp3 file. All of these files are stored on Library of Congress servers and accessed from them. In addition, where no analog preservation master currently exists for a recording, we are transferring the item to 1/4-inch audio tape on 10-inch, slotless, NAB hub reels.

This digitizing strategy should allow the permanent storage of the recorded sound in a system where the digital file can be continually migrated to ever-newer hardware and software without deterioration. Of course, the size and capabilities of the Library of Congress allow for this system of server storage. Smaller repositories will probably have to rely on CDs or other physical data-storage formats that might, over time, also degrade or deteriorate.

There are exceptions to this strategy for certain types of formats. For example, there is no use creating a 96/24 master of a DAT tape, which is itself a digital medium; rather, a 44.1/16 WAV file serves as a master, while the mp3 copy is the service file. The Dickinson video tapes are also an exception. Because of the excessive amount of storage required for digital moving image files, Dickinson’s open-reel videos have been transferred to analog BetaSP cassettes and digital DigiBeta cassettes as preservation masters. The service file is an MPEG3 streaming video on the Library’s servers.

Because we conceive of a sound recording as a package of information, the Save Our Sounds Project also digitizes the following material that accompanies the sound recording.

- ° The cover or housing, if it contains substantial information about the recording—field notes written on disc sleeves and recording logs on tape boxes being two examples.
- ° An image of the recording itself, if it is of interest because of its deteriorated or broken state.
- ° Accompanying notes, such as paper log slips inserted in cylinders or pages of notes kept inside of tape boxes.

Completing the concept of a sound recording as a package of information, each item receives extensive metadata description. Carl Fleischhauer will explain in greater detail the metadata standards used, both in the Save Our Sounds Project and as part of the digitizing strategy of the Library’s Motion Picture, Broadcasting, and Recorded Sound Division. Using a Web-based Oracle database, each recording receives a metadata component of descriptive, administrative, and technical information. The master and service digital copies of the recording, images of the recording, its housing, or accompanying material are associated with this data to create the entire information package.

The result of this digitizing procedure is a virtual presentation of the collection. Researchers will be able to gain access to the collection in the American Folklife Center reading room, where they can listen to a recording, see associated images, read associated texts, and see all of the metadata related to the recording.

The ultimate goal, of course, is to make these collections available to everyone over the Internet. This goal has already been achieved in the case of one of the Save Our Sounds collections—the Pearl Harbor Collection. Because it is a relatively small collection that was originally generated by the Library of Congress, there were few problems in exhibiting the digitized sounds and manuscripts as one of the Library of Congress's American Memory sites (American Folklife Center 2003). These sites present significant bodies of material from different Library divisions, including collections from the American Folklife Center. In the case of the Pearl Harbor Collection, we were able to use the American Memory site to present a complete collection—in fact, three complete collections that make up the Pearl Harbor material held by the Archive of Folk Culture.

As other collections in the Save Our Sounds Project become available in digital form, they will be considered for some form of Web site presentation. Some, such as the Zuni Storytelling Collection, will probably remain restricted to the library's reading rooms, given the culturally sensitive nature of the narratives and performances in the collection. The same may be true of the Eleanor Dickinson Collection of religious practices.

The great song collections of James Madison Carpenter and Eloise Hubbard Linscott, however, will undoubtedly become available through a library Web site. Presenting these collections in such a way constitutes a form of mass media broadcasting, which involves at least one more step in the process of making these collections accessible. Because early collectors of folklore never sought release forms from those they recorded, the library is under the ethical and perhaps legal obligation to make a "good faith effort" to contact the original performers or their descendants to gain permission to broadcast their performances. This final step in the digital presentation of ethnographic material brings the American Folklife Center back to its core activity of involving tradition-bearers in building Library of Congress collections.

Bringing this project to fruition involves a great many players: the directors of the two centers at the Library of Congress and the Smithsonian Institution who, with their staff, developed the project, applied to the National Park Service, and who have continued to campaign for matching funds from outside donors; the donors themselves, who range from individuals to companies (such as Emtec Pro Media and the A&E History Channel) to foundations (such as the Grammy Foundation and the Rockefeller Foundation). The Leadership Committee of the Save Our Sounds Project has also played a role—especially through its Chairman, Mickey Hart—in finding support for the project. As well, many divisions of the library have been involved in the project (such as the Motion Picture, Broadcasting, and Recorded Sound Division; Financial Services; Office of the General Counsel; the National Digital Library; Contracts and Logistics Services; Automation Planning; and Information Technology Services); and outside contractors (such as the Cutting Corporation, UTA, and VidiPax) have been instrumental in digitization and metadata structure.

Librarians, archivists, sound engineers, information specialists, and other professionals have

also assisted this project, either indirectly through their writings and other communications, or directly through the advice they have given and the questions they have asked. Various workers on the Save Our Sounds Project have attended meetings and workshops—such as this one—in order to share their experiences and learn from the work of others. At present, there are no national or international standards for the digital preservation of multi-media, ethnographic archival collections. Large centers such as the Library of Congress and the Smithsonian Institution will undoubtedly play an important part in establishing such standards, but only in conjunction with other centers—large and small—who hold similar kinds of material.

The responsibility, therefore, of librarians is to keep lines of communication open, and to strive for systems and procedures that can be shared with or replicated at other centers. Not only will such openness prevent the re-invention of the wheel (which has already happened to some extent), but will facilitate the eventual linking of digitized collections among institutions, or even the sharing of sites and data among institutions.

The time frame for the Save Our Sounds Project extends from June 2000 to September 2004, at which time all of the 3,000 earmarked recordings at the American Folklife Center will have been digitized and made accessible to researchers. But the result of this project will extend beyond the digitization of this group of recordings. The practices and procedures developed through this project will become the benchmark for the further digitization of the holdings of the Archive of Folk Culture. Ultimately, the project will function, for better or worse, as a model of how ethnographic collections were digitally preserved at the beginning of the 21st century.

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