The Plot Thickens: Digitizing Reel to Reels Cannot Be That Difficult...

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The Problem

• Digitizing audio from reel to reels might not seem to be a difficult task, but it can be.
• Reel to reel tapes began to move into public use with AMPEX in 1946 and Scotch 3M in 1947.
• Each decade these change either physically or chemically.
• Today, as archivists attempt to archive these materials they encounter a variety of problems, from locating players, to finding a way to capture the sound coming from the machine, to finding ways that ensure the information on the tapes can be replicated to the web?
• These challenges will be addressed and the uploading of Tuskegee's tapes will be discussed.
The Reason for this project

• Working with a grant from Lyrasis/Mellon Foundation.
• This involved digitizing audio materials with accompanying photographs specific to Tuskegee’s participation in the Civil Rights Movement, and then working with Shared Shelf Commons, The Smithsonian Museum of African American History and Culture, and other programs throughout the South to increase the visibility and impact of these materials.

Decided to

• Put into place a plan for making our collections more visible
• Searched:
  – Online sites for ideas on how to be more effective
  – Developed relationships with a variety of people that have succeeded
  – Sought out monetary resources
What were our options?

• Materials in our collections
  — Documents
  — Artifacts
  — Photographs
  — Artwork
  — Audio and Visual
    • Reel to Reel
    • Albums
    • Cassette
    • 8-track

How could we make them pertinent?

• Current events
  — Street level demonstrations
  — Civil Rights
  — Politics
  — Historical precedence

Decided on our Civil Rights Collections
But...

Our Plan- Phase One

• Phase one of the plan included the processing of our important Civil Rights Era audio tapes and photos.
• The two year project: “Addressing the Un-Addressed: Tuskegee University’s Hidden Audio/Video Collections, 1965-1968,” culminated in the processing and preservation of our significant audio/video collections: including speeches (with corresponding photographs) given by important Civil Rights leaders.
• The materials in these collections highlight people and organizations that were instrumental in promoting the modern Civil Rights Movement, not just in Alabama, but nationally.
• Financed by a generous Lyrasis/Mellon grant, this grant culminated in August of 2016.
The Work Plan

1. Find the photos and audio/visual items
2. Determine how to digitize them:
   – Use vendors (very expensive)
   – Do it ourselves (we have done it before)
3. Decided to do it ourselves in order to maximize our output and minimize our cost
4. Process the collections
5. Digitize the materials
6. Place them on pertinent sites

Processing and Finding Aids
Researched and Acquired Equipment and Software

1. Researched used equipment, not very economic.
   Parts/repairs exclude

2. Researched new equipment, expensive, but reliable.
   - Denon makes the broadcast-oriented DN-3602RG 1/4" recorder for Asian markets. Nagra makes the 4.2 portable 1/4" recorder available in several different versions for film and radio use. Stellavox makes the modular TD-9 1/4" recorder and the portable SD-9 1/4" recorder.
   - Chose: Otari MX-5050 machine
     - Adjustments for a variety of tape reel sizes and material
   - Benchmark ADC1 USB Analog to Digital Converter
     - a 2-channel 192-kHz 24-bit analog-to-digital audio converter with an unprecedented feature set.

3. Audacity software
   - free, open source, cross-platform audio software for multi-track recording and editing.
   - Audacity is available for Windows®, Mac®, GNU/Linux® and other operating systems.

Did not realize that there would be more!

Problems...

- Due to the variety of tapes, both physical and chemical, led to a variety of outputs. Some slow, very slow, and some fast, very fast. Very few were acceptable.
- Copied to Audacity and adjusted as necessary.
Our Plan- Phase Two

• Working with the Council of Independent Colleges, in conjunction with Artstor/Shared Shelf, to place pertinent digitized materials on a common website that was made available to researchers throughout the world.

• This provided researchers an opportunity to study these materials and possibly deliver papers and discussions that will provide new insight into the modern Civil Rights Movement.

Opps!!

1. Uploaded to Shared Shelf and Website, but the audio would not play.
2. Why? Must be a problem on the Artstor side?
3. Programmers could not figure it out.
4. Dug a little deeper
5. Others having same problem. Problem on both our website and Shared Shelf.
6. Audacity was set up to use Itunes player because we were working on Macs.
7. Loaded metadata on front end and would not let Windows based PCs to open and play.
8. Removed metadata from front end and it worked.
Successfully Negotiated...

- Uploaded 175 of our more important reel to reel audios, in mp3 format
- Uploaded 100 accompanying images, in jpeg format
- Have had many requests for more information
Added to our newly designed website...

This has led to substantial recognition...

• Radcliffe Workshop on Technology and Archival Processing, April 4-5, 2016, Cambridge, MA
  — Two-day program that brought together scholars, archivists, and computer scientists for a problem-solving event.

• SHARE Curation Associates Program, July 13-15, 2016 Charlottesville, VA
  — SHARE is an open source project to maximize research impact by making a comprehensive inventory of research widely accessible, discoverable, and reusable.
Then...

- This partnership is a multiphase endeavor constituting several important projects that will be financed under its Office of Community & Constituent Services.

Our Website

- We have had over 950,000 hits in approximately 8 years.
- 45% from abroad.

Making things better for our fellow man...
Although we have come a long way...

- Still have a long way to go
  - Approx. 2000 VHS Tapes
  - Approx. 500 more reel to reel audio tapes
  - Approx. 150 more video reel to reels
  - Approx. 1000 mini hi-8
  - Approx. 500 Beta
  - Approx. 175,000 more images

Lessons Learned: Plan Your Plan

- Realize what you have and its importance
- Decide how you can leverage your important materials to make your archives and school more visible
- Develop a multi-phase, multi-year plan
- Follow through

Know your collections
Thank You!

Questions?