Recital Preservation: before they fade away

DIGITAL FRONTIERS 2016
22 September 2016
Houston, Texas
Shepherd School of Music

- Formally opened in 1975
- Currently over 300 faculty and students
- Thousands of performances recorded and collected in multiple formats over the years
History

- Earliest recordings (1975-1983) of performances were reel-to-reel format.
- Deemed at high risk of deterioration, Fondren Library and the Shepherd School of Music collaborated to place digitized performances from reel-to-reel format in the institutional repository in 2006.
- Programs from Shepherd School performances are digitized and online in the institutional repository.

- The archive receives about 30 views a month from the US and overseas.
- Patrons include Rice University alumni, former faculty, and music students from other institutions.
Performances in IR
Preservation Issues

• Library holdings of Shepherd School audio cassette tapes (1983-2002) are becoming at-risk (reasonable useful life = 20 years)
• Digitization will improve access and discovery (cassettes are not circulating)
• Pilot project focusing on a single year to determine feasibility of digitizing the larger collection, including estimating needs
Pilot project work plan

• Compile inventory of cassettes to be digitized for one calendar year
• Document copyright concerns and address possible scenarios
• Test and refine digitization workflows
• Determine file storage needs for master and access files
• Timeline: summer 2016

• Funding for the pilot project: $0; utilize existing:
  ▪ Storage infrastructure
  ▪ Staff
  ▪ Equipment
Copyright challenges

• Current practice is to require students to sign a release form for performances; this practice was not in use for the performances in the project years

• Performances were conducted for academic purposes; there is no commercial use

• Rice University pays blanket license fees for copyrighted music to BMI and Ascap

• Low risk of copyright issues for cassette performances since scope is limited to 1980’s-2002

• Rice University legal counsel advised that placing legacy recordings online should not require special licensing or permissions

• If a complaint occurs the policy is for the performance to be taken down
Inventory for pilot year 1990

• Subject Specialists:
  ▪ Music Librarian, primary liaison to Shepherd School of Music
  ▪ Music Cataloger

• Physically count the tapes for the calendar year
• Compare to the list of the print program collection
• Check physical condition of tape
• Capture:
  ▪ Call number
  ▪ Tape Type
  ▪ Tape Length
  ▪ Sound Type
  ▪ Condition
  ▪ Performances of special interest
Digital Curation Lab

- Mac Pro workstation set up for cassette digitization by Fondren IT (includes storage for project)
- Cassette tape decks from Digital Media Commons
Requirements

- Audacity software
- Key is that we are capturing cassettes
- Master: WAV format, 16 bit/44.1 kHz (cassette tapes typically do not store higher than CD quality audio)
- Access: MP3, delivery via streaming server at 320 kbps
Audio digitization workflow & training

- Metadata Coordinator prepared workflow and trained team; bulk of the reformatting done by:
  - Archivist
  - Access Services staff

- Use Audacity to digitize performances
  - Monitor volume to avoid clipping
  - Remove silence between tape sides
  - Normalize audio to -0.5 dB
  - Perform spot checks of audio at 15 minute intervals
Workflow

• Remove the write protection tabs on the tapes
• Match each tape to (label title) to performance program (PDF)
• For any tape without a corresponding performance program (PDF), enter descriptive metadata into worksheet
• Do NOT use DOLBY noise reduction (NR) functions
• Make sure tape is rewound to beginning of side A

• Determine a reasonable audio level prior to digitization
• While tape is digitizing confirm performance metadata in tracking spreadsheet (compare to online program PDF)
Embedded metadata based on FADGI

- WAV files (BEXT & INFO-CHUNK)
  - Description
  - File Originator
  - Creation Date
  - Digitization History
  - Artist
  - Copyright
  - Genre
  - Medium
  - Name
  - Subject
  - Software

- MP3 files
  - Title
  - Creator
  - Date
  - Genre
  - Copyright note
Metadata (IR)

- **Metadata for sound recordings**
  - dc.title
  - dc.date
  - dc.contributor.performer
  - dc.contributor.composer
  - dc.description.abstract (playlist)
  - dc.digitization.specifications
  - dc.format.digitalOrigin
  - dc.format.extent
  - dc.type.dcmi
  - dc.type.genre

- **dc.subject (specific to Shepherd School performances)**
  - Graduate recital
  - Undergraduate recital
  - Undergraduate and graduate recital
  - Guest artist recital
  - Guest artist lecture
  - Graduate lecture-recital
  - Faculty lecture-recital
  - Faculty recital
  - Children concerts
  - Ensemble
Storage

- Access files (MP3s) can be stored in the public-online repository (backed up by robust local systems)

- Master WAV files in offline storage /cloud storage to be determined
Project status and remaining steps

- 161 known performances in 1990
- 63 performances with audio cassettes
- Digitization completed
- WAV master files: 45 GB
- 71.3 hours playing time

- Batch processing final QC review and MP3s
- Ingest audio files into institutional repository
- Storage of cassette tapes
- Recommendations for larger collection
### Item Details

#### Item Information
- **A Look Inside**
- **Catalog Record**

#### Title:
- Senior recital [sound recording]

#### Author:
- Arado, Renata, instrumentalist.

#### Summary/Contents:
- Look Inside

#### Publisher:
- Rice University,

#### Pub date:
- 1990.

#### Physical Description:
- 1 audiocassette : analog, stereophonic, Dolby processed

#### Item info:
- 1 copy available at Fondren.

#### Contents:
- Partita no. 2 in D minor / Johann Sebastian Bach --
- Sonata in A minor, op. 105 / Robert Schumann --
- Sonata no. 3 for solo violin / Eugene Ysaÿe --
- Microtono (1989) / Joan Guinjoan -- Havanaise, op. 93
  / Camille Saint-Saëns.

### Individual Holdings

#### Call Number:
- CASS 901027

#### Item Format:
- Cassette

#### Location/Due Date:
- Fondren - Circulation Desk - 1st floor (Nearby items on shelf)

---

- **Current catalog record for each performance**
  - Location of physical cassettes to change from access services to archives
  - Missing tapes identified during project
  - Deaccession of cassette tapes?
Final Goals for Project

• Immediate goal: to work through the backlog of performances on cassettes
  ▪ Digitization of remaining cassette performances through 2002
  ▪ Determine treatment of cassettes once the performances are digitized
  ▪ Evaluation of long-term storage options for master WAV files

• Additional goal: planning for preservation and providing online access to 344 performances on CDs (2002-?)
  • Consider methods of making interactive playlists in IR
  • Student worker with music background to enrich metadata with LOC composer names
Project Team

Mary Brower: Music Reference Librarian
Scott Carlson: Metadata Coordinator
Keith Chapman: Music Cataloger
Arnold Chee: Fondren IT
Dara Flinn: Archivist/Special Collections Librarian
Amanda Focke: Assistant Head, Special Collections and Archives
Sue Garrison: Access Services Manager
Ying Jin: Application Programmer
Monica Rivero: Digital Curation Coordinator

Access Services Staff:
Michael Chiles
Kevin Rivas
DaVian Smith
Heidi Vieira
Andrew Vieira
Thank you!

Dara Flinn, CA, DAS
Archivist/Special Collections Librarian
Woodson Research Center
dflinn@rice.edu