Education & Training for the A/V Archive of the Future

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Education & Training for the A/V Archive of the Future

- Why can’t we continue to teach the same way and the same content?
- In what ways do we need to do things differently?
- Examples from NYU’s MIAP Program

Our training needs to change to match this

- Technical skills
  - For managing born-digital and digitized works (DCDM, DCP, file formats, compression schemes, migrations, bit-flipping, digital repositories, …)
  - For developing new workflows
- Diversity skills (in content and in involving communities in metadata development, descriptive practices, and delivery/access decisions)
- Agility in adapting to a constantly changing environment
- Creativity in finding new ways to involve users (particularly in helping us deal with increased scale of cataloging)
- Project Mgmt skills

The need for basic technical and administrative/policy knowledge about many different areas

- analog and digital technical skills
- metadata
- copyright
- workflows
- …
21st century practices, approaches, and media types

- Cross-expertise collaborative work
- Interactive media
- Engagement with disenfranchised communities
- Cellphone digital videos, Police body-cam videos, Periscope, YouTube, Facebook (the “amateur films” of today)-

Collection Assessments

- Personal Collections of Media Artists, Small Distributors
  - Coleen Fitzgibbon Films- Spr’99
  - Elaine Summer Collection- Spr’09
  - Cory Arcangel + BEIGE- Spr’09
  - Laurie Anderson- Spr’08
  - Sonic Youth Video- Spr’08
  - The Barbara Kopple My Generation Collection- Spr’09
  - Bob Stein/Voyager Inc. Collection Assessment- Spr’10
  - Art21 Archive- Spr’07 Third World Newsreel- Spr’05
  - Willoughby Sharp Archive Collection Assessment - Spr’10
  - Fred Barney Taylor Collection- Spr’10
  - On Television Collection- Spr’10
  - John F Kennedy (Gartenberg Media)- Spr’08

Collaboration

- Students engage in about one dozen assignments involving collaboration with collections or individuals
- Here’s just a subset of collaborations on their Collection Mgmt assignment-

21st century important “soft” skills-
Collection Assessments
--Collections Housed in Arts Organizations

- Dance Theatre of Harlem Collection Assessment - Spr'10
- The Kitchen - Spr'08
- Robert Haller Collection (Anthology Film Archives) - Spr'07
- New Museum of Contemporary Art - Spr'07
- Filmmakers Coop - Spr'07
- Flaherty Film Seminar - Spr'07
- Eyebeam - SarSpr'07
- Frank Kuenstler Films (Anthology Film Archives) - Spr'07
- Cabinet Magazine Digital Content Archive - Spr'08
- Hemispheric Institute - Spr'08

Collection Assessments
--Collections Housed in Libraries, Archives

- Maryland Historical Society - Sp'09
- Mogull Brothers (Library of Congress) Collection - Spr'09
- California State University, Fresno - Henry Madden Library Special Collections - Spr'09
- 16mm Films at Brooklyn Public Library - Spr'07
- John Watts Papers (Fales Library) - Spr'07
- Richard Foreman Papers (Fales Library) - Spr'07
- World Music Institute Audio/Video Archive - Spr'06
- Teo Musco Collection (New York Public Library-Rodgers/Hammerstein) - Spr'06
- Red Hot and Rhapsody Music Collection (Fales Library)
- American Museum of Natural History Video Collection - Spr'08
- Hadassah Collection - Spr'07

Working in Groups/Teaching in Groups
Project Management -

Preservation Plan for a small Video Archive

L.A.V.A.--Phase 1
- Risk assessment and prioritization scheme.
- Improve environmental conditions:
  - Cataloging: consider IMAP template.
  - Start a new access number system.
- Remove cardboard slipcovers.
- Move the Masters tapes from besides the air conditioner and the
  window.
- Separate working space from the collection shelves
- Try not to eat or drink near the tapes.
- Sample tape inspection and rewinding schedule.
- Dub Betacam masters.
- Stock on VCRs and VHS tapes.
- New items: keep track of provenance. Have a tape and documentation
  inspection routine.
- Make sure all tapes can be played back.

L.A.V.A.--Phase 2
- Long-range preservation plan.
- Natural disaster plan.
- Insurance.
- Climate controlled storage.
- Regular tape inspection schedule.
- Plan on start collecting DVDs and migrating the most valuable
  VHS to DVD or other digital format.
- Digitizing plan for their Betacam Masters.
- Start collecting digital masters.
- Paper-based documentation preservation plan.

The Jerry Jofen Collection
At Anthology Film Archives
Priorities

- **Cataloging, General**: A full inventory of all film and audio elements should be created.
- **Intellectual Property Rights**: Anthology should draft letter of agreement, and have it signed by Ellen Jofen.
- **Micro environment, Film**: All elements should be housed in archival containers as soon as possible.
- **Micro environment, Audio**: Audio elements should be stored separately in acid-free individual archival boxes.
- **Film element preparation**: Leader, labeling, wind and inspection.
- **Further Film element recommendations**: Cleaning, Compacting, Processing
- **Audio element preparation**: Identify and remaster any unstable or deteriorating elements to new stock ½” reel-to-reel, and/or RWY digital file stored on server or hard-drive.

Jerry Jofen Collection:

**Workplan**

- **PHASE 1**
  - The steps to improve the storage, housing and intellectual control of the collection are:
    - 1. Inspection/Rehousing & Labeling/Inventorying & Identification
    - 2. Drafting letter of agreement
    - 3. Cleaning moldy elements

- **PHASE 2**
  - The steps to be taken towards a long-term preservation plan and an access policy are:
    - 4. Re-format high-risk items (particularly mag strip films, and audio elements in danger)
    - 5. Processing exposed film and slides

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### TASK | WHO | WHEN | TIME
--- | --- | --- | ---
Audit report for housing, inventorying and labeling | Intern | Month 1 | 3 weeks
Clean storage areas | Intern | Month 1 | 3 weeks
Monitor stability and relative humidity | Intern | Month 1-3 | Checking/mo
Micro environment | Archivist | Month 1 | 3 weeks
Re-weighing | Archivist | Month 1 | 3 weeks
Film tape inspection and cleaning | Archivist | Month 1-3 | 4 weeks
Log-keeping, Labelling, Marking | Archivist | Month 1-3 | 4 weeks
Research into Archival Techniques | Intern | Month 1-2 | 4 weeks
Identify items in need of laboratory work | Archivist | Month 1-4 | 4 weeks
Quality Control | Archivist | Month 1-4 | 4 weeks

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### Budget

The total budget cannot be estimated, as it can only be determined once the number of items requiring re-housing and in need of preservation laboratory work is determined.

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**Speaking in Public**

- Preserving the Legacy of Public Access Television
  - Artists, Activists, Neighbors and Stripers
Engagement with Professional Associations

Networking with other professionals (both question-answering and collaboration on new projects)
AMIA Wkshp @ ALA

Engagement with Professional Associations

Networking with other professionals (both question-answering and collaboration on new projects)
APEX Patrimonio Filmico Colombiano
Planning and carrying out public events, particularly those that promote A/V archiving/preservation (WAVHD)

Planning and carrying out public events, particularly those that promote A/V archiving/preservation (HMD)

Planning and carrying out public events, particularly those that promote A/V archiving/preservation (HMD)
Engagement with larger public, particularly at times when they really need it (N.O. 2005)

Engagement with larger public, particularly at times when they really need it (Sandy 2012)

Engagement with larger public, particularly at times when they really need it (ALA/Occupy)

Engagement with larger public, particularly at times when they really need it (Occupy)

THE ACTIVIST ARCHIVISTS
COMMUNITY ARCHIVING AND THE OCCUPY WALL STREET MOVEMENT

What will happen to all of the audio, video and physical materials we’ve collected in the past six months? What will be the impact on them? How will we ensure that it is preserved for future generations?

JOIN THE DISCUSSION
and come learn about some of the initiatives currently underway.

In conjunction with the New York University Libraries, “Archivists, Activists and the Occupied Archive” will present a panel discussion to discuss and preserve materials related to the movement.

FREE AND OPEN TO THE PUBLIC
APRIL 24, 6 PM
NYU MICHIELSON THEATER
221 BROADWAY, 6TH FLOOR, ROOM 448.

Engagement with larger public, particularly at times when they really need it (Occupy)
Engagement with larger public, particularly at times when they really need it (XFR STN)

Important 21st century “soft” skills
- Collaboration
- Working in Groups/Teaching in Groups
- Project Management
- Speaking in Public
- Engagement with Professional Associations
- Networking with other professionals (both question-answering and collaboration on new projects)
- Planning and carrying out public events, particularly those that promote A/V archiving/preservation
- Engagement with larger public, particularly at times when they really need it

Digital Collection Technical Skills
- Obvious Digital Library knowledge (OAIS/SIP/DIP, Audit Certification, File Format Validation, ...). But also learning applications and command-line skills for:
  - Creating and validating check-sums
  - Extracting metadata from file headers
  - Managing bulk ingest, ...

Digital Preservation Tools Training

Digital Preservation Tools

Checksum Education
Checksum Education

Batch Processing Checksums

Extract Metadata from Digital File Headers

Extract Metadata from Digital File Headers

Extract Metadata from Digital File Headers

Checking if well-formed PDFs/XMLs were received
Exercises/Tools for File Identification

File ID Exercise

1. Unzip the DROID folder using `unzip droid-6.01.zip -d droid`
2. Change to the droid directory
3. Launch DROID using `sh droid.sh`
4. Add sample files by clicking on the green Add button, then to DROID by going to home/miap/Desktop/samples, click OK
5. Click Start
6. What does it display?
7. What doesn’t it display?
8. Is file ID enough?

Interdisciplinary; students need to

- learn the context in which each of these cultural artifacts were made
- know the history of changing formats
- need to be scientists and technologists who understand:
  - the process of color change
  - how certain stocks become too brittle to provide a flat focus for copying
  - how magnetic particles are laid on videotape and what causes the various types of deterioration
  - how different computer files link and interact, and how compression algorithms cause various types of loss so that they can anticipate preservation problems of compressed and hyper-linked digital works
- strong organizational and classification skills so that they can manage these collections and help others find things they want in them.
- administrative skills to manage large preservation repositories (whether they be film, video, digital, or others).
- understand that preservation does not exist in a vacuum, and that they may have to become activists to prevent outside political forces from inadvertently trumping on our ability to preserve

Competencies

- Handling film, video, new media, and understanding how these artifacts are made
- Collections assessment, risk assessment
- Selection & appraisal
- Collection management (labeling, storage, cataloging)
- Repair and transfer
- Navigating through different institutional cultures
- Programming and exhibition
- Budgeting, justifying projects, and grant-writing
- Donor relations and intellectual property
- Research & access
- Scholarship
- Historical Research

Where do our students go to work?

Conventional Film Archives

- Academy of Motion Picture Arts and Sciences (Print Trafficker)
- Anthology Film Archives (Archival Consultant)
- Cineteca Nacional de Mexico (Archivo Memoria Coordinator)
- Moving Image Archive, Indiana University Libraries (Film Archivist)

- Museo del Cine, Buenos Aires, (Director)
- National Film Archive, Philippines (Director)
- Northeast Historic Film (Technical Services Director)
- Pacific Film Archive, UC Berkeley (Film and Video Collection Assistant)

But also other types of institutions…
### Libraries
- Columbia University Libraries (Digitization and Preservation Project Manager)
- Harvard University Library (National Digital Stewardship Resident)
- John Hopkins University (Media Preservation Specialist)
- Northeastern University Libraries (Digital Production Coordinator)
- Northwestern University Library (Moving Image and Sound Specialist)
- New York University Libraries (Head, Media Preservation)
- New York Public Library (Media Preservation Coordinator)
- University of Baltimore, Langsdale Library (Audiovisual Archivist)
- UCLA Library (Digital Archivist)
- University of Kansas Libraries (Audio Visual Preservation Specialist)
- University of Virginia Library (Audiovisual Conservator)
- Washington University Libraries (Film and Media Catalog and Preservation Archivist)

### Museums
- American Museum of Natural History (Public Programs Associate)
- Denver Art Museum (Assistant Conservator)
- Exploratorium (Coordinator, Cinema Arts Program)
- Guggenheim Museum (Computer Based Art Fellow)
- Hirshhorn Museum (Time Based Media Archival Specialist)
- Los Angeles County Museum of Art (Time Based Media Technician)
- Museum of Modern Art (Collection Specialist)
- Museum of the Moving Image (Registrar)
- National Aquarium (Visual Media Archivist)
- Smithsonian American Art Museum (Media Conservator)
- Smithsonian Institution (Digital Video Specialist)

### Non-Profit Broadcast Organizations
- Democracy Now! (Digital Archivist)
- Pacifica Radio Archive (AACIP Cataloger)
- PBS (Archivist)
- WNYC Radio (Archives Manager)

### Other Non-Profit & Government Organizations
- American Folklife Center (Digital Assets Manager)
- Appalshop (Archivist)
- Bay Area Video Coalition (Preservation Technician)
- Carnegie Hall (Digital Asset Manager)
- Human Rights Watch (Sr. Manager of Archives & Digital Systems)
- Library of Congress (Digital Projects Coordinator)
- ONE National Gay and Lesbian Archive (Archivist)
- Roundabout Theatre Company Archives (Project Archivist)
- StoryCorps Oral History (Historias Archive Coordinator)
- United Nations (Audiovisual Archivist)

### Avant-Garde/Experimental Collections
- Kramlich Collection (Conservation Associate)
- The Kitchen (Archivist)
- Canyon Cinema (Archivist)
- Electronic Arts Intermix (Media Collection Manager)
- Sonic Youth (Archivist)
- Vito Acconci Studio (Archivist)

### Private Sector
- AVPreserve (Partner and Senior Consultant)
- CNN News Archive (Archivist)
- Collector Systems, LLC (Registrar)
- Mediant (Account Manager)
- Rist Games (Archivist)
- Second Run Media Preservation (Associate Director)
- Towers Productions, Inc. (Chief Creative Officer)
- Ugen Media (Business Development)
- US Tennis Association (Archivist)
Where do our students go to work?

Personal Archivist

- Parkwood Entertainment (Archive Director)
- Gloria Steinem's Office (Archival Assistant)
- Todo Mundo [David Byrne Archive] (Audiovisual Archivist)

Important Pedagogy-

- Most projects and coursework are “useful”
  - either help a Collection move forward, or contribute useful information to the field
- Project-based learning

Engagement with Real situations

- Work on real problems facing real collections
  - Copyright, collection assessments, preservation projects, …
  - APEX, Community Archiving (like the CAW on Sat with the CineVision collcit at IBON working with UP-LIS)

Project-Based Learning

- Students complete well over a dozen intensive projects
- Almost all projects involve doing real work with real collections, the results of which will be used by those collections’ managers
- Most projects involve research, planning, and executing phases
- Vast majority of projects are group projects (group-sourcing instead of crowd-sourcing)
- All projects involve developing time-lines, division of labor

Project-Based Learning: Where does the Learning come from?

- All projects have a variety of constraints (time, money, or other resources) and students must make trade-offs between the ideal and what can be accomplished within the constraints
- Most projects have plans that are both reviewed by collection managers and critiqued by instructors
  - Reviews often happen iteratively throughout the project
  - Projects, methods, challenges are formally presented to fellow students (so students learn from each others’ projects)
- Much of learning in group projects comes from peers (Wisdom of the group — group-sourcing instead of crowd-sourcing)

Examples of 2 classes/topics

- Students take an entire course on © and another on Collection Management in their first year, then those skills and concepts are integrated into the curriculum and projects for a variety of subsequent courses
Copyright Class Syllabus

Copyright, Legal Issues, and Policy

Faculty: Nina Gleerup, Principal Legal Counsel to the Library and Archives of Canada, Department of Justice, Canada, New York, NY.

Educational Objectives:
1. Basic conceptual understanding of copyright law
2. Knowledge of copyright issues affecting preservation, restoration, exhibitions, and repurposing.
3. Familiarity with both professional and legal rights and responsibilities around preservation and restoration.
4. Understanding of the kind of policy and intellectual property management issues facing moving image repositories.

Grade based on research paper and group copyright audit and risk assessment project:
- Class participation 10%
- Paper (at least 5 double-spaced pages) on topic 50%
- Audit Project oral presentation and written report 40%

Copyright Audit

- Sign non-disclosure agreement
- Go through boxes of records related to a particular television episode from the past, including correspondence, letters of agreement, licenses, union contracts, etc. for all parts of the episode (original footage, clips, sounds, music, narrators, talent, etc.)
- What might prevent re-showing the episode on TV, DVD, internet, etc. and what are the risk levels for each impediment

Collection Management 2011 Assignments

- Short paper (4-5 pages) (10%). Compare collection and acquisition, appraisal, and retention policies at two archives. How can an organization’s mission impact its policies? Due: February 14.
- Fales collection assessment (20%). Due: 3/3/2011.
- Funding request (20%). (1) One-page summary “pitch” (due 5/9/2011) (2) Powerpoint presentation in class (last 2 weeks of semester)

Situated within a series of different existing Traditions and Disciplines

- cinema studies
- museum studies
- archival studies
- library and information science
- engineering,
- cultural studies
- art history
- Even though Program is housed within Cinema Studies Dept

Rhizomatic Collections Emphasized

- Orphan/neglected works, newsreels, home movies, found footage, artistic works, community works, … (everything but mainstream commercial works)
- Collecting organizations with less resources (community organizations, organizations in poorer countries, collectives, …)

Orphans Film Symposium

Thanks to ETE, NTU, UV, and all who made the 9th Orphans Film Symposium a success.
3 days, 6 nights, 75 minutes, 200+ screenings from 25 countries. Reports and documentation will be added to the website in the weeks following the event.

Orphans, a film report from the screening.
Art’s a summary in one from NTU Cinema Studies.
Media Types (both analog & digital)

• Film
• Video
• Personal digital collections
• complex media (installations, interactive, web-based, games, ...)

Involvement in the latest research initiatives

• Disaster Preparedness and Recovery (2005-)
• Preserving complex works of art for museum settings (2005-2015)
• Preserving Born-Digital Public Television (2005-2010)
• Pushing metadata gathering upstream into the production process (2007-)
• Issues in preserving large corpora of crowd-sourced cellphone videos from social movements (2011-2016)
• Preserving and sharing raw scientific video data (2012-)
• Copyright guidelines for VHS Video At Risk (2012)
• Outsourcing reformatting for VHS Video At Risk (2013)
• Archiving streaming media from Websites (2016-2018)

© Activities NYU has worked on

• Current study of commercially distributed VHS tapes, their uniqueness, and preservation reformatting guidelines
• Studies of international laws that inhibit moving image preservation
  - InterPARES study of laws inhibiting digital preservation
  - IFLA survey of mandatory registration of moving image material
• Study of massive underlying rights inhibitions within a single public television program (as much as 350/hr)
• Lucas Hilderbrand (now UCI), Inherent Vice: Bootleg Histories of Videotape & Copyright

NYU Mellon Video At Risk Grant:

Video replacement issues

• Expands on the previous grant findings that many VHS tapes were rare and difficult to replace
• examine routine maintenance, preservation, and © issues in circulating video collections

Personal Digital Archiving 2015

http://personaldigitalarchiving.com/
NYU Mellon Video At Risk Grant:

Examine routine maintenance, preservation, and © issues in circulating video collections

- Research "scarcity" of videos originally purchased by libraries in commercial market (examine OCLC records)
- Research "replaceability" of videos (test several procedures for determining out-of-printness)
- Develop checklist procedures for determining whether replacement copy can be legally obtained (Orphan Works type procedure), and explore legal justification for digitizing without prior permission
- Develop a model procedure to follow and identify trade-offs in preservation reformatting of library videos into digital (quality, file format, CODECs, QC, line 21,...)

Research:

Preserving Digital Public Television

- Preserve a broad set of elements (including ancillary material)
- Life-cycle mgmt (add metadata as soon as a clip comes in)
- Establish a community of stakeholders, working together for preservation (stations, university, librarians, journalists, historians, producers, scholars, …)
- Build an OAIS Server
- Explore appropriate file formats, wrappers, METS extensions
- Develop sustainable business model

Infant Action Lab Research Data

Archiving Composer Websites 2016-
### Education & Training for the A/V Archive of the Future (1/2)

- Project-based learning
- Exercises should be real-life and useful to some external collection or individual
- Collaboration
- Working in Groups/Teaching in Groups
- Project Management
- Speaking in Public
- Engagement with Professional Associations
- Networking with other professionals
- Planning and carrying out public events, particularly those that promote A/V archiving/preservation
- Engagement with the larger public

### Education & Training for the A/V Archive of the Future (2/2)

- Content needs to reflect much more diversity (in media, format, who created it, ...)
- Archivists/Curators are not the sole authorities; need to work cooperatively with reflected communities to describe and provide access to those collections
- Need to move away from hierarchical nodes of authority to more networked situation with grassroots participation (rhizomatic & weeds)

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