


Audiovisual and Multimedia Section  
Training workshop  
AV Collections for non-specialist librarians  
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**Access:**  
on site, online  
metadata  
access formats

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## Outline-

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- Introduction
- On-site access
- Online access
- Metadata
- Access formats

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## Introduction-

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- Preservation and access : associated concepts
- Different kinds of access:
  - to physical object
  - to a particular part of an object (one song, a scene)
  - to a file on a computer or on the web
  - subject access, intellectual access
- We will look at access on site, online, metadata for access, and formats for access

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## On-site access

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- For audiovisual materials, you need space and equipment
- Space:
  - costs money
  - is the space available needed more for other purposes?
  - staff need to manage, supervise, help with machines
  - a/v materials have sound, so users need cabins or earphones (alternately: they bring their own)
- Unlike books, all a/v materials require equipment for consulting

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## Equipment

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- What equipment you have depends on:
  - what a/v materials you have
  - what you can afford to buy & maintain
- Using the equipment:
  - staff mount the a/v materials for viewing/listening
  - users mount their own materials, staff train them
  - cleaning, reporting malfunctions, repairs
  - service contracts or trained staff

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## Viewing / listening

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- Preservation copies, viewing copies:
  - what kind of collection you have (deposit, public)
  - series of generations: master, sub-master, viewing copy
  - managing these copies, responsibility for making them
  - master copies should never or rarely be projected
  - no master = periodically replace viewing copy

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## Digital copies

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- Digital materials have many advantages:
    - copies are easy to make
    - quality is maintained from one copy to the next
    - same equipment (a computer) for movies, video, sound
    - less training, users may already know how to use
    - you can use a web interface
    - computers relatively cheap to buy, maintain
  - Several options for organising
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## Options for organising digital copies

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- Server
    - copies are stored together, file format can be standard
    - security easier to maintain
    - users never touch the materials, can't damage them
    - costs lower than managing analogue materials
  - Hard disk
    - relatively small, inexpensive
    - storage costs relatively low (<\$100/Terabyte)
    - reliable, less handling, less damage than DVDs
  - DVD (next slide)
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## Options for organising digital copies

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- DVD
    - relatively cheap
    - buy commercial films, music
    - if you hold the rights, record your own films, sound
    - careful labelling, protection necessary
  - For all organising options:
    - work out a timetable for replacing equipment
    - organise servicing the equipment
    - make sure staff are trained adequately
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## Online access

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- If you already have a server for on-site access, you can use it for online access too
  - A separate server is desirable (better security)
  - One staff member as system administrator, or a service contract with a company
  - Integrate with the library web site
  - A decision: public, or members only?
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## Similar to in-house digital a/v

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- If you already have digital copies for in-house use, most of the issues are the same
    - buying and maintaining equipment, materials
    - procedures for making copies
    - staff and user training
    - file formats determined by access policy
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## Good for statistics

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- Online access will improve statistics:
    - number of users
    - number of times each document is consulted
    - collect data on user satisfaction
  - Provide arguments for budget, service:
    - increased visibility
    - available any time, day or night
    - lower equipment, service costs = more acquisitions?
    - free up staff for other tasks
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## Learn and set up

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- This is no longer new territory
  - Lots of models available
  - Lots of information about what to do and what NOT to do
  - Experience of other libraries, colleagues helps you avoid mistakes
  - Choose a good project leader to ensure success
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## Metadata

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- Importance of metadata
  - Kinds of metadata
  - Costs
  - Compromises
  - Metadata for access
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## Importance of metadata

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- Metadata (information about the a/v materials you collect) is essential for:
    - knowing what you have (inventory, catalogue)
    - finding anything (storing, retrieving)
    - communicating with users, colleagues, systems
    - making acquisitions, using, preserving
    - comparing different versions, recordings
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## Kinds of metadata

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- Many, many kinds exist
  - What you need depends on what you collect, who uses the collection
  - What you can afford depends on staff, budget
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## Metadata services

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- For films & tv on DVD, catalogue services like OCLC have the records
  - Also for commercially recorded music
  - Staff may have to adjust these records
  - Original cataloguing for other materials
  - Simple indexing often ok (genre, audience, general subject categories)
  - Can users help, for example by adding tags?
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## Costs associated with metadata

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- Lots of initial work to decide what to use
  - You start from zero, expensive at first
  - Cost for updating, adding new metadata as needed
  - Don't add more than you need
  - Automate as much as possible
  - Read, talk with colleagues elsewhere about developments
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## Compromises

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- Formerly, rigorous standards
  - Now, much more flexibility because of the web
  - Cataloguers are rigorous by nature, but detailed cataloguing is expensive now
  - How much or how little do you need?
  - Are simple standards like the Dublin Core ok for your collection?
  - Is simple indexing good enough?
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## How things have changed

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- Formerly, fewer photos, more detailed metadata
  - Now, digital photos easier to take, too many to catalogue individually
  - Lots of commercial movie and tv production, but also YouTube, Vimeo, Daily Motion, etc.
  - Musicians no longer need the record companies to publish their creations
  - Film and video makers no longer need the studios
  - Do we still need the librarians?
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## More changes

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- Artists can have their own web site
  - Remix of commercial recorded music
  - Video mashups
  - Rights management, use, other issues difficult
  - Google is used to search for everything
  - Tagging instead of indexing
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## Metadata for access

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- Metadata for physical / digital access
  - Metadata for intellectual access
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## Physical/digital access

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- This has to do with finding physical pieces or locating files in a database or on a computer
  - Physical access: a call number, an address on a shelf
  - Digital access:
    - searchable fields in a database (title, actors, running time...)
    - predictable organisation, names for file folders, files
    - an archival classification
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## Intellectual access

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- Like for text, messy and not so predictable
  - This is because interpretation can be different from one person to the next
  - When materials are networked, we don't know the users so well
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## User needs

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- Intellectual access for different collections:
    - art collections: artist, school, genre, theme...
    - documentary collections: who, what, how, when, where
    - ordinary photos: tags to name the objects, actions
  - Indexing should meet user needs:
    - art collections: controlled vocabulary, authority lists, standardised tools (e.g. *Art & architecture thesaurus*, *Iconclass*)
    - documentary collections: in-house subject list, proper names important
    - ordinary photos: tags, *Thesaurus for graphic materials*
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## Intellectual access to sound

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- For published music, use existing vocabularies:
    - publisher's, musicologist's catalogue for classical music
    - categories: jazz, pop, rock...
    - composer, musicians, titles
  - For readings of plays, poetry, speeches, etc. :
    - cataloguing, subject headings, indexing as for books
  - Stock sounds, sound effects for movies, etc. :
    - describe with words: "dog barking", "thunder"
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## Access formats

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- Different file formats
  - Preservation formats
  - Access formats
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## Different file formats

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- With all digital materials, we need different file formats for preservation than for access
  - For preservation:
    - formats that will last a long time
    - open source, W3C recommendation, public, widely used
    - uncompressed data
  - For access:
    - depends on user needs
    - more flexible, a variety of formats ok
    - compression ok
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## Preservation formats for audio

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- As we saw in the audio module, .wav, BWF, MBWF / RF64 are recommended because they are the closest thing to a standard
  - Physical carrier: hard disk, tape, LTO tape (better)
  - For the short term, CD or DVD ok
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## Preservation formats for video

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- For archiving production collections, such as a tv archive:
    - MXF (metadata wrapper) + JPEG2000
    - physical carrier: LTO tape
  - For mixed library collections:
    - Already compressed, probably acquired on DVD
    - Preserve this copy, replace when damaged
    - National library: preservation copy, distribution copy
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## A word on Motion JPEG

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- Everyone is familiar with JPEG
  - JPEG2000 is an improvement on JPEG:
    - compression can be reversed, no loss of data
    - came after JPEG was already widely used, so people don't know about it
  - Motion JPEG / Motion JPEG2000 is a way to compress moving images:
    - each frame of a film or video is compressed like a photo
    - much better quality than MPEG2, which destroys much of the data
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## Digital materials not permanent

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- No stable physical carriers for digital files
  - So digital materials can never "reside" anywhere for very long
  - They are somewhat "homeless", have no fixed address
  - Digital preservation activities revolve around keeping the files "alive", readable
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## A word on digital preservation

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- With digital materials, don't try to preserve the physical carrier (tape, disc)
  - Instead, copy to new carrier from time to time ("refreshing")
  - Move to new format, new version as necessary ("migration")
  - Keep the material "alive" so newer computers, operating systems, software can still play it
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## A word on digital master copies

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- The original or "master" copy is the one to preserve
  - But with a/v materials, what this means exactly is not clear
  - One way to understand it: the master copy is the best one you have
  - Since digital copying makes an exact copy, copies are identical
  - However, different "generations" for access
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## Access formats

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- Ideally, the original or "master" copy is not compressed (but: JPEG2000 is ok)
  - Access formats can be compressed because they are not used for preservation
  - Different degrees, types of compression
  - Different formats, depending on user needs
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## One model (e.g. for an a/v archive)

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- Master copy (not compressed)
    - Submaster copy (not compressed)
      - Access copy (compressed a little)
      - Access copy (compressed more)
        - Access copy (compressed more, for web)
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## Example: a photograph

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- Master copy (untouched)
  - Submaster copy (used to make access copies)
    - Access copy (to use in a book, little compression)
      - Access copy (to use in a presentation more compression ok)
        - Access copy (to use on the web, highly compressed)

## Compressing access copies

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- Creates smaller file sizes
- More flexibility with physical carriers
- Users have different needs
- Lower quality helps protect ownership, copyright
- On the web, small file sizes means:
  - faster transmission time across the net
  - shorter time to load the file to your computer
  - smoother viewing, listening, no pauses

## Access formats for photos

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- JPEG
- JPEG2000
- GIF
- PNG

## Access formats for moving images

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- Recommended
  - .mp4 (MPEG 4)
  - .mov (QuickTime)
  - .wmv (Windows Media Video)
- Acceptable
  - .swf (Macromedia Flash)
  - .flv (Flash Video)
  - .rm (Real Media)

## Access formats for sound

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- Recommended
  - .mp3 (MPEG 4)
  - .AIFF (Apple Computer)
  - .wav (Windows)
- Acceptable
  - .ogg (Ogg Vorbis)
  - .flv (Macromedia Flash Video)
  - .ra (Real Audio)

## Conclusion

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- Everything changes: keep reading
- Talk, visit with colleagues
- The web a good source of information