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Preservation at Syracuse University Library

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Preservation at Syracuse University Library

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PREPARED FOR IST 600 AT SYRACUSE UNIVERSITY
2009 –

Program Statement 1

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The Department of Preservation and Conservation serves Syracuse University by ensuring the long-term preservation and access of collections in all media and formats. Core functions include preparation of materials for circulation; repair of materials circulating and special collections; exhibitions preparations, reformatting by analog and digital means; preparation of materials for off-site storage; disaster preparedness. Facilities include “Collections Care” located in the basement where commercial binding, paperback stiffening, and circulating collections repair take place, and “Conservation” located adjacent to SCRC where SUL’s holdings of rare books and manuscripts are treated as well as materials prepared for exhibition, and Belfer Audio Laboratory where unique wax cylinders and 78s are preserved as well as provided to students, faculty, and researchers. In addition the Department provides internship and independent study opportunities such as the annual Brodsky lecture and workshop series, instruction in the book arts and preservation to classes at SU, and workshops and other outreach activities to organizations in the region.

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Program Statement 2

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The Department proactively provides for the treatment of all new special collections materials at the point of acquisition, materials selected for exhibition, and the stiffening of all new paperbacks ensuring that materials become available to patrons in the best possible condition. At the point of circulation, all damaged materials are sent to preservation for appropriate treatment. The department also provides rehousing for embrittled materials or those requiring a higher/format specific level of protection for all areas of SUL. Other services include support stacks maintenance, acquisitions and collections processing, as well as the SU and greater regional community's preservation needs through consultative and outreach activities.

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Departmental Organization

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- Four functional areas
  - Circulating collections repair and off-site prep
  - Rare book and paper conservation
  - Audio preservation and reformatting
  - Disaster planning and preparedness

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Circulating Collections I

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- Book repair
- Pamphlet binding and paperback stiffening
- Commercial binding
- Off-site prep

Circulating Collections II

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- Book repair
  - Driven by circulation with proactive pulling from heavily used parts of the collections
    - Meatball surgery, i.e. quick and “functional.”
    - Generally involves spine repairs, tip-ins
    - Completed by Library Technicians and work-study students.

Circulating Collections III

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- Pamphlet binding and paperback stiffening.
  - Used to protect and support items that cannot stand on the shelves by themselves or circulate
    - Items sewn into binders (ordered from Gaylord... or made in-house dependent on need.
  - Paperback stiffening changed from proactive for all materials to after first circulation to reduce costs
    - Inner hinge reinforced with thin cloth and covers strengthened by adhering thin board to inside.

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Circulating Collections IV

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- Commercial binding
  - Used for monographs in need of rebinding that can't be done in-house efficiently/cost effectively.
    - Full-cloth "Class-A" @ $15/vol
    - Folds cut and adhesive bound.
  - Applied to serials when "binding unit" is complete.
    - Is in decline to serials cancelations and shift to online access
    - Cost @ $8/volume
      - Bare boards, cut flush,cloth spine

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Off-site Prep and Storage I

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- Why Off-site
  - Relieve space cramping in libraries
    - Selection for off-site based on low-use/no use
      - Old journal runs...
      - Monographs
      - Archival/manuscript collections
  - Provide higher shelving density
  - Provide better environmental conditions
    - Easier to control environment as no staff working in spaces...

Why give low-use/no-use better storage conditions than books in main collections?

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Off-site Prep and Storage II

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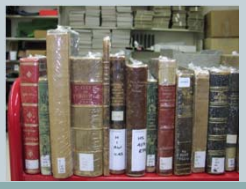
- Off-site prep/rehousing
  - Involves cleaning, labeling, shrink wrapping.
    - Make sure bar codes are on outside in consistent location
    - Shrink wrapping replaces phase boxes
      - Allows bar codes... to be read through film
      - Provides protection and stabilized damaged items
      - MUCH lower cost at MUCH higher output
        - $0.25/vol (20/hr) vs $7/vol (2/hr)



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Environment and Disaster Planning

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Critical to the health and continued well-being of all library and archival collections.

Environment and other issues

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The ideal environment should include:

- Temperature 65 - 70 degrees F
- Relative Humidity (RH) 47 – 55 %
- Light Levels 150 lux (foot candles)
- Regular Cleaning program
- Pest Control/ Management (Insects & Rodents)
- Mold Control / Abatement
- Security
- Housings – boxing, envelopes, folders

What is it?

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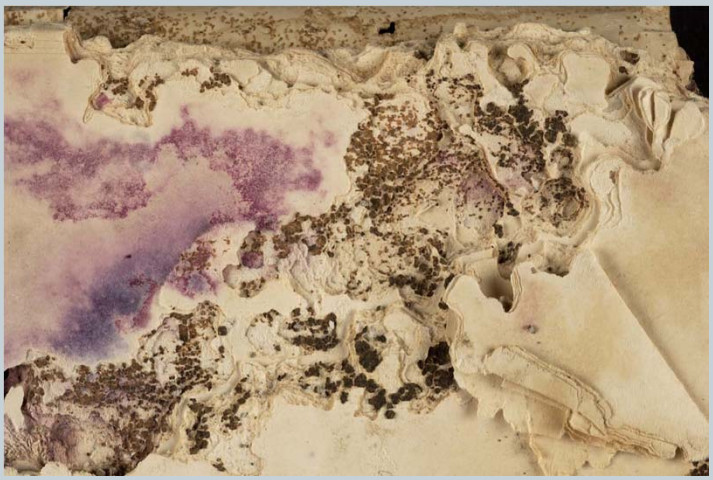

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Mold ?

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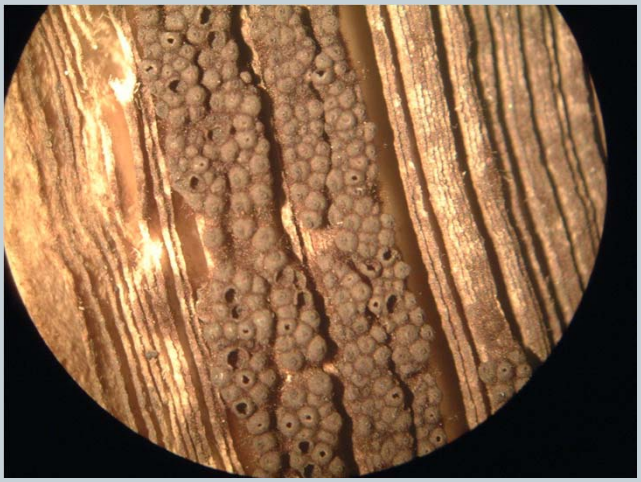

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Mold outbreak...

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Pests!

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Book-lice

Rodents

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Disaster clean-up

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Fan drying of flood damaged books

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Vacuum freeze drying chamber

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HVAC duct cleaner !

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Special Collections Conservation

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Responsible for ensuring continued access to the rare and unique assets in Special Collections

What are conservation and preservation?

- Conservation is the stabilization and maintenance of existing materials.
  - Simple repairs to full treatments
- Preservation encompasses preventative measures e.g. temp, light & humidity control
  - Also can include rehousing

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Policies and Procedures

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- Conservation Selection Process
- Care & Handling (staff & readers)
- Exhibitions & Display
- Copying & Duplication (Digital, Microform, Photocopy)
- Disaster Planning & Preparedness

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Conservation Ethics

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- Reversibility of process
- Homogenous (i.e. repair paper with paper)
- Sympathetic to original
- Documentation & Record Keeping
- Minimal & non-invasive
  - "Do as much as you can, but as little as you have to" - Peter Verheyen.

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Formats

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- Paper: manuscripts, maps & plans
- Books: cloth or leather bound
- Parchment & vellum
- Wax seals: applied & pendant
- Photos & film
- Inks & pigments

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Paper: Map Repair

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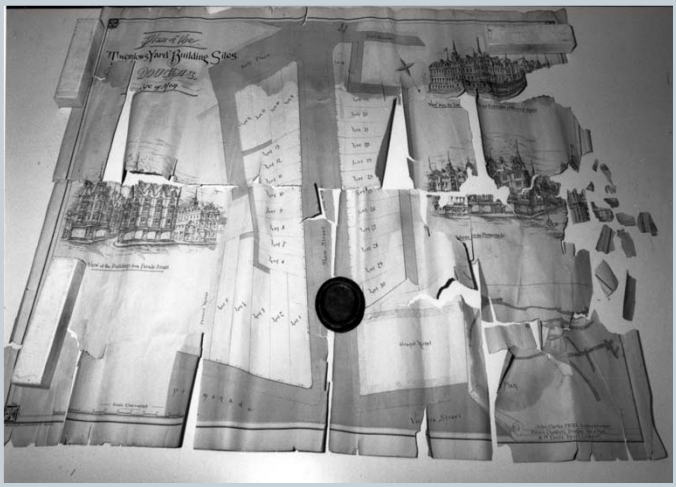

Before

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Paper: Map Repair

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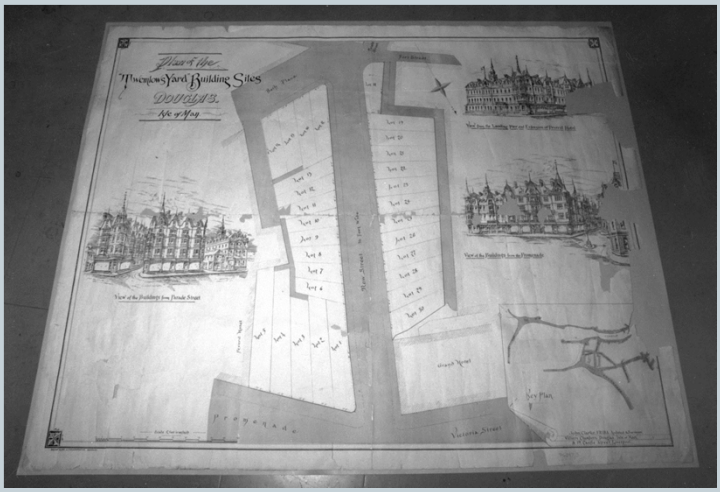

After

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Books

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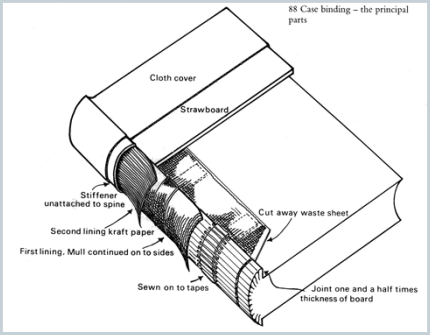
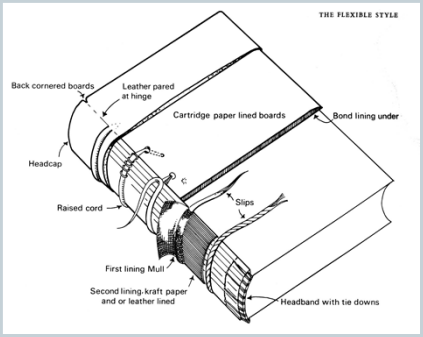


Case binding



Laced-on boards

Books

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Before

Cleaning spines

Books

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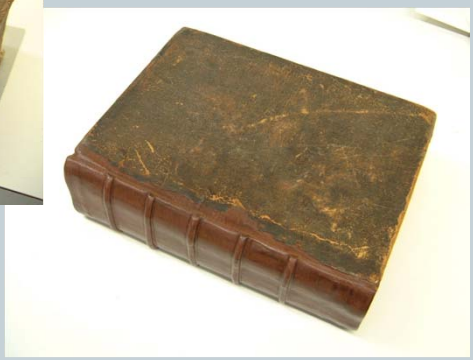
During

After



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Scrapbooks!

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Scrapbooks!

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Enclosures

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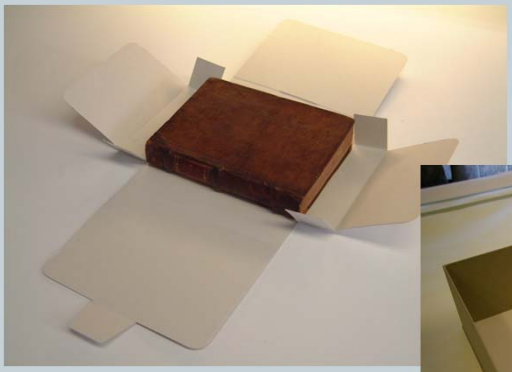
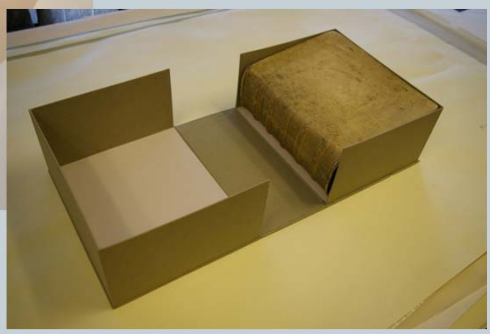


Clamshell box



Phase box

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Parchment Document

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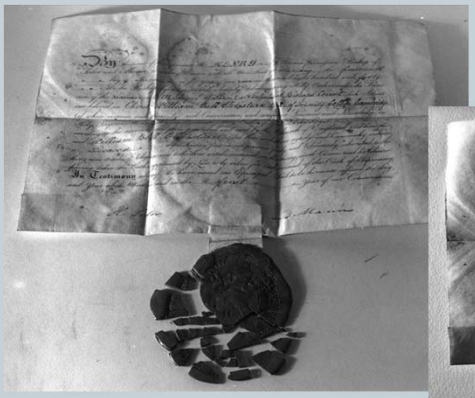
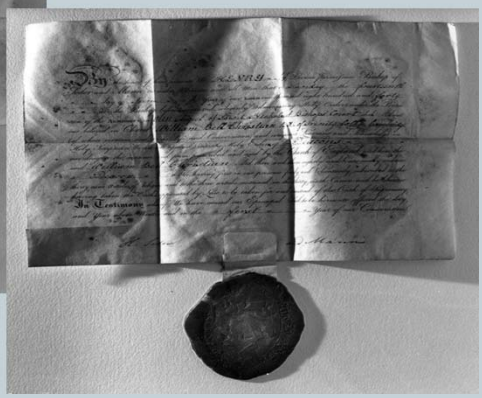


Pendant seal: before

Pendant seal: after



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Photographic Prints and Negatives

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Daguerreotype, cellulose acetate negative, curled fiber prints

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Films

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Inks & Pigments

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Das X. Capitel, wie

Vnd Herr sprach zu

RELATIONE

Handcolored woodcut and iron-gall inks

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Early And Present Methods Of Audio Preservation, Restoration and Access

Early Methods

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Vintage phonograph playing a record into a microphone

- Pros:
- A means of access to a rare recording that would otherwise have been impossible.
- Allowed preservation of recording that could be lost due to breakage, mold, improper playback attempts, or other conditions.
- As time can work against many early carriers such as wire, wax ,glass and paper, an earlier preservation can yield better source materials than otherwise could be had.

Early Methods

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- Cons:
- Frequently, the early recordings capture frequencies that the early machines couldn't reproduce.
- If an early player for that format wasn't available, then it couldn't be played.
- If the player was not properly restored, or even if it was, it could inject artifacts of it's own into the preservation. I.E. motor noises, sound box and or horn resonances, etc.
- Resonances of the room in which the microphone and player were placed could artificially color the sound .
- Worn diamond, sapphire, glass styli can cause irreparable damage to fragile materials.(The ubiquitous steel needle- I'll let you draw you own conclusions about!)

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Modern Preservation Methods

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- For some formats, properly restored vintage machines using calibrated microphones feeding know quality amplification and processing equipment in a controlled acoustic environment were used to capture the sound.
- Other formats, playback via a known quality modern playback device using modern styli and pickups.

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Analogue and Digital Preservation and Playback

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- All vintage materials are played back using techniques and equipment that are minimally invasive to the original.
- Technology exists that allow recovery of signal that is impossible to recover using a stylus.
- Styli of variant shape and size are used to find portions of a groove that can have less wear on a worn original ,and consequently yield a better playback.
- Sampling of one side of a groove wall or the other to attain a similar result.

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Analogue and Digital Preservation and Playback

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- Playback devices that have documentable speed readouts.
- Playback devices that can be adjusted to handle recordings in ways that don't require a separate device for each example of a know recording or can be used to possibly allow a damaged recording to be played back that could not be done with the "usual" techniques.

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Analogue and Digital Preservation and Playback

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- All digital is not the same- I.E. A cheap generic computer sound card will not yield the same results of a quality one.
- Digital domain allows for manipulation of signal not as easily done in the analogue domain.
- Pitch Correction, Noise Reduction, Signal Reversal and Optimization, for instance.
- Noise reduction must never be done at the expense of signal integrity !

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Analogue and Digital Preservation and Playback

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- Many of the techniques used to playback a vintage recording are as applicable today as they were 20 years ago. Improved hardware and software have added flexibility to the process.
- Digitization will not instantaneously correct all faults inherent in a early recording.
- The restoration tools are only as good as the user applying them!

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Storage

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- Generally, magnetic tape was the archivally accepted storage medium for many years.
- Digital can be preserved in many different forms , Server based, Linear Tape, CD-R, WAVE, MP-xxx.
- The same technologies can be used for access.
- Both magnetic tape and digital storage have their pros and cons.

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Storage

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- Magnetic tape can suffer from several maladies which can render it useless when in advanced stages.
- Digital storage needs to be kept in 2 storage mediums. Linear tape and or server based. Migration is important to maintain future accessibility.
- Analogue tape required a higher linear speed to capture all of the signal recorded in a high quality original.
- The same principal applies to digital sampling . The higher the sampling frequency and bit rate that can be used will yield the best results.

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Digital as Preservation

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- Cost is relatively low compared to other preservation/duplication methods
- Greatly increases access to collections by delivering surrogates with metadata
- Reduces contact/damage to the original items preserving the original)
- Digital items are stored on unstable media
- Buy now, pay forever
- Image is not always comparable to original

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Case Study: Clara E. Sipprell

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- SCRC houses a collection of nearly 13,000 photographs by Clara Sipprell
- Date of photographs ranges from the 1920s - 1970
- Access via SCRC finding aid

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Deterioration Issues with Photographs

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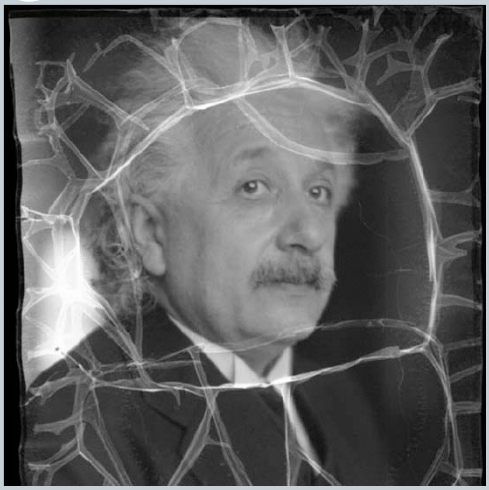
- Negatives deteriorate due to use of cellulose acetate or nitrate base
  - "Vinegar syndrome"
  - Causes increasing blistering as seen in image at right leading to total loss
  - Conservation very expensive



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The Importance of Metadata

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- Digital collections are often expected to be available to the public online
  - Accurate metadata essential
- Sipprell collection is described at the folder level only
  - Contains client information, not necessarily describing the actual images
  - Only information we have

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The Importance of Metadata

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- This photo was titled as “Cekich, Fedja (and Nina)”
- The baby is Nina
- The woman is Irina Cekich

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The Importance of Metadata

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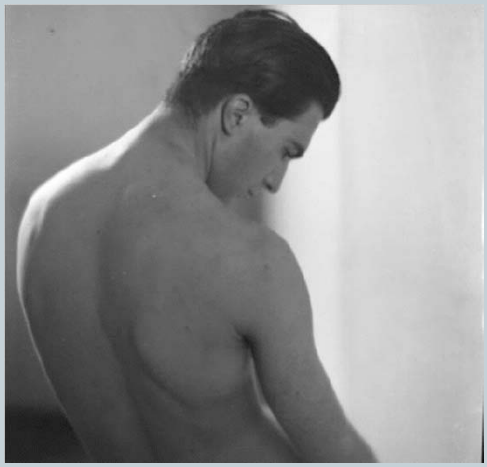
- This is Fedja
- Ironically the title for this image is “Cekich, Feodor (Fedja) (in costume)”
- These discrepancies can be misleading to online users and can create unnecessary work for reference staff



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CONTENTdm

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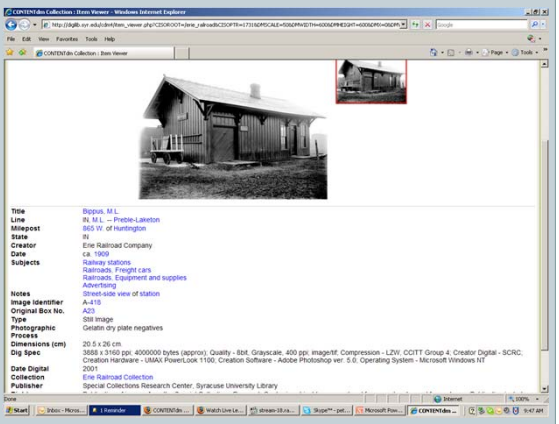
- CONTENTdm facilitates standard metadata
  - Built around Dublin Core

Title
Creator
Description
Subject
Image Identifier
Photographic Process
Dimensions (cm.)
Digital Specifications
Date Digital
Collection
Publisher
Rights



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Digitization v. Born Digital

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- Digitization creates a surrogate of an analog original
  - Original may be retained, or not
- Born digital refers to content that was digitally created
  - Many variables such as format, hardware, software, …

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For More Information...

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- Preservation and Conservation LibGuide at SUL:
  - http://researchguides.library.syr.edu/preservation
- Conservation OnLine (CoOL): THE site for preservation and conservation information.
  - http://cool.conservation-us.org
- American Institute of Conservation (AIC)
  - Book and Paper Group @ http://www.conservation-us.org
  - See also their Wikis
- NEDCC
  - http://www.nedcc.org

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For More Information...

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- Preservation and Conservation at SUL
  - http://library.syr.edu/about/departments/preservation
  - Peter D. Verheyen
    Head of Preservation and Conservation
    (315) 443-9756
    pdverhey@syr.edu

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