Caring for Photographs

Webinar 1: Physical and Chemical Properties of Photographs

Art Conservation Disciplines of Study

- Paper
- Textiles
- Library Materials
- Organic Materials
- Inorganic Materials
- Photographs
- Paintings
- Furniture
- Painted Surfaces

Art Conservation Department

Heather Brown, Second-year Fellow in Master's-Level Program

Art Conservation Department

Greta Glaser, Third-year Fellow in Master's-Level Program

Photographic Conservation Resources

http://www.rap-arcc.org/
Understand the value and vulnerability of these treasures.....

Photographic Collections Around the World

- Enhance scholarship

Fouad Naamani. Anonymous, 1930. AIF/Hoda Naamani. Copyright © Arab Image Foundation

Photographic Collections Around the World

- Enhance scholarship and knowledge

Anna Atkins, Cyanotype Equisetum Sylvaticum. J Paul Getty Museum

Photographic Collections Around the World

- Enhance scholarship and knowledge
- Inspire discourse


Photographic Collections Around the World

- Enhance scholarship and knowledge
- Inspire discourse

Anonymous. Albumen Photograph, Cabinet Card. Private Collection
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Photographic Collections Around the World
- Enhance scholarship and knowledge
- Inspire discourse
- Engage public audiences
- Document history

Anonymous, Albumen Photograph
Courtesy of Mohammad Reza Tahmasbpour

Anonymous, Chromogenic Color Photograph

Anonymous, Silver Gelatin Photograph, Arab Image Foundation, Beirut, Lebanon

Anonymous, Silver Gelatin Photograph
The Center for American History and General Libraries, University of Texas at Austin

Anonymous, Silver Gelatin Print
Gunn & Stuart
Queen Victoria 1897
Silver Gelatin Printing – Out Photograph
Cabinet card

Anonymous, Silver Gelatin Print
http://www.luminous-lint.com/app/image/872503111642087485648/
Photographic Collections are Endangered

Provided by Isle of Wight County Museum and the Archivo General de Puerto Rico

Photographic Collections are Endangered

Provided by Marcia Anderson

Photographic Collections are Endangered

Provided by North Carolina Museum of Natural Sciences

Photographic Collections are Endangered

Provided by University of Cincinnati Libraries, Archives & Rare Book Library

Photographic Collections are Varied

- Early direct positive processes

Ambrotype, c 1860 Private Owner

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Daguerreotype
- 1839 – 1865
- Silver-plated copper support
- Gold-mercury-silver amalgam image material
- Fragile image prone to corrosion
- Highly reflective

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Daguerreotype
- Protective enclosure protects from oxidation and abrasion
- Glass degradation serious challenge

Weeping Glass
- Cracking
- Crazing
- Breaking
- Deterioration of the silver image

Case Construction

Ambrotype

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Ambrotype
- 1852 – 1880
- Glass support prone to damage
- Dimensionality present
- Silver image in collodion binder
- Typically varnished. Yellowed.
- Black asphaltum layer applied to verso (often). May be cracked.

Tintype
- 1856 – 1890
- Japanned iron support
- Silver image in collodion binder
- Typically varnished. Hand coloring in cheeks common

Making of a contemporary tintype
Photographic Collections are Varied

- Early direct positive processes
- Print Materials

Tintype, Jan Cas. Tanzania

Hand-colored Postcards

- Portrait of Jaswant Singh II of Jodhpur (1873–1896)
- Hand-colored Postcards

Major Photographic Processes

- Salted Paper
- Albumen Prints
- Gelatin and Collodion Printed-Out Papers
- Gelatin Developed-Out Papers
- Chromogenic Color

Hand-colored Postcards

- Courtesy of Image Permanence Institute

Photographic Collections are Varied

- Early direct positive processes
- Print Materials

Madame Medici Salted paper print from glass negative

Hand-colored Postcards

- Courtesy of Image Permanence Institute

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Instructor: Debra Hess Norris

Print Processes

Albumen
- 1851 – 1890
- Thin paper support
- Silver image
- Egg white binder
- Image fading
- Binder will crack

Silver Gelatin
- 1895 – 1960
- Paper support coated with baryta
- Silver image
- Gelatin binder
- Image fading
- Silver mirroring

Contemporary Color Processes
- 1940 – 2010
- Dye-based image
- Gelatin binder
- Dye fading

Chromogenic Color
- 1940 – 2010
- Dye-based image
- Gelatin binder
- Dye fading

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Chromogenic Color
- 1940 – 2010
- Dye-based image
- Gelatin binder
- Dye fading

Photomechanical Print: Collotype


http://www.graphicsatlas.org
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Image Permanence Institute
https://www.imagepermanenceinstitute.org

NOTES ON PHOTOGRAPHS

Photographic Collections are Varied
- Early direct positive processes
- Print Materials
- Negatives

Left: Cellulose Nitrate Film-base negative, private owner

Photographic Collections are Varied
- Early direct positive processes
- Print Materials
- Negatives

Courtesy of Luis Pavao

Photographic Collections are Varied
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Left: Cellulose Nitrate Film-base negative, private owner

Photographic Collections are Varied
- Early direct positive processes
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Courtesy of Luis Pavao
Photographic Collections are Varied

- Early direct positive processes
- Print Materials
- Negatives
- Photographic Albums
- Framed Materials

North Carolina State Museum of Natural Sciences

Photographic Collections are Varied

- Early direct positive processes
- Print Materials
- Negatives
- Photographic Albums

Courtesy of Laci Prado

Photographic Collections are Varied

- Early direct positive processes
- Print Materials
- Negatives
- Photographic Albums

Photography: Component Parts

Support
(paper, glass, iron, silver plated copper, plastic, textile, leather, wood and more)

Binder
(albumen, collodion, gelatin)

Support
(paper, glass, iron, silver plated copper, plastic, textile, leather, wood and more)
### Photography: Component Parts

<table>
<thead>
<tr>
<th>Final Image Material</th>
<th>Binder</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>(silver organic dyes, pigments, platinum, gold, iron salts)</td>
<td>(albumen, collodion, gelatin)</td>
<td>(paper, glass, iron, silver plated copper, plastic, textile, leather, wood and more)</td>
</tr>
</tbody>
</table>

### Basic Preservation Advice

- **House collections in good-quality plastic or paper enclosures and box for protection.**
  - [Image](The%20Metropolitan%20Museum%20of%20Art%20credit%20Tania%20Meller.png)

- **Control temperature and RH as possible.**
  - [Image](Courtesy%20of%20Library%20of%20Congress%20and%20Arab%20Image%20Foundation.png)

- **Limit light levels for display. Exhibit digital or other copies.**
  - [Image](Richard%20Stenman%2C%20The%20Metropolitan%20Museum%20of%20Art%20and%20now%20The%20Better%20Image.png)

- **Seek advice from experts. The American Institute for Conservation Referral Service.**
  - [Image](The%20Metropolitan%20Museum%20of%20Art.png)

- **Secure collections against emergencies. Be prepared. Handle carefully.**
  - [Image](Damage%20sustained%20from%20water%20emergency.%20Private%20Dyce.png)
Or ..... Don't Leave Grandma in the Attic!

“HOMEWORK” Identify the three primary preservation challenges associated with your photograph collection and strategies for improvement.

Courtesy of Image Permanence Institute