Your Photographs – How to Help Them Survive Over Time

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Early photography and photographic formats
1840 through 1920’s-1930’s
Types of photographs you may encounter

- Daguerreotype
- Ambrotype
- Tintype
- Various early printing techniques and early print formats on paper
- Glass negatives
- Film negatives
Daguerreotype

The daguerreotype (original French: *daguerréotype*) is an early type of photograph, developed by Louis Daguerre, in which the image is exposed directly onto a mirror-polished surface of silver or copper bearing a coating of silver halide particles deposited by iodine vapor. In later developments bromine and chlorine vapors were also used, resulting in shorter exposure times. The daguerreotype is a negative image, but the mirrored surface of the metal plate reflects the image and makes it appear positive in the proper light. The daguerreotype is a direct photographic process without the capacity for duplication.

Daguerreotype images usually exhibit fine detail and tonal range. They were most popular during the late 1840s to early 1850s, and rarely produced after 1860. Photographs dating from the Civil War are often mislabeled as Daguerreotypes, but by that time, they had been replaced by the less expensive ambrotypes and tintypes.
Daguerreotypes
The **Ambrotype** or Colloidion Positive was developed by Frederick Scott Archer in 1851 and reached peak popularity between 1855 and 1860. Archer did not patent his process; in fact he published it so it could be employed by anyone with the skills to master the work. Ambrotypes became popular because they were cheaper and were more convenient to produce than Daguerreotypes. The glass substrate of the ambrotype was also less easily damaged than the thin copper plate of the Daguerreotype.

Unlike a daguerreotype, an ambrotype image can be seen when viewed from all angles. For this reason the process became popular, even though the finished result lacked the detail and tonal range of the daguerreotype. The image is unique, consisting of a negative, usually underexposed, mounted against a dark background then mounted in a case. The image can be either normal or reversed (left to right) according to whether or not the emulsion side of the negative lay against the black backing.
Ambrotypes
**Tintype**

**Tintypes** (also known as Ferrotypes) are negatives on iron coated with black paint, lacquer or enamel. This process was invented and patented by Prof. Hamilton Smith of Ohio in 1856. Both the ambrotype process and the tintype process relied on the fact that a collodion negative appeared as a positive image when viewed against a dark surface. Tintypes would be exposed while the sensitized collodion on the metal was still wet, and would be processed immediately after being exposed - so producing an early version of the 'instant photo.' When mounted in cases, ambrotypes and tintypes can appear similar; however, the two types can be distinguished by testing them with a strong magnet applied to the center of the glass.

Tintypes are less beautiful and less nuanced than ambrotypes or daguerreotypes but are very inexpensive to produce, and this led to their widespread use and popularity. They also became popular during the Civil War because it was possible for soldiers to send them to their families through the mail. They were less likely to break than the glass plates of ambrotypes or the copper plates of Daguerreotypes. In addition, up to twelve images could be produced on a plate in a single exposure with a multiple lens camera.
It is said that the tintype got its name from the tin shears used to cut individual images from the multiple exposure sheet. Brown or chocolate tintypes were popularized by the Phenix Co. during the years 1870 through 1885. Another development was the “rustic” look introduced around 1870 which made use of painted backgrounds of rural themes. Tintypes were popular until the late 1880s, when they were superseded by gelatin dry emulsion plates, although in more rural areas they were produced until much later. Tintypes experienced a resurgence in popularity in the late 1890s, as a type of cheap and quick photograph sold at carnivals and boardwalks. The last tintypes were produced in about 1930.
Tintypes
Cartes de Visite

The Carte de Visite was introduced in 1854 by Andre Adolphe Disderi when he developed a method of producing eight images on a single 8” x 10” glass negative, allowing eight prints to be produced at one time. Cartes de Visite are albumen prints that are typically 2 1/8” x 3 1/2”, mounted on 2 1/2” x 4” card stock. Prints can deviate somewhat from this standard size because each print had to be cut by hand from the original multiple-image master print. The size of the card stock is more regular since it was usually bought by the photographer from a commercial supplier. Upon the introduction of the photo album in about 1860, the standard size of the CdV was slightly reduced to be compatible with album pockets. Because the photographer attached a print to the card stock himself, the image is sometimes crooked with respect to the stock. CdVs were popular throughout the Civil War because like tintypes, they could be sent through the mail without being broken. CdVs reached their peak in popularity in 1866, after which they were gradually replaced by the cabinet card until production died out in the early 1880s. An excellent guide to dating CdVs can be found at http://www.phototree.com/dating_cdv.htm.
Cartes de Visite
The **cabinet card** was introduced as a larger format albumen print by Windsor & Bridge in London in 1863. It became known as a cabinet card because photographic albums were not large enough to accommodate it, so that it were usually displayed in cabinets. A standard cabinet card consists of a 4” x 5 1/2” image mounted on 4 1/4” x 6 1/2” card stock. Because of the larger size of the cabinet cards, retouching became a necessary part of the photographic process. Usually a test print was made first to identify changes and corrections to the negative from which final prints were made. (See O. Henry Mace, Collector’s Guide to Early Photographs, Krause Publications, 1999, p. 134.) Cabinet cards were popular 1870 - 1890, but by the end of the century were declining in popularity due to the introduction of the snapshot (an unmounted paper photograph. See [http://www.city-gallery.com/learning/types/cabinet_card/index.php](http://www.city-gallery.com/learning/types/cabinet_card/index.php)). Cabinet cards continued to be produced until the early 1920s.
Early Negatives

- Large Glass Plates
  - Wet plate process
  - Dry plate process
- Smaller Glass Plates
- Large flexible film sheets
- Smaller flexible film sheets
  - 4”x5”
  - 2”x2”
Early Cameras
Early Printing Techniques

- Salted Paper Print 1840-1865
- Albumen Print 1855-1920
- Carbon Print 1860-1940
- Woodburytype 1866-1900
- Collotype 1870-
- Photogravure 1880-
- Cyanotype 1880-1920
Early Printing Techniques (Continued)

- Platinotype 1880-1930
- Gelatin Developing-out Paper 1885-
- Gelatin Printing-out Paper 1885-1920
- Collodion Printing-out Paper 1885-1920
- Letterpress Halftone 1885-
- Matte Collodion Printing-out Paper with gold and plantinum toning 1894-1920
Recognizing what kind of print you have
Kodak’s FABULOUS chart of hints and clues from James M. Reilly’s Care and Identification of 19th-Century Photographic Prints
“Modern” Photography

1900 to the present
“Modern” Photography

- Kodak Brownie cameras – introduced in February 1900 – early roll film
- 35mm cameras – roll film
- Color film and prints
- Instamatic – introduced in 1963 – 126 and 110 film cartridges
- Poloroid technology
- Digital photography
Kodak Brownies
Later Cameras

An old camera with a magnesium bulb flashgun.
“Modern” black and white prints
Instamatic Cameras 1963
“Modern” color prints
Polaroids
Preserving your treasured photos
First, do no harm!
Scrapbooking can be tricky!
Safe scrapbooking

- Only scrapbook with copies of your photos
- Only scrapbook using items and artifacts that you won’t mind compromising permanently
- Use archival quality papers, inks, and adhesives
- Remember: You are creating a keepsake so you want your creation to last a long time!
Sources for archival scrapbooking supplies

- Archivers Scrapbooking Store
  http://www.archiversonline.com/
- Light Impressions
  http://www.lightimpressionsdirect.com
- Addicted to Scrapbooking
  http://www.addictedtoscrapbooking.com
Sources for Scrapbook preservation information

- http://delicious.com/eduserv/scrapbooks
- http://www.loc.gov/preserv/care/scrapbk.html
Born Digital Photographs

- Complex current issues
  - Format
  - Size
  - File naming
  - Temporary storage and migration

- Complex future issues
  - Ongoing changes in technology make decisions hard
  - Long-term preservation options are unknown
Digitization/Scanning Old Photos
To scan or not to scan?!
Everybody’s doing it!

Un-edited scan of original

Digitally enhanced scan

And look how cool it is!!!!
Digitization/Scanning Old Photos
To scan or not to scan?!

Should you or shouldn’t you?

- **You should** if:
  - You intend to keep your originals and store them safely
  - You want copies of your old photos to be inexpensive to reproduce, share, and/or use for scrapbooking
  - You are aware that the scans, regardless of how high the quality and clarity, will never replace or be as clear as your analog (original) negatives and prints
Digitization/Scanning Old Photos
To scan or not to scan?!?

Should you or shouldn’t you?

- **You should NOT** if:
  - You intend to throw out your originals and keep only your digital copies – DON’T DO THIS – ALWAYS SAVE YOUR ORIGINALS!
  - You want to keep an image secret or personal or “in the family” – digital images are VERY easy to copy and distribute electronically and once an image is ‘out there’ on someone’s home computer, it is only a matter of time before it will be ‘out there’ further in cyberspace on the Internet and able to be seen, used, copied, and manipulated by anyone with a computer!
Questions?

So Many Questions…!
Resources
National Park Service
Conserve O Grams

http://www.nps.gov/history/museum/publications/conserveogram/conserv.html
http://www.nps.gov/history/museum/publications/conserveogram/cons_toc.html
Local North Carolina Resources

- North Carolina Museums Council
  http://www.ncmuseums.org/

- NC ECHO (Exploring Cultural Heritage Online)
  http://www.ncecho.org/

- North Carolina Preservation Consortium
  http://www.ncpreservation.org/

- State Historic Records Advisory Board
  http://www.ah.dcr.state.nc.us/shrab/

- Society of North Carolina Archivists
  http://www.ncarchivists.org/
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