IDENTIFICATION OF PRINTS & PHOTOGRAPHS

Preservation Week 2017
April 26, 2017
ID PRINT PROCESSES

- Intaglio
- Relief
- Planographic
INTAGLIO PRINTING PROCESS

- Engraving
- Etching
ETCHING
(Early 16th on)

Styles

- Crayon Manner
- Stipple
- Aquatint
ETCHING
(16TH on)

Identifiers
- Plate Mark
- Raised ink from substrate
- Rough edge
- Blunt or rounded end
- Most common
- Can stand alone
- Or with other etching processes
  - Aquatint
  - Engraving
  - Drypoint
- Appears sketch-like or hand drawn
  - But can appear more refined
- Rembrandt commonly used medium

http://www.sportscollectorsdaily.com/
http://www.harvardartmuseums.org/art/262116
CRAYON MANNER
AKA SOFT GROUND ETCHING
(Introduced 1757)

Identifiers
- Plate mark apparent
- Looks like a lithograph
- Raised ink from surface
- Creates tonality
- Appears drawn
- Created with a roulette or mattoirs
  - Repetative markings

http://www.fineartprintsondemand.com/
https://collection.cooperhewitt.org/
http://www.ub.edu/
STIPPLE ENGRAVING
(actually an etching process)

http://www.sportscollectorsdaily.com/

Identifiers
• Plate mark
• Raised ink from substrate
• Popular turn of 19th century
• Creates tonality and shading
• Appears engraved
• Created with a stipple wheel
  • Repetitive patterning
• Softer gradate on than engraving
  • Fuzziness to edge

http://www.elizabethharvey-lee.com
http://sites.fas.harvard.edu
AQUATINT
(MID 17TH on)

Identifiers
• Plate Mark
• Raised ink from substrate
• Popular Mid 18th century
• Creates overall tonality
• Resembles watercolor or washes
• Reticulation or granular in appearance
• Typically with other etching processes
• Spirit Ground or Dust Ground
• Not to be confused with platetone
ENGRAVING
(15TH – 19TH)

Styles
- Line
- Stipple
- Mezzotint
- Drypoint

http://www.metmuseum.org/
http://www.williamhenry.com/
http://sites.fas.harvard.edu
LINE ENGRAVING
(15th on)

Identifiers
- Plate mark
- Raised ink from Surface
- Sharp defined lines
- Come to point at ends
- Smooth repetitive lines
- One Line change in thickness
- Tonalities
  - Hatched lines
  - Lines closer together
  - Thicker lines

How to Identify Prints

http://sites.fas.harvard.edu/
Identifiers

- Plate mark
- Raised ink from substrate
- Creates tonality
- Typically portraits
- More pronounced dot than stipple etching

STIPPLE ENGRAVING
(1760s)

How to Identify Prints
MEZZOTINT
Aka Black Manner
(17th on)

Identifiers
• Plat mark
• Raised ink from surface
• Velvety blacks
• Lines or crosshatching seen peeking out on edge of print
• Minute gradation or shading
• Subtractive drawing method
• Good use of light, negative space
• Used alone
• Or with other methods
  • Outlines in drypoint or etching
DRYPOINT
(15TH on)

Identifiers

• Plate mark
• Raised ink from substrate
• Fine lines
• Dark black velvety line
• Distinct fuzziness to line
  • blurred line effect
  • Caused by burr
• Sketch or drawn look

https://www.pinterest.com/pin/506443920581127276/

HOW DO I ID AN INTAGLIO PRINT?

Key Identifiers

- It has a visible plate mark
- Is there a date? 15\textsuperscript{th} Century on
- Is the ink raised from substrate?
  - View in raking light
- Takes on different characteristics if engraved or etched
- Repetitive patterning?

Helpful Tools

- LIGHT
  - Reflected light, an overall even lighting
  - Raking Light, light directed from one direction and at a low angle
- MAGNIFICATION
  - loop, minimum 10x
  - Microscope
- Graphics Atlas Website
WOODCUT VS. WOOD ENGRAVING

Woodcut


Wood Engraving

http://www.woodengravers.co.uk/
WOODCUTS (15TH on)

Identifiers

- No plate mark
- Embossing onto sheet
- Woodgrain sometimes can be seen in large printed areas.
- Ink squish
- Inks may be water soluble or sensitive
- Black lines
- Sharp edged lines
- Intricate designs
- Typical in Japanese Prints
- Commonly printed on Japanese Paper
- Larger Format than wood engraving
WOOD ENGRAVINGS
(End of 18TH)

Identifiers
• No plate mark
• Embossing onto sheet
• Missing or broken lines
• No wood grain
• Ink Squish
• Sharp edged lines
• White on Black
  • White line used
• Used in in combination with text
  • Created for book format
• Typically smaller than woodcut

http://bethkrommes.com/
http://www.graphicsatlas.org/
http://www.houseandgarden.co.uk
http://www.mapsofpa.com/
**LINOCUTS (20th on)**

**Identifiers**
- No plate mark
- Embossing onto sheet
  - Softer embossing than wood
- Sharp edged lines
- Ink Squish
- Similar appearance to Woodcut or wood engraving
- May see stray printed burs
- Similar appearance to Woodcut or wood engraving
  - No Woodgrain
- Can be very detailed with thin lines
- Reduction Linocut
  - Colors all printed form one block
THEOPHYLACTI

M. CL. F. W. Z. V.

M. A. X. A. X. A.

styles
- Woodcut Style
- Wood Engraving Style

identifiers
- Relief Etching
- Engraved edge, not straight
- Has a bite
- Rounded edges
- Embossed inked areas
- Embossing on verso
- Ink Squish
- Difficult to distinguish from Wood
HOW DO I ID A RELIEF PRINT?

Key Identifiers

- Ink is indented into substrate
- Embossing on verso of sheet
- Wood Grain Texture
- Ink squish (thicker line on edge that squished out)
- Text printed with Image
- Lack of Plate Mark

Helpful Tools

- LIGHT
  - Reflected light, an overall even lighting
  - Raking Light, light directed form one direction and at a low angle
- MAGNIFICATION
  - Loop, minimum 10x
  - Microscope
- Graphics Atlas Website
PLANOGRAPHIC PROCESS

- Lithographs
- Stenciled
- Monoprints
LITHOGRAPHS
(1790s on)

Styles
• Washes
• Crayon Manner
• Stipple
• Reproductions of
  • Painting
  • Drawing
  • Etchings
• Off-set Litho
  • Photo reproduction
  • Creates tonality

https://meghanpohlod.wordpress.com/
https://www.masterworksfineart.com/
http://www.metmuseum.org/
LITHOGRAPHS (1790s on)

Identifiers

- No plate mark
- Reticulation Under Magnification
- Layering of Colors
- Appears drawn or washes of color
- Granular under magnification
- Typically signed and numbered
  - Unless Off-set reproductions
- Images Within Books

http://www.graphicsatlas.org/
**STENCILED**
(early 20th on)

**Styles**
- Also known as pochoir
  - French for “Stencil”
  - Difference is in the application
- Screenprints
  - Also known as Serigraphy
    - 1950s term

[Image: https://artinprint.org/]

[Image: http://blogs.nottingham.ac.uk/]

**POCHOIR**
(early 1900s)

**Identifiers**

- Typical flat layering of colors
- See bits of dried paint
- Bubbles in pigment
- Brush strokes
- Hairs adhered from brush
- Uneven/painterly application
- Sometimes combined with other printing processes
  - Etchings
  - Engravings

SCREENPRINTS
AKA SILKSCREENS
(20th on)

Identifiers

• Typical flat layering of colors
• Can be photo reproductions
  • Dot matrix (Offset Litho)
  • Creates tonality
• See bits of dried paint
• Bubbles in pigment
• Brush strokes
• Hairs adhered from brush
• Uneven
• Can be oil based or acrylic
  • Oil halloing to sheet
    • Yellowing
    • Orange

http://www.shiranleibowithhttp://www.rival.events/z.com/
http://www.rival.events/
http://askmissa.com/
MONOTYPE
(1640s on)

Identifiers
- Possible plate mark
- Drawn directly to plate and transferred to paper
  - Glass, metal, plastic
- Can be rub transferred
- Used by Edgar Degas
- Individual prints
- Artist prints
- Appears painted, smudged
- Can be more refined with use of brushes or pen and ink
HOW DO I ID A PLANOGRAPHIC PRINT?

Key Identifiers

- Ink is on the same plane as sheet
- In paint in surface
  - Bubbles
  - Dry bits
  - Brush marks
  - Hairs from brush
- Date of Print
- Lack of Plate Mark
  - Although could have minimal faint plate mark
- Diversity of line application
  - Engraving
  - Drawn
  - Painted
  - Etched
- Has a dot matrix patterning of CMYK

Helpful Tools

- Magnification (10x on)
- Graphics Atlas Website
- DP3 Website: Digital Print Preservation Portal
- AIC Website
IDENTIFICATION AND CARE OF PHOTOGRAPHIC AND STILL IMAGE MATERIALS
Heliograph, View from the Window at Gras, Joseph Nicéphore Niépce 1826.
Introduction

Historical Processes & Identification
  ▪ Timeline
  ▪ Description of photographic formats

Deterioration & Preservation

Questions
- Heliograph 1826
- **Daguerreotype 1839-60**
- Salted Paper Prints 1840-60s
- **Cyanotype 1840-1920 (popular 1880-1920)**
- Wet Collodion 1851
- Platinotype 1881-1930s
- **Tintype 1855-1900**
- Ambrotype 1855-65
- **Albumen 1850s-1920 (popular 1850-95)**
- Carbon 1861-1940
- **Silver Gelatin 1880 - 2000**
- Color 1946-2000
- (digital) Ink Jet (1984-present)
- (digital) Dye Diffusion (1989-present)
Cased Photographs
Daguerreotypes (1839-60)

William Pratchett, 1850s, University of Connecticut
IDENTIFICATION OF MAJOR PROCESSES

Cased Photographs
Collodion Processes

Tintypes
(1855-1900)

Ambrotypes
(1851-1865)
Cased Photographs:

Daguerreotypes (1839-60)

Tintypes (1855-1900)

Ambrotypes (1851-1865)

http://archfoto.atspace.com/daginsten.html
IDENTIFICATION OF MAJOR PROCESSES

Cyanotypes
(1840, popular 1880-1920)
Cyanotypes (1840, popular 1880-1920)
IDENTIFICATION OF MAJOR PROCESSES

Albumen prints
(1850s-1920
(popular 1850-95)
DETERIORATION

Albumen prints

- Cracking
- Fading
- Curling
IDENTIFICATION OF MAJOR PROCESSES

Collodion Printing Out
(1867-1930)
IDENTIFICATION OF MAJOR PROCESSES
Matte Collodion (1893-1920)
IDENTIFICATION OF MAJOR PROCESSES

Silver Gelatin Printing Out (1880-1920)
IDENTIFICATION OF MAJOR PROCESSES

Silver Gelatin Developing Out (1900-2000)
Silver Gelatin Printing Out (1880-1920)

Silver Gelatin Developing Out (1900-2000)
IDENTIFICATION OF MAJOR PROCESSES

Chromogenic Color (1946-2000)
IDENTIFICATION OF MAJOR PROCESSES

Instamatic
B&W (1947-2008)
Color (1963-2008)
DETERIORATION

Chromogenic Color (1946-2000)

Instamatic

B&W (1947-2008)

Color (1963-2008)
IDENTIFICATION OF MAJOR PROCESSES

Digital Prints

Ink Jet (1984–present)

Dye Diffusion (1989–present)
Collotype (1870 – 1930s)
Photogravure (1880 - )
Rotogravure (1880s - )
Letter Press Halftones (1885 - )
Photochrom (1888–1920s)
PHOTO-REPROGRAPHIC PROCESSES

Collotype
(1870 – 1930s)
PHOTO-REPROGRAPHIC PROCESSES

Photogravure (1880 - )
PHOTO-REPROGRAPHIC PROCESSES

Rotogravure
(1880s - )
PHOTO-REPROGRAPHIC PROCESSES

Letter Press Halftones

(1885 - )
PHOTO-REPROGRAPHIC PROCESSES

Color Offset Lithography
(1880 – present)
GENERAL PRESERVATION TIPS

- Store in buffered or pH neutral folders/boxes (7.0-10.0)
- Sleeve photos only if handled frequently or exceptionally fragile
- Proper Care and Handling (Conservation does workshops)
- Limit light exposure
- Control Humidity & Temperature (50% RH +/- 5%, 70 °F +/- 5°F)
- Limit pollution & Airborne Particulates
- Never apply pressure sensitive tapes, staples, paper clips, or rubber bands
- When in need or doubt contact Conservation Laboratory or Preservation Services

http://www.conservation-us.org/about-conservation/caring-for-your-treasures/paper#.WPwjolMrLGI
PHOTOGRAPHIC PRESERVATION STORAGE

- Storage
  - RH – low (30-40%)
  - Cold Storage (Frozen)
    - Color, cellulose based film
  - Cool Storage (50-60°F/10-15°C)
    - Most other photographic formats
- Light
  - Dark storage ideal, necessary for color, cyanotypes, salted paper prints, and poorly fixed albumen and silver gelatin
  - (200-400 lux)
CONSERVATION

INTAGLIO PRINTS
• **Compare Traits of Prints**
• **ID of Print Processes**
• **Great Magnification**
Definition of Digital Prints

What is a digital print?

A recent IPI survey of the professionals in the cultural heritage field determined that there is currently no common definition for the term digital print. In fact there are contradictory definitions in use that will ultimately make clear communication difficult to impossible. It is important that the field take responsibility to address the confusion regarding this term.

However, despite the confusion, it is important for IPI to provide clear and consistent definitions for the print types under investigation in this project. While these definitions may not be acceptable to all, they will at least provide a context for users of the site to find, interpret, and utilize the information they individually need.

So, for the purposes of this project, the term digital print will refer to that class of prints created using the most common modern, non-impact printing technologies: inkjet, dye sublimation, and electrophotographic. Pictorial images generated with silver-halide, light-sensitive papers using laser or LED exposure from digital files will also be included. The printed material can include pictorial images, text, line art and graphics or any combination of the three. Printing substrates will be limited to paper (uncoated and coated) or polyethylene-laminated papers (also referred to as resin-coated or RC papers).

For more information regarding the variability in definitions for the term digital print, see the following:

What Do You Mean When You Say “Digital Print”?
Read the entire article

Summary of the DP3 Project Survey of Digital Print Experience within Libraries, Archives, and Museums
by Daniel Burge, Douglas Nishimura, and Mirsam Estada and published in IS&T’s Archiving 2009
Read the entire article

Printer friendly version
PSAP: PRESERVATION SELF-ASSESSMENT TOOL

psap.library.illinois.edu
The Preservation Self-Assessment Program (PSAP) is a free online tool that helps collection managers prioritize efforts to improve conditions of collections. Through guided evaluation of materials, storage/exhibit environments, and institutional policies, the PSAP produces reports on the factors that impact the health of cultural heritage materials, and defines the points from which to begin care.

### Photographic & Image Material

#### Photographic Print

**Monochrome Print**
- Albumen Print
- Carbon Print
- Collodion
- Gelatin POP Print
- Glossy Collodion Print
- Matte Collodion Print
- Platinum/Palladium Print
- Salt Print
- Silver Gelatin Print (DCP)

**Color Print**
- Chromogenic Color Print
- Color Carbon Print
- Dye Transfer Print
- Silver Oxy-Bleach Print

**Instant Print**
- Instant Photo: Digital
- Instant Photo: Color

#### Cased/Direct Photograph

- Ambrotype
- Daguerreotype
- Tintype

#### Negative

**Glass Negative**
- Albumen Glass Negative
- Collodion Glass Negative
- Gelatin Glass Negative

**Plastic Film Negative**
- Chromogenic Color Negative
- Silver Gelatin Negative

### Additional Links

- [Skip to Collection ID Guide](#)
- **ID of Materials in collection**
  - From AV materials to Objects
  - Paper & Media
  - Photos
- **How to assess Risks**
- **Storage**
- **Best Environment**
Process ID Chart: Photomechanical Prints

**LETTERPRESS HALFTONE (1885–1970s)**
- AM halftone pattern
- Dots ink squarish and hard edges
- Lacks fine image detail

**OFFSET LITHOGRAPHY (1890s–Present)**
- AM or FM halftone pattern
- Dots uniform density and soft edges

**ROTOGRAVURE (1890s–Present)**
- Gravure screen grid pattern
- Good tone reproduction
- Very large print runs

**Patterns**
Magnification is critical to accurate photomechanical process ID. Continuous tone photographic images must be divided into patterns in order to simulate the original silver image with printing ink. The AM halftone is the most common pattern, but FM halftone, reticulation, aquatint, and the gravure screen grid are also commonly found.

**AM HALFTONE (Amplitude Modulation)**
In an AM halftone, the size (amplitude) of the individual dots in the halftone pattern are varied (modulated) in order to simulate the densities of the original photograph. The AM halftone is made by exposing a high contrast negative through a crossline screen. This mechanical method of breaking down an image into dots became popular with the commercialization of the technique in the 1910s.

**FM HALFTONE (Frequency Modulation)**
FM halftone changes the spatial frequency (the distance between the dots). The size of the dots may or may not change as well. Also referred to as a stochastic screen, FM halftone can be done mechanically, but rather requires a computer to decide where each dot should be placed. The higher image quality has led to its use since the 1990s in color table picture books and other applications where image quality is paramount.

**COLLOTYPE (1860s–1930s)**
- Redecillation/encaustic pattern
- Fine detail
- Good tone reproduction

**PHOTOGRAVURE (1880–Present)**
- Aquatint grain pattern
- Nearly continuous tone
- Good tone reproduction
- Small editions, hand pulled

**PHOTOCHROM (1888–1980s)**
- Random pattern
- Dots varied shapes and sizes
- Printed as late as 1970

HTTP://GAWAINWEAVER.COM/IMAGES/UPLOADS/PROCESS_ID_CHART_PHOTOMECHANICAL.PDF
- Detail on AM/FM halftone patterns
- Hints for identification
- Photomicrographs showing detail
BIBLIOGRAPHY

- Reilly, James M. “Care and Handling of 19th-Century Photographic Prints” (1986)