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Process Work: Intersections of Photography and Print ca. 1825 to Today

February 1, 2025 - July 20, 2025

When you think of the word *process*, what comes to mind?
A process, in the most general sense, is a series of actions, whether physical or mental. While processes frequently lead to results, the word itself suggests something that is still underway, suspended in a state of potential.

What about the word *work*?
We usually associate work with paid (or unpaid) labor. The things we do on our own time, for our own satisfaction, only become work when we put the results out into the world, whether for money or some other larger purpose.

For a brief period of time at the end of the 1890s, *process* and *work* were combined to mean something very specific: the use of photographic techniques to produce prints for a broad range of new audiences. This terminology was no accident: both the process of how an image was made and the kind of work required to produce it transformed dramatically after the invention of photography.

Process work was the term used by the makers of these prints, as opposed to their consumers. In a similar spirit, this exhibition looks at processes from the maker's viewpoint, while also considering the broader social and cultural impact of these prints once they left the studio and began to do their work out in the world.

Sarah Mirseyedi
Andrew W. Mellon Curatorial Fellow
Prints, Drawings, and Photographs

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This exhibition is complemented by the print publication *Manual 20: Technologies*, available for sale at the museum's Visitor Services desks and at the RISD Store.

Exhibition Note
Throughout the exhibition, the label texts offer two ways to find out more:
Zoom Out to learn about social, cultural, and artistic impacts.
Zoom In to discover more about techniques and materials.

Section Overview (Zoom Out)
Technical details (Zoom In)

Color coding in texts:
Specific techniques
Materials involved

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CHECKLIST OF THE EXHIBITION

Inventing the Photographic Print

Zoom Out

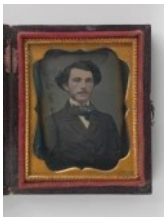
Reproducing visual information and sharing it widely has always been an important part of building knowledge, exchanging ideas, and growing communities. But for most of this history, images were reproduced by drawing them. To make multiple copies of a drawing required the additional step of producing a print, a time-consuming task in its own right. With the invention of photography in the 1820s and 1830s, it became possible for the first time to produce images automatically, transforming not only the act of making images but also the processes used to reproduce them for wider audiences.

Zoom In

Photography is a way of image-making that chemically records light onto a light-sensitive surface. Printmaking, on the other hand, is a way of image-making that transfers ink from one surface to another. Most photographs are made using a camera, which focuses the light reflected off of objects through a lens and onto a light-sensitive surface.

Photographs are made up of continuous tones, meaning that there is a smooth transition between light and dark areas of the image. Prints, on the other hand, are made up of inked marks and blank spaces. To print a photographic image in ink requires translating the continuous tones of the photograph into the graphic language of print.

American
Portrait of a Man, mid 1800s
Daguerreotype
Gift of Mrs. Truman B. Pierce **17.125**



American
Portrait of a Woman, ca. 1860s
Daguerreotype
Gift of Mrs. Frank A. Wightman **56.144.4**

David Octavius Hill
Scottish, 1802-1870
Robert Adamson
Scottish, 1821-1848
Elizabeth Rigby (Lady Eastlake), ca. 1845
Salt print from paper negative
Jesse Metcalf Fund **77.049**

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Alphonse Poitevin
French, 1819 - 1882
Manual on Photographic Printing without Silver Salts (Traité de l'impression photographique sans sels d'argent), 1862
Illustrated book with two photoetchings, one albumen print and several photomechanical text figures
Museum of Fine Arts, Boston. Gift of Sylvester Rosa Koehler

When photography was first being developed in the late 1830s and early 1840s, its applications were strictly limited to the kinds of objects you see on the left side of this case. Daguerreotypes and salted-paper prints were celebrated as technical marvels for their ability to stabilize images made with a camera. But they were also extremely fragile, subject to fading, and difficult to replicate and share widely.

In response to these limitations, artists, printmakers, and scientists looked for ways to combine photography with printmaking. A major breakthrough was the addition of light-sensitive materials (including bitumen and dichromated gelatin) to printmaking processes. Discoveries were shared through publications such as Alphonse Poitevin's 1862 *Manual on Photographic Printing without Silver Salts*, displayed here.

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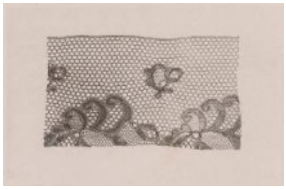

William Henry Fox Talbot
English, 1800 - 1877
A Strip of Lace, with Selvage, ca. 1852-1857
Photographic engraving on paper
Georgianna Sayles Aldrich Fund and Mary B. Jackson Fund **2023.132.1**

Joseph Nicéphore Niépce
French, 1765 - 1833
Portrait of Cardinal d'Amboise, 1826 (printing plate); 1864 (print)
Heliogravure from an engraving
Philadelphia Museum of Art, Gift of the Friends of the Philadelphia Museum of Art, 1971

Hippolyte Fizeau, printer
French, 1819 – 1896
Noël Marie Paymal Lerebours, photographer
French, 1807 – 1873
Maison Élevée Rue St. Georges Par M. Renaud
From *Excursions Daguerriennes*, ca. 1841
Etching and aquatint on paper, printed from a daguerreotype plate
Private Collection

Some of the earliest examples of photographic printing are actually reproductions of non-photographic images, such as architectural drawings, pieces of fabric, and Renaissance-era prints, as seen here. Early experimenters struggled to translate the tonal range of photography into the graphic language of print. Reproducing images that were already made up of lines and marks on a blank space was a logical place to start.

To read more about William Henry Fox Talbot's early experiments, see curator Sarah Mirseyedi's Object Lesson in *Manual 20*.

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Roger Fenton, photographer
English, 1819-1869
Paul Pretsch, printer
Austrian, 1808 - 1873
Raglan Castle, Porch
From *Photographic Art Treasures,* 1856
Photogravure (Photogalvanograph) on paper
Museum of Fine Arts, Boston. Bequest of Charles W. Millard III

Innovations in photographic printing quickly captured public attention. Prints like this one were even announced in newspaper reports at the time of their publication. In the words of one reviewer writing in an English magazine in 1854:

The first surprise on viewing these really lovely proofs is that of seeing a photograph in printer's ink! — a real engraving in which houses and trees, and ruins, and water appear, not in the conventional guise in which we have been accustomed to see them, as reproduced by the pencil of the artist or the burin of the engraver, but in the beautiful truthfulness of Nature's own touch.

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The Mass-Produced Image Before Photography

Zoom Out

Today, we are inundated with images, on screens and in print. We can take a photo with our phone and share it at a moment's notice. But in the 1800s, before the invention of photography, creating and sharing images took a great deal of time, labor, and material resources, making printed images a luxury product. It was not until the 1830s and 1840s that existing printing processes like lithography were coupled with technical improvements in letterpress printing, making the mass production of visual material faster and cheaper than ever before.

Zoom In

In the process of lithography, an artist draws with a greasy crayon directly onto a stone surface. After the surface is treated chemically, it is inked, and the drawing is printed onto paper in a high-pressure press. Since its introduction in the late 1700s, lithography became a popular method for reproducing the look and feel of artists' drawings, but it was not ideal for printing with text, since text required the use of an entirely different type of press.

Honoré Daumier
French, 1808-1879
Where Reading The Constitutionnel Might Take You! (Où Peut Conduire La Lecture du Constitutionnel!)
From the series *Pastorales*, 1845
Lithograph on paper
Gift of Mrs. Gustav Radeke **27.171**

Honoré Daumier
French, 1808-1879
Aubert & Cie, printer
Subscribers Trying to Cope with Their Paper (Abonnés Recevant Leur Journal et Cherchant la Manière de s'en Servir)
From the series *Actualités*, 1845
Lithograph on paper
Mary B. Jackson Fund **45.102**

As depicted in these two prints made in 1845 by Honoré Daumier, new magazine and newspaper formats in the mid-1800s forced readers to adapt their reading habits. Steam-powered presses increased the speed of production, while new developments in paper-making increased the size of newsprint sheets. The effect on consumers was not only physical but psychological: the increased flow of information often overwhelmed readers in ways that are still familiar to us today.

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Carle Vernet, designer
French, 1758-1836
Francois Seraphin Delpech, publilsher
French, 1778-1825
F. Delpech's Lithographic Print Shop (Imprimerie Lithographique de F. Delpech), 1818
Lithograph on paper
Anonymous gift **53.315**

Nicolas Toussaint Charlet, designer
French, 1792-1845
Francois Seraphin Delpech, publisher
French, 1778-1825
The Seller of Lithographic Drawings (Le Marchand de Dessins Lithographiques), 1818
Lithograph on paper
Museum Works of Art Fund **72.083**

Single-sheet lithographic prints, like the ones being sold in these two scenes, were some of the earliest forms of visual media produced in large numbers for public consumption. For the first time, European and American middle-class viewers could afford to buy images that reflected their own lives and interests. The widespread availability of lithographic prints in the early 1800s increased demand for visual images and primed the public for the introduction of photography in the decades to come.

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Hippolyte Bellangé
French, 1800-1866
Enter, Gentlemen and Ladies . . . (Entrez, messieurs et dames), Frontispiece to *Lithographic Sketches by H. Bellangé (Croquis lithographiques par H. Bellangé)*, 1824
Lithograph on paper
Esther Mauran Acquisitions Fund **2018.20.1**

Here the artist Hippolyte Bellangé imagines lithographic print production as a carnival-like spectacle, emphasizing the entertainment value of popular prints and highlighting the labor-intensive, industrial nature of their creation.

The caption reads:
Enter Gentlemen and Ladies, right in there you will see the family of the famous Lithographantoccini, brought here from Senegal by the famous Captain Crayonizinkhotzp! These little creatures have arrived despite deprivation of sleep and especially of nourishment, in order to give you the most beautiful collection of Albums, Collections of Sketches, Landscapes, Civil and Military Subjects, Caricatures, Scenes of the People as well as of Society, Drawing Manuals, Portraits in Tone, in Cross-hatching, in Stipple, etc. etc. Enter, Gentlemen and Ladies, it's the moment of their daily exercise.

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Making the News

Zoom Out

Given the enormous popularity of newspapers and lithographic prints, the new genre of the illustrated magazine, which combined text and image, became the next logical step. Early magazines, from the 1830s, had to be printed on two different presses—one for the lithographic images and another for the text. After the 1840s introduction of wood engravings, which could be printed at the same time as text, illustrated publications exploded into a full-fledged industry.

Zoom In

In wood engraving, a relief printing technique, the artist uses engraver's tools to carve fine lines into the hard end-grain surface of a block of wood. This is distinct from the woodcut technique, which involves a different kind of wood and a different set of tools. Unlike lithographic stones, wood engraving blocks can be locked alongside the moveable type used to print text in books and newspapers. This compatibility between wood engraving and letterpress printing opened the door for new kinds of publications to reach wider audiences than ever before.

Pierre-Auguste Renoir
French, 1841-1919
Young Woman Reading an Illustrated Journal, ca. 1880
Oil on canvas
Museum Appropriation Fund **22.125**

Alfred Jones
American, 1819-1900
After Richard Caton Woodville
American, 1825-1855
Mexican News, 1853
Etching and engraving on paper
The Patricia Carroll Fitzgerald Mandel Print Collection **2011.96.10**

How do class, race, and gender affect our engagement with printed media? For the upper-class white woman in Renoir's painting, reading a fashion magazine is a private pleasure—not a matter of public or political engagement. The print *Mexican News*, on the other hand, depicts media consumption in a social setting, where people from different classes and racial backgrounds have gathered. In this case, the news concerns Mexico's loss of territory to the United States at the end of the Mexican-American War (1846–1848). Though their reading experience is shared, the group's lack of social cohesion is apparent. The artist hints at this marginalization by placing the African American figures at lower right and the woman peeking from a window at upper right, barely in the frame.

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Winslow Homer
American, 1836-1910
D. Appleton & Company, publisher
Danger Ahead, 1870
Wood engraving on paper
Gift of George P. Metcalf **52.047.9**

Winslow Homer
American, 1836-1910
Harper's Weekly, publisher
New York, 1857–1916
Our Watering-Places—The Empty Sleeve at Newport, 1865
Wood engraving on paper
Museum Works of Art Fund **52.298**

American artist Winslow Homer began his career as a newspaper artist, producing illustrations of current events from railroad accidents to shifting social dynamics in the aftermath of the Civil War. By 1865, publications like *Harper's Weekly*, which regularly printed Homer's work, sold at least 100,000 copies every week, making their weekly readership upwards of half a million people.

For one of Homer's drawings to appear in print, it was first transferred onto a woodblock, then manually carved by an engraver working in a large commercial workshop. This time-consuming process was not very conducive to the rapid pace of the news cycle. To speed up production, large woodblocks were often cut into smaller pieces so multiple engravers could work on the same image at the same time. The gaps between woodblocks often remain visible in these final prints. Ironically, in the example at right, a gap cuts across a Civil War veteran's shoulder near the site of his amputation.

Process Work and the Printer: The Magazine for Makers of Magazines
London, 1893–1929 (renamed repeatedly)
Museum of Fine Arts, Boston. William Morris Hunt Memorial Library, Museum of Fine Arts, Boston **EXL2.20252.7**

As printing technologies continued to evolve, trade journals, or "magazines for makers of magazines" became an important source of information for workers hoping to transition into this new industry. By the end of the 1800s, the new terms process work and process reproduction were coined to encompass the wide array of photographic printmaking techniques used by the commercial printing industry.

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Harper's Bazar
New York, 1867–present (renamed *Harper's Bazaar* in the 1920s)
How Art Remunerates Women/Wood-Engraving, November 4, 1882
Wood engraving and letterpress on paper
Museum of Fine Arts, Boston. William Morris Hunt Memorial Library, Museum of Fine Arts, Boston **EXL2.20252.8**

Despite being cheaper to print than lithography, wood engraving was more physically demanding, often requiring divisions of labor more in line with factory work than artistic production. Women played a key role in supplying this labor throughout the 1800s, as described in this article from 1882.

Le Charivari
Paris, 1832–1937
Vol. 9, no. 195, July 11, 1840
Wood engraving and letterpress on paper
Museum Collection **INV2006.180**

Le Charivari, one of France's first illustrated journals to be published daily, featured wood engravings designed to appeal to a range of tastes. Its publisher, Charles Philipon, described this vast range of visual imagery, including "the latest and most elegant fashions," "places, monuments, and landscapes on which some event of the day may focus attention," "scenes of daily life", and portraits of "any personality who rightly or wrongly, in France or abroad, may for a moment arouse public curiosity."

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What a Relief! The Photographic Print in Letterpress

Zoom Out

Depending on the situation, we expect different levels of quality from the printed images we encounter in the world. The same was true for consumers of illustrated publications in the late 1800s. Readers still valued the look of hand-drawn illustrations in more expensive books, but they had also begun to expect a new degree of photographic realism in images printed in magazines and newspapers. During this time, the relatively new process of photographic printmaking in relief became one of many options available to publishers who wanted to print an image with text.

Zoom In

Most prints made for mass-market book and magazine illustrations during the 1880s and 1890s were produced using some combination of drawing, photography, and relief printmaking in wood or metal. Whatever the method, the goal was to produce a relief printing matrix for letterpress printing.

It can be difficult to tell which processes were combined to print an image. In this section, you will find a photographic half-tone reproduction of a pen and ink drawing; a photo-relief zinc etching reproducing a wood engraving; and two photographic wood engravings, one after an oil painting and the other of a celebrity photograph.

Timothy Cole
American, 1852-1931
Helena Modjeska as Juliet, ca. 1878-1881
Wood engraving on paper
Gift of Miss Helen C. Robertson **51.087.42**

The portrait of Polish actress Helena Modjeska is an example of photo-xylography, or photographic wood engraving. The engraver, Timothy Cole, worked directly on a woodblock prepared with a photographic image. Making tiny cuts, Cole translated the entire original photograph into the network of lines that you see in this print. Portraits of famous actors such as this one were frequently published in popular magazines like *Century*.

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George W. Brenneman
American, 1856-1906
Benjamin Russel Hanby, composer
American, 1833 - 1867
Charles E. Brown & Co., publisher
Boston, active 1890s
My Darling Nelly Gray, 1892
Bound book with half-tone illustrations
Gift of Mr. and Mrs. Samuel Chase **81.254**

George Brenneman's illustrations for the book *My Darling Nelly Gray* were reproduced as photographic half-tone prints. To print a half-tone, a photograph of the original drawing is taken through a grid or screen. As the photograph is captured, the screen breaks up the tonal range of the drawing into small dots of varying size. This image is then transferred to a printing plate, etched in relief, and printed. At a distance, the dots in half-tone prints blend together, resulting in faithful reproductions of the original drawings.

George W. Brenneman
American, 1856-1906
Lovers in Rowboat
Illustration to *My Darling Nelly Gray*, 1892
Pen and brush and ink over graphite on illustration board
Gift of Mr. and Mrs. Samuel Chase **81.255.5**

This wash drawing by George Brenneman refers to the song "My Darling Nelly Gray" by the abolitionist pastor Benjamin Hanby. First published in 1857, the song tells the story of two lovers forced apart by enslavement. Popular among white anti-slavery activists in the years leading up to the Civil War, the song was likely never intended for Black audiences. Brenneman's illustrations are likewise drawn from a white person's perspective. Later recordings of the song by Black musicians including Louis Armstrong point to its evolving legacy.

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Henry Wolf, wood engraver
American, 1852-1916
After Diego Rodríguez de Silva y Velázquez, artist
Spanish, 1599-1660
Portrait of a Little Girl, 1909
Photograph on wood engraving block
Museum Collection **85.139**

Gustave Doré
French, 1832-1883
Judith with the Head of Holofernes, ca. 1865
Watercolor and gouache on wood
Museum Membership Fund **66.027**

Before the photographic half-tone process, photographic images were printed directly onto woodblocks for carving. This process, sometimes referred to as photo-xylography or photographic wood engraving, involved coating the woodblock with light-sensitive material and exposing it under a photographic negative. This is how the image of an oil painting by Spanish artist Diego Velázquez was transferred onto the woodblock on display here. Rather than carve an artist's drawing into the block, as was the case with Gustave Doré's Bible illustrations, engravers instead worked into a photographic image. Given its high degree of realism, photographic wood engraving became a popular means of illustrating famous works of art.

Henry Wolf
American, 1852-1916
A Spanish Girl, 1909
Wood engraving on paper
Museum of Fine Arts, Boston. Gift of Horatio Greenough Curtis

It was notoriously difficult to produce accurate photographs of oil paintings for much of the 1800s and early 1900s, with the results often failing to capture nuances of tone and color in the original. This is one of the main reasons that photographic wood engraving became a popular means of art reproduction, as engravers could manually correct inaccuracies in the original photograph. Wood engravings like this one, which reproduces a painting by Velázquez, offered the best of both worlds by combining the visual definition of a photograph with the detailed artistry of engraving.

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Charles Henry, printer
French, active 1860–1870
After Gustave Doré, designer
French, 1832-1883
Christ and His Disciples in the Corn Field, 1868
Photo-relief zinc etching on paper
Museum of Fine Arts, Boston. Gift of John Walter Osborne

In the 1860s, the French illustrator Gustave Doré created a series of Bible illustrations that quickly became a hit with popular audiences. Hoping to capitalize on this success, publishers and printers later produced unauthorized copies of Doré's illustrations using new methods of photographic printing in relief. In this case, the printer photographed the original wood-engraving illustration and transferred that image onto a zinc plate. The zinc plate was then etched in relief and printed via letterpress. The result is a near identical copy of the original wood engraving, but with far less manual labor involved in its production.

John Henry Ellsworth Whitney, wood engraver
American, 1840–1891
After Henry W. M. Meade, photographer
American, ca. 1823–1865
Joseph Jefferson as Asa Trenchard in Our American Cousin, ca. 1890
Wood engraving on paper

Charles State, wood engraver
American, active 1880–1900
After Otto Sarony, photographer
American, 1850–1903
E. A. Southern as Lord Dundreary in Our American Cousin, ca. 1890
Wood engraving on paper

Both works printed in *The Century Magazine*
New York, 1881–1930
Vol. XXXIX, March 1890
Museum Property

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The Magic of Gelatin

Zoom Out

Carbon printing and woodburytype were popular processes for printing photographic images that required a high level of detail, such as portraits of famous people and reproductions of famous works of art. Unlike relief printing processes, which require breaking up the photographic image into printable dots or lines, woodburytypes and carbon prints retain the smooth tones of the original photograph.

Zoom In

Carbon printing and woodburytype use light-sensitized gelatin to print continuous-tone photographs in pigmented ink. If you've ever made Jell-O or cooked with sheets of gelatin, you may already be familiar with some of this material's unusual qualities. Gelatin dissolves in hot water, but not in cold. It swells up and remains remarkably stable in a semi-solid state. Mixed with certain chemicals and exposed to light, it will harden and cannot be dissolved, making it especially useful in photography.

Félix Nadar, photographer
French, 1820-1910
Goupil and Company, printer
Paris, 1827–1879
Portrait of Isidore Séverin, Baron Taylor, ca. 1875
Woodburytype print on paper
Mary B. Jackson Fund **75.029**

In the 1860s, the English photographer Walter Woodbury patented the woodburytype process, which involved creating a relief mold from light-sensitized gelatin. The thin sheet of hardened gelatin in the case below is one such example, used to produce this portrait of the French artist and writer Isidore Séverin, also known as Baron Taylor. The mold's surface varies in thickness across the tonal range of the image: the darkest areas of the image, such as the jacket, are the thickest areas of the gelatin sheet, while the lightest areas, such as the face, are thinnest.

To produce a woodburytype print, great force is used to press the gelatin mold into a lead plate, transferring its three-dimensional surface onto the plate. The plate is then inked with pigmented gelatin and printed onto paper.

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Adolphe Braun
French, 1811-1877
Untitled (Photograph after a drawing attributed to Michelangelo Buonarroti), ca. 1878
Carbon print
RISD Library Transfer **2000.29.1**

Adolphe Braun
French, 1811-1877
Untitled (Photograph of a drawing attributed to Leonardo da Vinci), ca. 1878
Carbon print
RISD Library Transfer **2000.29.2**

Adolphe Braun
French, 1811-1877
Untitled (Photograph of a drawing attributed to Andrea del Sarto), ca. 1878
Carbon print
RISD Library Transfer **2000.29.4**

These carbon prints are reproductions of famous drawings by Italian Renaissance artists Leonardo da Vinci, Michelangelo, and Andrea del Sarto. Reproductions such as these allowed more people—especially those without the money to travel—to study works of art from around the world. Art history was no longer the exclusive privilege of the wealthy. Many educational institutions, including RISD, maintained extensive collections of carbon-printed reproductions for use by students well into the 1900s.

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Félix Nadar, photographer
French, 1820-1910
Goupil and Company, printer
Paris, 1827–1879
Baron Isidore Justin Séverin Taylor, ca. 1875
Gelatin mold for a woodburytype
Esther Mauran Acquisitions Fund **2023.132.2**

American
Carbon tissue samples in three colors, ca. 1891
Museum of Fine Arts, Boston. Source unidentified

These paper samples are examples of carbon tissue, the main material used in the process of carbon printing. Carbon tissue is a sheet of paper coated with a mixture of gelatin, pigment, and light-sensitive material. When this sheet is placed under a photographic negative and exposed to light, the gelatin mixture hardens and becomes insoluble wherever the light falls. The hardened gelatin is then transferred to a new sheet of paper and the remaining gelatin washed away, leaving behind the final image.

The word carbon, in this case, refers to the pigment carbon black, but any color of pigment could be used. For this reason, carbon prints became a popular way to reproduce drawings made using historical materials, such as red chalk or blue-toned paper.

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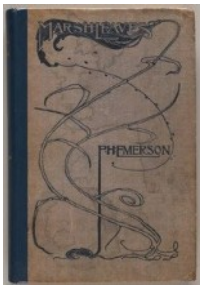
The Art of the Photographic Print

Zoom Out

Near the end of the 1800s, a new generation of photographers embraced the idea that subtle suggestion can be more powerful than crisp delineation when it comes to photographic expression. Members of the Pictorialism movement turned to photogravure, a process first developed in 1852, for its soft and hazy effects. The unique visual qualities of this process appealed not only to fine-art photographers, but also to publishers eager to capitalize on the public's growing interest in photographic images. Publications filled with luxurious photogravure prints of faraway places or enticing scenery offered readers new ways of engaging with the world from the comfort of home.

Zoom In

In the process of photogravure, light-sensitive gelatin is coated onto a printing plate and exposed under a photographic transparency to transfer the image to the plate. A photogravure print has a grain-like texture when viewed under magnification. This texture is produced by dusting powdered rosin onto the printing plate prior to etching it in acid (a procedure known as aquatint). Without this addition, the continuous tones that make up the image would be lost in the etching and printing process.



Peter Henry Emerson, photographer
British, 1856-1936
David Nutt, publisher
American, ca. 1746 - 1816
Marsh Leaves, 1895
Photogravure on paper
Gift of Mr. and Mrs. Gilman Angier in memory of Julia Angier Ewing and Colby MacKinney Keeler **79.109**

Peter Henry Emerson's preferred method for printing photographs in books was photogravure, even though processes like collotype and woodburytype were more commercially practical at the time. Emerson was interested in the expressive qualities that photogravure offered. He explained:

For artistic reasons we are of the opinion that Collotypes, Woodburytypes, and all such methods, are undesirable; and this we say deliberately, after long study of the subject, for in supervising and choosing illustrations for the books which we have illustrated we carefully examined specimens of nearly all the photomechanical processes extant.

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James Leon Williams
American, 1852 - 1932
Charles Scribner's Sons, publisher
New York, 1846–1984 (renamed repeatedly)
The Homes and Haunts of Shakespeare, 1891
Photogravure on paper
Gift of Carolyn Faulhaber **1989.066.10**

After a successful career as a dentist in the United States, James Leon Williams moved to England and began making photogravure prints of scenic spots associated with the life and work of author William Shakespeare. Catering mostly to an American audience, The Homes and Haunts of Shakespeare was available by subscription only and appealed to a higher end of the market than newspapers or magazines at the time.

Anne W. Brigman
American, 1869 - 1950
The Soul of the Blasted Pine
From *Camera Work 25*, 1909
Photogravure on paper
Gift of Susan Ehrens **2022.111.3**

This photogravure by Anne W. Brigman highlights the range of textures and tones possible using the photogravure process. This print first appeared in Camera Work, a journal founded by photographer Alfred Stieglitz in 1903. Both Brigman and Stieglitz were part of the Photo-Secession, a movement that championed photography as a medium for individual artistic expression. Trained as a commercial printer in Germany, Stieglitz brought photogravure to the attention of this new group of photographers in the early 1900s and actively promoted the process through publications like *Camera Work*.

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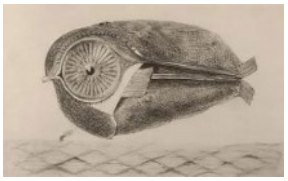
The Versatility of the Photographic Print

Zoom Out

In the first few decades of the 1900s, photographic prints rose in popularity for commercial, scientific, and artistic use. One new process in particular stood out for its versatility and flexibility across disciplines: the collotype. This technique, first invented in the 1850s, allowed printers to achieve a wide range of textures, tones, and colors. Though practiced far less widely today, the collotype process continues to entice artists with its unique visual characteristics.

Zoom In

A collotype print has a worm-like pattern when viewed under magnification. Like photogravure, the collotype process also involves the use of gelatin, but this time it is coated onto a glass plate rather than a metal plate. Gelatin mixed with light-sensitive chemicals is spread over the glass and left to dry. As the gelatin dries it contracts, producing its characteristic surface pattern. In most cases, this grain is nearly invisible to the naked eye, making collotype prints easily mistaken for other kinds of photographic media.



Max Ernst
German, 1891-1976
Galerie Jeanne Bucher, publisher
Paris, 1925–present (renamed 1947)
The Fugitive (L'Évadé)
From the series *Natural History (Histoire Naturelle)*, 1926
Collotype on paper
Museum Works of Art Fund **46.323.30**

The gallerist and publisher Jeanne Bucher found the commercial collotype process to be a useful tool for artists interested in translating their ideas from one medium to another. Under her direction, German artist Max Ernst published a series of surrealistic compositions called *Natural History*, in reference to scientific illustrations of plants and animals. Throughout the series, Ernst showcases the drawing technique *frottage*, which involves rubbing a crayon or pencil over paper placed on a textured surface. The collotype process reproduces these textures with remarkable accuracy, so much so that they are often mistaken for originals drawings instead of prints.

RISD
MUSEUM

Eadweard Muybridge
English, 1830-1904
Plate 469
From the book *Animal Locomotion*, 1887
Collotype on paper
Richard Brown Baker Fund **73.168**

Each of these photographs of a child in motion was taken by a different camera positioned at a different point along a track; as the child ran along the track, their footsteps triggered the camera shutters, capturing the figure at specific moments along the journey.

Photographer Eadweard Muybridge devised this method for his scientific study of humans and animals in motion, published in 1887 as *Animal Locomotion*. To produce the prints for this publication, Muybridge arranged the photographs into tidy grids that were then rephotographed and printed using the collotype process.

American
Two Roses, ca. 1915
Collotype postcard
Gift of Mary Bergstein **2012.83.12**

American
Bouquet of Flowers, ca. 1915
Collotype postcards
Gift of Mary Bergstein **2012.83.13**

Kurita Kōichirō **栗田紘一郎**
Japanese, b. 1943 in Manchuria; works in Japan and the US
Benrido Atelier, publisher
Kyoto, Japan; 1887–present
Atmosphere/Dark Cloud; from *Time*, 1987, printed 2005
Collotype on paper
Anonymous gift **2019.106.4a**

One of the last print shops still making collotypes today is Benrido Atelier in Kyoto, Japan. At the time of its founding in 1887, Benrido was primarily a commercial enterprise, printing photographic images for books, advertisements, and postcards similar to the American examples in this case. Today, Benrido's master printer Osamu Yamamoto collaborates with contemporary artists and photographers from around the world, translating a wide variety of artistic styles into the rich tones and textures characteristic of collotype printing.

RISD
MUSEUM

William de Wiveleslie Abney
English, 1843 - 1920
Macmillan and Company, publisher
London, 1843-1920
"Photography: Two Lectures"
From *Science Lectures at South Kensington*, 1876
Museum of Fine Arts, Boston. William Morris Hunt Memorial Library, Museum of Fine Arts, Boston

This pamphlet documents a series of photography lectures given to students at South Kensington, an English school of art and design that served as a model for RISD when it was founded in 1877. Describing how photography "has put a new power in the hands of men of science in their investigations," the lecturer demonstrates a variety of photographic processes, including collotype. The illustration shows the application of ink onto a gelatin-coated glass plate, which is still today the way most collotypes are made.

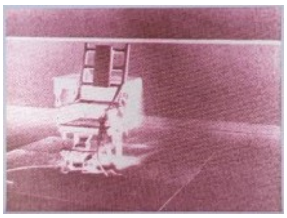
Contemporary

Richard Hamilton
1922–2011; b. and worked in London
Heinz Häfner, collotype printer
active in the 1970s in Stuttgart, Germany
Dieter Dietz, screenprinter
active in the 1970s in Lengmoos, Germany
A Portrait of the Artist by Francis Bacon, 1970-1971
Color collotype (from a Polaroid of Richard Hamilton by Francis Bacon) and screenprint
Georgianna Sayles Aldrich Fund **74.108**

Based on a Polaroid picture taken by artist Francis Bacon, this portrait by Richard Hamilton combines two inexpensive processes— collotype and screenprint. Working closely with professional printers, Hamilton wanted to push back on the "perfection" of commercial printing technologies like collotype by incorporating the painterly textures of screenprint. As he described:

Beautiful as the [collotype] process is . . . , I never felt that I could leave it there. The smooth flat surface asks for a rougher touch to break the perfection of tone, the soft, watery tonalities achieved with a deceptive ease.

RISD
MUSEUM



Andy Warhol
1928-1987; b. in Pittsburgh, Pennsylvania; worked in New York
Silkprint Kettner, printer
Zurich, Switzerland
Bruno Bischofberger, publisher
b. 1940 in Zurich
Electric Chair, 1971
Color screenprint on paper
Museum purchase with funds from the National Endowment for the Arts **76.004.2**

Is it true that the more we see horrifying images on screens and in print, the more desensitized we become? In this work, Andy Warhol asks this question by borrowing an image of an electric chair from a mass-produced newspaper. A symbol of state-sanctioned violence and capital punishment, the electric chair is a jarring image, but it is also just that—an image.

What power does an image hold when it is replicated, reproduced, and shared widely? Blown up to a much larger scale than it would have appeared originally and reproduced in shades of brown and pink, *Electric Chair* refuses to be ignored.

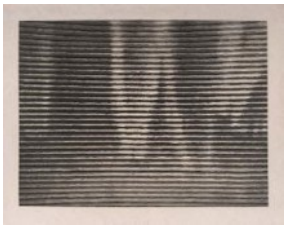
Luis González Palma,
b. 1957 in Guatemala; works in Cordoba, Argentina
Scott Mathes and Paul Taylor, printers
Renaissance Press, publisher
Ashuelot, New Hampshire; 1986–present
The Silence (El Silencio), 1998
Photogravure with polymer and bitumen
Nancy Sayles Day Collection of Modern Latin American Art **1998.49**

Dark yellow-brown tones cover the surface of this print, producing a shadowy haze punctured only by the bright white of the figure's eyes. This tonal quality is the result of a thin wash of bitumen, or asphalt, a smelly, sticky material most commonly used for paving roads. Coupled with the velvety richness of the photogravure process, González Palma's use of bitumen pays homage to the materials and techniques of early photographic history. See, in particular, Joseph Nicéphore Niépce's heliogravure of Cardinal D'Amboise, which was printed from a metal plate coated in light-sensitive bitumen, in the smaller gallery at left.

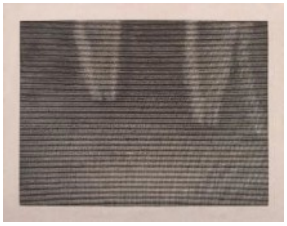
RISD
MUSEUM

Robert Gober
b. 1954 in Wallingford, Connecticut; works in New York
Derriere L'Etoile Studios, printer
Long Island City, New York; 1986–present
Bride, 1992-1996
Photolithograph printed on archival newsprint
Walter H. Kimball Fund **2005.74**

Artist Robert Gober made this print look like a page from the *New York Times*, complete with an advertisement for the department store Saks Fifth Avenue. But this is no ordinary newspaper ad—Gober himself models the bridal gown. As a gay man in drag, the artist's presence acts as a silent but powerful protest against the news item appearing above, which describes marriage discrimination against the LGBTQ+ community. In 1992, when this print was made, photographic images were found throughout newspapers and magazines. By calling attention to the image on the page, Gober challenges the viewer's overfamiliarity with visual media and invites a second look.



Christiane Baumgartner
b. 1967 in Leipzig, Germany; works in Leipzig
Trails I, 2009
Woodcut print on paper
Walter H. Kimball Fund **2010.11A**



Christiane Baumgartner
b. 1967 in Leipzig, Germany; works in Leipzig
Trails II, 2009
Woodcut print on paper
Walter H. Kimball Fund **2010.11B**

In this print, Christiane Baumgartner combines woodcut—one of the oldest techniques for reproducing visual media—with more recent media technologies, in this case, video images of World War II warplanes. To make these prints, Baumgartner took photographs of her television screen, pasted the scaled-up images onto large planks of wood, then carved the image in relief. Note that she captured both the image itself and traces of its original media format: horizontal bands characteristic of older-style television screens compete for our attention against the vapor trails of the airplanes.

To learn more about Baumgartner's prints, read scholar Gerry Beegan's Object Lesson in *Manual 20*.