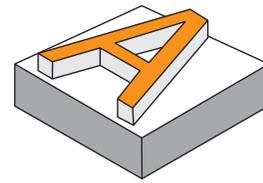


What is a Print?

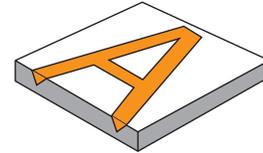
A print is a work of art that is made by transferring an image from a plate or matrix onto a sheet of paper by applying pressure to the paper and the matrix. This allows multiple iterations of the same image to be printed as a numbered limited edition. Typically prints are placed in a press to apply the necessary pressure. A matrix can be a number of different materials depending on the type of print being made, for example: a piece of wood, a linoleum block, a sheet of metal, or a piece of limestone. The matrix is manipulated in different ways in order to hold the ink that is used to print the image. All fine art prints fall into five main categories: relief, intaglio, lithograph, monotype, and serigraph. Within each of these, there are a significant number of specific tools and techniques used to manipulate the image.



relief printing
linoleum cut (linocut), woodcut,
wood engraving



printing area is raised from the non-printing area



intaglio
etching, drypoint, aquatint,
engraving, mezzotint, photogravure



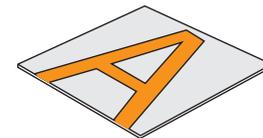
printing area is lowered from the non-printing area



planography
lithograph, monotype



printing and non-printing areas are on the same level and are separated chemically



stencil
serigraph



printing through an opening

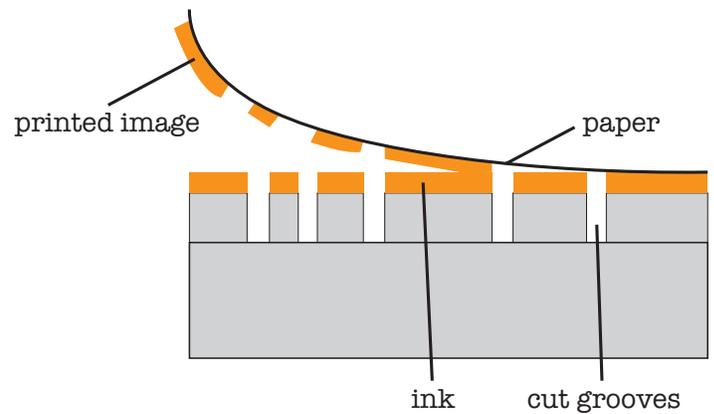
Printing Techniques

Relief Prints

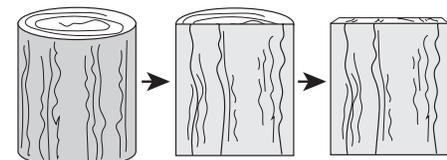
A relief print refers to any print in which the surface of the printing matrix is carved away and the ink is applied to and printed from the remaining raised surface. Relief prints include woodcuts, wood engraving, linoleum cuts, letterpress, and rubber or metal stamping.

Linoleum Cut (Linocut): A relief technique using a sheet of linoleum from which shapes are gouged away using chisels or knives, leaving the printing image as the raised surface. Ink is transferred from the surface of the block by the application of pressure. Linoleum is softer and therefore easier to carve than wood; however, it exhibits neither wood's characteristic grain nor its durability.

Woodcut: A relief technique using a plank of wood from which shapes are gouged away using chisels or knives, leaving the printing image as the raised surface. Ink is transferred from the surface of the block by the application of pressure. Woodcuts are characteristic both for the grain that is often evident in the printed image, as well as for their durability, stark lines, and sometimes textural background.

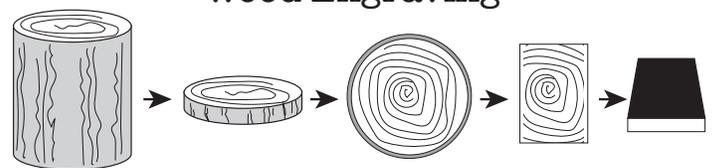


Woodcut



long grain block

Wood Engraving



end grain block

Wood engraving: A wood engraving is created by carving out the end grain of a wood block. Wood engravings allow for more intricate details to be carved out than a woodcut since woodcuts tend to splinter more easily during carving.

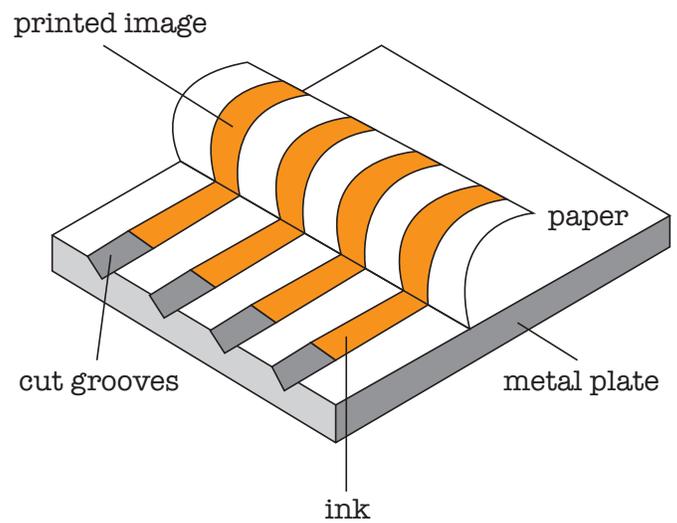


Gustave Baumann, *Hoosier Garden* progressive proof (first) and printing block, ca. 1940s, woodcut on paper/carved wood, 14 ½ x 17 in., Albuquerque Museum, gift of an Anonymous Donor, PC1986.68.1.B/.N

Gustave Baumann's carved woodcut and progressive proof illustrate the tedious process of woodcut printing. The final print of *Hoosier Garden* was printed in seven colors which means Baumann created seven separate blocks; one for each color. Note Baumann's unique cancellation mark on the woodcut in the doorway above the chair. Cancellation marks are carved into the matrix after an edition has been printed to ensure that no future prints are made.

Intaglio

Intaglio prints are prints where the image has been incised into a surface and the incised line holds the ink which is then transferred to the paper. The incising can be done mechanically with a tool or by chemically removing layers of the plate's surface. Intaglio prints can be identified by a slightly raised ink surface and a plate mark around the edge, where the pressure of the press created an indentation in the paper. Common types of intaglio prints are etching, drypoint, aquatint, mezzotint, and photogravure.

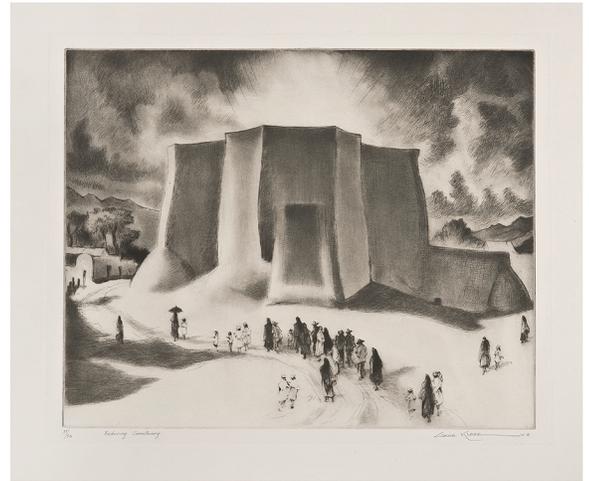


Etching: An intaglio technique that can create a wide variety of printed marks. A resist (material that is not corroded with acid) is first applied to a clean metal plate (such as zinc or copper). The resist is selectively scraped off to reveal the bare plate beneath. When the plate is placed in a corrosive acid bath, only the exposed metal areas corrode. The plate is then inked; ink remaining on the surface of the plate is wiped away. Damp paper is laid on the plate; paper and plate are run through a press, and the ink is transferred from the recesses to the paper.

Aquatint: An intaglio technique that creates tonal variation in a printed area rather than lines. Fine particles of acid-resistant material, such as powdered rosin, are attached to a printing plate by heating. The plate is then immersed in an acid bath, just like etching. The acid eats into the metal around the particles to produce a granular pattern of tiny indented rings. These hold sufficient ink to give the effect of an area of wash when inked and printed. The extent of the printed areas can be controlled by varnishing those parts of the plate to appear white in the final design. Gradations of tone can be achieved by varying the length of time in the acid bath; longer periods produce more deeply-bitten rings, which print darker areas of tone. The technique was developed in France in the 1760s, and became popular in Britain in the late eighteenth and early nineteenth centuries.

It is often used in combination with other intaglio techniques.

Drypoint: An intaglio technique in which marks are cut directly into a metal plate using a tool with a sharp point. The drypoint needle is used like a pencil to incise lines into the plate, displacing ridges of metal called burrs. The plate is wiped with ink, which collects in the incisions as well as under the burrs. Damp paper is laid on the plate, and they are run through a press together, transferring ink from both the incision and the burr, resulting in the drypoint's characteristic fuzzy line.



Gene Kloss, *Enduring Sanctuary*, 1973, etching, drypoint, and aquatint on paper, ed. 37/50, 17 1/2 x 23 in., Albuquerque Museum, gift of James Evans, PC2019.25.9

Enduring Sanctuary incorporates three intaglio techniques into one print. The variation in shades of gray was created using aquatint. The finer, crisper lines throughout the print are examples of etched lines, and the softer lines, especially evident in the figures are examples of drypoint.

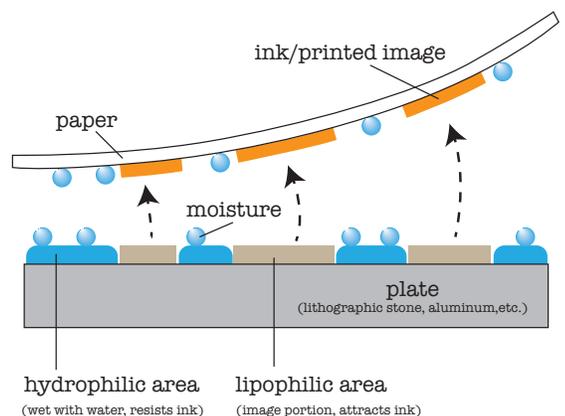
Engraving: A technique that creates precise lines which swell in the middle and taper at the ends. Lines are incised into a bare metal plate using a burin, a tool with a V-shaped blade. The plate is wiped with ink, which collects in the incisions. Damp paper is laid on the plate, and they are run through a press together, transferring ink from the incisions to the paper.

Mezzotint: An intaglio technique in which the surface of a metal plate is first uniformly pitted using a tool called a rocker. A mezzotint rocker is serrated on the bottom and must be rocked back and forth by hand, a demanding task. A rounded metal tool called a burnisher is then used to gradually and selectively smooth out areas, causing them to retain less ink. Damp paper is laid on the plate, and they are run through a press together. The fully pitted areas transfer more ink than the burnished sections, creating mezzotint's characteristic gradations of tone.

Photogravure: A general term for any metal plate process in which an image has been transferred to a metal surface by photographic means. A corrosive bath is used to incise the image into the plate before inking and printing. Photoetching is a term alternatively used.

Lithograph

Lithographic prints are created when the image is drawn on stone, zinc, mylar, or aluminum plate with a greasy crayon or ink. A chemical solution is applied so that the greasy image attracts ink and blank areas attract water. The inked image is then transferred to paper. Offset lithographs are a different process made with a printing machine which offsets the image on rubber roles or blanks and then onto paper.



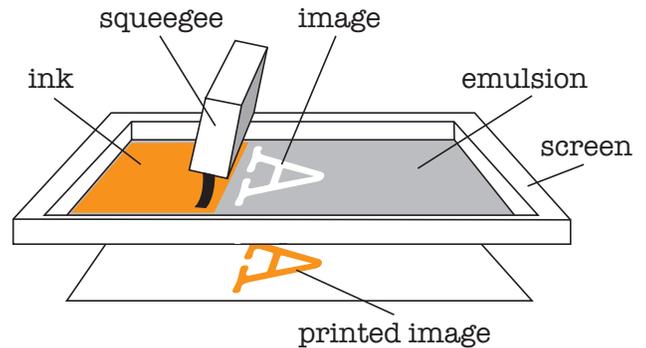
Monotype/Monoprint

Monotypes are unique prints made from a re-printable block, but in a way that is unique. Typically

painterly in effect, monotypes are made by applying paint or printing ink to a flat sheet of metal, glass, or plastic and the image is then transferred to paper either by manual rubbing or through a press. Typically each plate yields only one monotype, but later pulls of the plate are sometimes made with the residual pigment on the plate creating what are called "ghost prints."

Serigraph

Serigraphs are also known as screenprints. The image is created by cutting out a stencil from paper or plastic film. The stencil is placed in a frame with silk, dacron, or other fine mesh fabric over it and the ink is then pushed through the stencil with a squeegee.



PRINT NOTATIONS

Fine art prints are made as a limited edition set of identical prints made from the same matrix. Each print in a limited edition is usually numbered in the lower left-hand margin with the following format: number in the edition/size of the edition (i.e. 15/50). To guarantee a limited edition, the artist or printer can "strike" the plate by incising an X on the printing face after completion. Edition sizes can vary and in addition to the edition, a number of other prints are made in the process as proofs to ensure that the print has the desired appearance. These proofs are not considered part of the numbered edition. Many of the following print notations are common in all printshops and other printshops utilize unique notations to delineate proof prints.

Artist's Proof (A.P.): A print reserved for the artist and not included in the numbered edition. An artist's proof can be identified by the inscription "A.P." found in the lower left-hand margin. Artist's proofs may also be marked with the French version "E.A." for 'épreuve d'artiste.'

Bon à Tirer (B.A.T.): A print that is not included in the edition and translates in French to "good to pull." This is the final proof that artist and printer approve for printing and indicates how each print in the rest of the edition should appear. "B.A.T." is typically found in the lower left-hand margin.

Color Proof (C.P.): A color proof is used to test which colors best express the artist's intention. C.P.s are typically done prior to signing off on the B.A.T.

Edition Variable (E.V.): An edition that uses a common matrix throughout, but incorporates additional elements such as a hand-painted background that are unique to each individual print in the edition.

Hors Commerce (H.C.): A print that is not included in the edition that is traditionally never sold, but reserved to be given to galleries or museums to promote the artist and the edition.

Printer's Proof (P.P.): A print reserved for the printer and not included in the numbered edition given to the printer as a gift for their work. A printer's proof can be identified by the inscription "P.P." typically found in the lower left-hand margin. The number of printer's proof can vary depending on how many printers were involved in the edition.

Trial Proof (T.P.): The trial proof is made so that an artist can examine and perfect the print's intricacies before beginning the official print run. Trial proofs may vary slightly from the final edition.

Working Proof (W.P.): Working proofs are trial proofs that the artist has altered by hand, usually by drawing or painting on the print to indicate subsequent changes to the composition on the printing plate.

GLOSSARY

à la poupée (French, "with a doll"): An intaglio inking technique used for making color prints by applying different ink colors to a single printing plate using ball-shaped wads of cloth, one for each color. The "doll" refers to the wad of cloth used to apply ink.

Acid: The corrosive solution in which a metal plate is etched for intaglio printing. The concentration of the acid bath is precisely measured, as is the period of a plate's submersion.

Baren: Hand tool used to firmly rub the back of the sheet of paper in order to pick up ink from the matrix.

Biting: The action of acid on a metal plate to incise an image. Also called etching.

Bleed: Printing that extends to the edge of a sheet or page.

Blend Roll: Also called rainbow roll or split fountain roll, a technique of simultaneously rolling one or more colors onto a stone or relief surface from the same roller. The print colors have a soft blended transition from one to the next.

Brayer: A roller used to spread ink on a matrix.

Burnisher: A bent, rounded tool used for making changes in a metal plate after it has been incised. The burnisher, used with oil, smooths out marks after they have been diminished by scraping the metal with a tool called a scraper.

Burr: Small deposits of displaced metal that are created when any sharp point (usually a tool called a needle) is used to draw into a plate. In drypoint etching, the burr clings to the incisions and creates distinctive soft lines in the print.

Cancellation: The term for any method of assuring that a plate, or other matrix from which a limited edition has been printed, can no longer produce impressions. Sometimes the image is scratched or defaced; sometimes the entire plate is cut up and recycled.

Chine-collé: The process of adhering one piece of paper to another by using a liquid adhesive and running them together through the printing press. *Chine* is French for "China," which refers to the thin Asian paper originally used with this technique, and *collé* means "glued."

Chop: The chop mark is a mark or seal made with an embossing tool in the margin of a print. Chops exist for print shops as well as individual printers and occasionally artists have their own chop. The chop mark holds particular meaning for the printmaker and publisher and in addition to the artist's signature it also reinforces the print's authenticity.

Collagraph: A technique of relief printing using any combination of items such as cardboard, fabric, washes, carborundum (an abrasive powder), or found objects, which are adhered to a plate, inked, and printed.

Embossing: A print of a relief element on a dampened paper without ink resulting in a three-dimensional impression of the object. Sometimes referred to as “blind” embossing.

Ground: Any acid-resistant material used to protect an etching plate from acid. The most common grounds are wax, asphaltum, shellac, rosin, and soap.

Impression: Any numbered print from a completed edition.

Letterpress: A relief technique for printing movable type (though blocks with images may also be used). Metal, wood, or polymer forms of a standard height are set in place in the bed of a press. Since ink is transferred from the surface of the blocks by the application of pressure, letterpress prints are recognizable for their embossed printed forms.

Matrix: A physical surface that can be manipulated to hold ink, which is then transferred to paper. Most, though not all, matrices are able to print the same image many times. Matrices used in printmaking include blocks of wood, sheets of linoleum, metal plates, sheets of Plexiglass, and slabs of limestone.

Mylar: A material similar to polyester or plastic that is used in lithography. Artists can draw directly on mylar then transfer the image to a photosensitive lithographic plate which is then printed.

Offset lithographs: Lithographs printed by transferring an image from a stone or plate to an intermediate surface and then to the print paper.

Open Bite: An intaglio technique in which larger open areas of the plate are exposed to acid.

Plate: A flat piece of metal, usually copper or zinc, used to create an image that can be printed.

Platemark: The indented impression of the edges of a plate in the paper. If the plate edges have been wiped clean of ink, the platemark will be simply an indentation. Otherwise it will hold ink unevenly and print as an irregular line. The presence of a platemark is a sign that the print was printed in intaglio, but not all intaglio prints show a platemark. Sometimes the paper is the same size as (or smaller than) the plate, or the print is trimmed inside the platemark after printing.

Pochoir: A stencil printing process where ink is brushed through a series of stencils to achieve a final color image.

Printer: The specialist who provides technical aide throughout the printing process. A master printer may have a group of assistants. Historically, printmaking has been characterized by a divided production process, where artist and printer work collaboratively but accomplish different tasks.

Proof: A print that is not considered to be part of the numbered edition. Examples include prints made in advance of the edition – known as “trail proofs” – as well as those made at the time of the edition, but which are reserved for the artist or printer.

Publisher: The entity responsible for funding the development and production of an edition. Commonly, this is in exchange for either a percentage of the edition or of the profits from its sale. Some printshops publish their own editions.

Pull: To make a print by transferring the ink onto paper either by hand or with a press.

Registration: A system to ensure that several plates can be printed in accurate alignment, one on top of the other, to make a single print.

Resist: An etching resist (such as hard ground or asphaltum) is applied to the plate in order to prevent an acid solution from corroding the surface. The artist scratches off the resist using a variety of etching tools: these lines are etched into the plate by exposing the bare metal to acid.

Restrike: A restrike is a print produced from the matrix of an original print, but which was not printed as part of the original publishing venture or as part of a connected, subsequent publishing venture. A restrike is a later impression from an unrelated publishing project.

Roller: A tool used to spread ink on the matrix.

Roulette: A roulette is a tool with a small textured wheel at its drawing end. It is used in intaglio processes by rolling it over the plate. The roulette makes wide marks that hold ink to varying degrees creating tonal variation in the final print.

States: Once editioned, plates are occasionally reworked to produce what is called a second state. They may have a different number in the edition to the first state.

Unique State: Each impression is original and unlike any other in the edition. Each may be hand colored in different colors for example or changed in some other way.