PRINT

Print is pictorial multiples have been wide use since fifteen century as a means of vital communication to serve the need the church and monarch. Prints taken out in multiples by the artist from images worked out on blocks, stones plates, plates, or stencils, either manually or through appropriate mechanical process of reproduction. Art, generally associate with print is called Graphic Art or Impression Art in a broader sense, and later stage Print making, more specific.

GRAPHIC ART

The phrase Graphic art, ‘Graphic’ has been derived from the Greek ‘Graphikos’ through the Latin ‘Graphicus’, and it stands for writing, drawing (pictorial or symbolic rather than verbal); plus art, (middle English and old English accusative) comes from the Latin ‘Ars’ (nominative), ‘Artem’ (accusative), meaning skill applied to a production of beauty or to a work of creative imagination. In general, the term ‘graphic art’ embraces a large number of activities from logogram to book printing, from symbol to artistic prints, from commercial to fine arts. The development of printing techniques made it possible to reproduce a number of copies of single image, although the invention of true printing had to wait for the time when paper became
readily available. It can be considered as democratic art for requirement of the masses.

Before 1964, all the printed pictures for both illustrative (commercial) and non-illustrative (fine art) purposes were together titled graphic art. As the purpose and attitude of each differs from that of the other, it became vital necessity to coin a new term to distinguish them. To solve this problem, the print council of America in 1964, restricted the original print and gradually the term 'print making' was generally accepted.

The systems used to record the image fall into four categories: Relief Printing, Intaglio Printing, Planographic Printing or Lithography and Stencil Printing or Serigraphy. These main four printing processes are known as autographic methods of recording images.

**IMPRESSION**

Impression (Synonyms: impression, print), denotes a visible made on a surface by pressure which is prime means of making multiple copies of a work of art or images; an impress of a bare feet in the sand. An individual print has been taken from a worked plate, block or stone, whether intaglio (which may be printed un-inked), relief or surface.

**LINOLEUM PRINT**

Linoleum is made with powered cork, resin and linseed oil, with a burlap backing. Because of its relative softness, it can be more convenient to cut for the making of relief print. The u-shaped gouge is the most practical tool for cutting linoleum and it is often exclusively for the entire image. Textures
can be made in the surface of the linoleum with a knife or other tool. When the cleaning the unwanted areas, make the initial gouging shallow textures, so that the ridges will catch up ink. This technique leaves an interesting textural effect between the raised areas and produces an active surface characteristic of the linoleum print. Printing the linoleum block by hand follows same procedure as woodcut relief print. Because of the consistency of the linoleum, it will also print with excellent result on an etching press.

RELIEF PRINTING

Relief Printing in which the image is made from a raised surface as in Wood cuts and Wood engravings. As the name implies, in this technique the image is printed from parts of the block in relief; white areas are created by cutting away the block. Ink is applied to the block and the image is transferred on to the paper by rubbing the back of the paper or by applying vertical pressure to it in a press.

WOODCUT

Woodcuts were developed in Europe shortly after 1400. A block of wood, usually about 1 Inch (2.5 c.m.) thick, is cut along the grain of tree and the surface smoothed. Unless a grained wood is desired to create a particular artistic effect, a short, even grained wood such as cherry, sycamore, or pear is used. After drawing the image on the block, the wood is cut away using knives and gouges. Because of the nature, the technique is more suitable for bold area of black and white rather than fine lines, but the great artist-craftsman Albrecht Durer achieved remarkable details in his woodcuts.
The technique of woodblock cutting is one of the oldest and simplest forms of print making; in its simplest form the woodcut is made on the plank side of the wood, with the grain running lengthwise. After all the background area has been cut away, the image remains on the surface wood. The surface is inked, the paper placed on top, and back is rubbed with a spoon or other burnisher to make to make the impression, or print.

WOOD ENGRAVING

In wood engraving, it is possible to make fine lines, similar to metal engraving technique, using wood block of hard, close grain such as box wood, which is sawn across the grain. The cutter considers the surface as a black back-ground and cut his design to form white lines; thus this is called the white line method. The wood engraver uses engravers’ tools such as the graver or burin rather than knives and gouges. Thomas Bewick, an English engraver of the eighteenth century accomplished the major exploratory work in this particular medium.

MATERIALS AND TERMINOLOGY

**Baren:** Normally a circular pad about five inches in diameter, used by the Japanese relief print makers for burnishing. The traditional version is made of bamboo fibres.

**Gouge:** A small woodcutting or carving tool, rather like a chisel, with a curved or ‘V’ shaped cutting edge.

**Graver:** The basic engraving tool, consisting of a steel blade, square or lozenge-shaped in section, set into a small half-round wooden handle. The
cutting point is normally set back at a steep angle ($45^0$-$60^0$ for metal, and $30^0$-$45^0$ for wood).

**Key block:** Usually, the block outline or master block from which all subsequent colour blocks are registered.

**Printing press:** Platen (e.g. Albion, Columbian)- An older form of relief printing press consisting of a travelling bed, on which the relief block is placed, and a heavy iron plate which is lowered on to it and pressed firmly with a lever.

**Registration:** Ensuring the correct alignment of each plate, block, screen and so on, when printing in several colours on to a single sheet of paper.

**Scraper:** Small steel hand tool, triangular in section, with hollow-ground sides and sharp edges tapering to a point; used in etching and engraving for removing burr and for making corrections or scraped effects; occasionally employed in woodcut for hollowing out or scraping down the surface of a block.

**‘V’ tool:** A ‘V’ shaped gouge, is also known as scive or veiner.

**INTAGLIO PRINTING**

In Intaglio Printing, an impression is made by pushing the paper into inked depression and recess in the metal plate. These depression and recess are created by acid, by a burin or graver or by direct scratching and scoring on the metal plate. An intaglio print is made in several operations. First, a short, soft ink is applied to the surface of the etched or engraved plate and rubbed into all recessed and incised areas. The surface ink is then removed,
leaning the ink deposited in all the crevices; paper softened by being dampened with water is placed on plate. Considerable pressure is applied with the aid of an etching press and felt-blankets, forcing the paper into the recessed area to pick up the ink. The quality of the printed line can vary greatly depending on the image-making method that was used. It can be sharp and crisp, soft and crayon like, or smooth and almost velvety.

Many techniques for making intaglio plates can be dividing into two basic categories- etching techniques that employ acid and engraving techniques dependent on sharp tools. Dry point, line engraving and mezzotint are engraving methods; etching techniques include hard ground etching, soft ground etching, aquatint and its many variations.

**DRY POINT**

Dry point produces a characteristically soft, heavy line. As the point of the needle is scratched across the plate in creating the image, it displaces metal, thus raising a burr. The incised groove and burr however are very fragile, because of wear from the friction of inking, wiping and printing; the plate will yield no more than ten or twenty good impressions unless it is steel faced.

**ENGRAVING**

The engraved line exemplified by any bank note, is characterized by sharp and infinitely crisp detail, line are often smooth and flowing- thinner where the engraving tool cuts less of the surface metal, swelling to heavier and wider lines where the tools pushed deeper into the metal. Tonalities are
achieved by engraving parallel lines that intersected at various angles or many closely spaced fine dots.

MEZZOTINT

The making of a mezzotint plate involves several steps, the first of which is to roughen the entire plate with the aid of a mezzotint rocker. In this state, the plate would print a solid black. Tones are then burnished and scraped into highlights. As a reverse technique, the image is developed from dark to light.

ETCHING

An etched line does not have the smooth crisp quality of an engraved line. It is usually sharply defined, but slightly irregular due to the action of the acid biting into the metal plate. There is a characteristic freedom to hard ground etching, because the softer ground offers less resistance to the drawing instrument. For this reason, soft ground etching is often referred to as crayon or pencil manner. Even more typical of the soft ground technique are the textural effects achieved by pressing fabrics or other materials into the ground.

AQUATINT

The effect of aquatint is produced solid areas of tone. Aquatint was invented by Jean-Baptiste Leprince in the second half of the 18th Century. In the absence of any special treatment, when a plate is exposed to the acid both, a large smooth area on the plate will simply be etched to a lower level without producing any appreciable tonal change between that level and the
surface of the plate. To retain ink and print a tonal value, the area must be pitted to a greater or lesser degree by the aquatint process.

Before the etching takes place, particles of resin or asphaltum powder are dusted on a clean plate and heated until they melt, adhering to the metal surface. The acid bites into the plate around each acid resistant particle, roughening the surface so that it will hold the ink. The plate remains in the acid bath for longer time, the dark will be tone it produces.

Both asphaltum and resin produce good aquatint grounds. The best resin is the clear, hard lump variety, ground in a more pestle before use. This melts at about 250F. Resin is dissolved with alcohol. The best varieties of asphaltum powder are Egyptian or Syrian in origin. Asphaltum dissolves in turpentine or lacquer thinner.

LIFT GROUND OR SUGAR LIFT AQUATINT

This process is a reversal of the usual aquatint process. In the normal procedure, the whites are burnished out and the artist works from light to dark. In lift ground, however, the line areas created by the pen and brush stroke are part of the plate that will eventually print. The drawing is done with water soluble solution, and the plate is covered with liquid hard ground, the sugar solution dissolves and lifts the ground, exposing the image area. The plate is acquainted before printing.

One of the most common formulas for sugar-lift is a simple mixture of one part sugar to one part Indian ink, with a small amount of ethylene glycol as a wetting agent to break the surface tension and allow better adhesion to
the plate. The sugar can be pulverized in a mortar and pestle to make it dissolve faster, or honey can be substituted. If the mixture proves too thick, it can be diluted with a little water to brushing consistency. Another formula is made from one part gum Arabic solution, one part black tempera color, and a small amount of soup.

COLOUR VISCOSITY METHOD

As 'A glossary of print making terms', published in 'Indian print making today 1995': "It is a recently evolved and internationally practised technique of printing, which was developed by William Hayter and N. Krishna Reddy in Atelier 17 studio in Paris during six decades of twentieth century." In this method a multiple-colour print is obtained from a single plate, which is so etched as to form different levels for different colours. Rollers of varying degrees of softness are used for different colours, the softest one being used to reach the bottom-most layer.

PHOTO ETCHING

The process of photographically reproducing an image on a metal plate, so that it can be etched and thus duplicated by printing has a changed little over the past century. A line or half tone image or film is contacted to a plate covered with a light sensitive coating, then exposed to an ultra-violet light source; where light travels through the film, the coating hardens. A solvent appropriate to the coating is applied to dissolve the unexposed areas. The etch solution attacks the metal except where the coating remains on the surface. In intaglio printing, everything etched below the surface of the plate is filled with ink, and surface of the plate is filled with ink, and the surface is then
wiped clean so that it becomes the non-printed area. A positive image is needed for exposure to make a positive printing intaglio plate.

Each of the tolling produces has its own peculiarities with the Kodak Photo Resists or K.P.R. type 3 and the cold top enamel methods any mordant such as ferric chloride, Dutch mordant or nitric acid may be used. The plate may removed from the etching baths at any time to step out varnish for controlling the depth of the bite of the etching in selected area with the tissue process, only ferric chloride can be used for etching because acid would quickly erode the gelatin film stopping-out is also not possible in the carbon tissue method, the entire etching must be done in one stage.

MATERIALS AND TERMINOLOGY

**Acid:** Practically all acid solutions (mordents) used by the etcher are made from the following: nitric acid (HNO₃), hydrochloric acid (HCl) and ferric chloride (FeCl₃). The formulae for each of the solutions may vary slightly according to the character of the drawn work or type of the metal used. Acetic acid, though too mild to have much effect on metals used for etching and engraving, frequently used for cleaning lines drawn into a hard wax ground prior to etching.

**Aquatint dust box:** A simple mechanical device employed to lay resin/rosin or asphaltum aquatint grounds on metal plates. Usually an enclosed wooden box in which a small quantity of powered resin is blown about in such a way that the fall can be more or less controlled to form a uniform and even coating on a plate placed momentarily inside the box. Various methods of activating the dust are used, for example bellows, or an integral revolving shutter.
**Biting:** The corrosive action of a solution of acid is on lines or areas of exposed metal.

**Blankets:** A set of felts, usually three or four, uniformly cut to fit on the bed of an etching press, where they provide the necessary cushioning—strong but pliable—between the printing paper lying on the intaglio plate and the pressure from the roller.

**Burr:** Ridges of metal forced up by the sharp, heavy point of a drypoint needle scoring through the surface of a metal (usually copper) plate, the consequent build-up of ink round a prominent burr creates the rich, warm black characteristic of drypoint.

**Burin:** A small hand tool, consisting of a few inches of steel rod, square or lozenge-shaped in section. The cutting point is formed by sharing one end to an oblique section; a wooden handle, generally half-round, fits over the opposite end. It is also known as ‘graver’ and is the principal tool employed by the line-engraver.

**Burnisher:** Small hand tool made from a rod of highly polished steel, oval in section, tapering at one end to a point. The burnisher can be perfectly straight or turned up slightly at the pointed end. Used for smoothing the rough surface of a metal plate, for example aquatint and mezzotint.

**Dry point needle diamond point:** Generally, a solid, tapering steel point, much heavier and sharper than an etching needle used to inscribe or score lines into metal.
Etching ground for plate making: An acid resistant substance made from various mixtures of wax, bees gum, asphaltum/ resin. Applied to the surface of warm metal plate with a dabber or roller, it forms a stable, durable ground, suitable for drawing through with an etching needle.

Etching needle: A light, round steel point, usually set into a wooden holder.

For normal purposes, such as drawing through the wax ground, the actual point is kept blunt, rather than needle sharp.

Etching press: Also known as a 'copper plate printing press' the principal feature of the etching press is the sliding steel bed or plank (on which the plate lies) travelling, with direct or geared drive, between two heavy rollers. One, below the bed, supports it; the other, with adjustable screws at both ends, is directly in line above it and provides the downward pressure-essential when printing intaglio plates. The bed ad rollers are usually suspended on a metal frame large enough to permit the bed to be fully extended in either direction.

Metals: Copper, zinc, micro metal-16 or 18 gauge, Alternative include mild steel, iron, aluminum and magnesium. Solar plate, Plexiglas and similar substances may be used for engraving.

Rocker: The principal tool employed to cut into a metal plate the regular indentations of a mezzotint ground. It consists of a broad and fairly heavy steel blade-the actual cutting edge of which is curved, beveled and serrated-fixed centrally into a wooden handle. The indentations are achieved by rocking the cutting edge across the plate in many directions.
Roller: Various types, including leather, felt, rubber, composition or gelatine. Mainly used for applying wax grounds to etching plates and printing ink to plates or blocks, both intaglio and surface. The wax roller consists of a cylindrical wooden core covered with a layer of felt and an outer skin of leather. The inking roller used on intaglio plate is similar to the grounding roller, but has an outer skin of usually rubber. Gelatine or plastic rollers (brayers) are often employed for stenciling. Large rubber or composition rollers, capable of covering a sizeable plate within one full turn of the roller are widely used for intaglio and surface colour printing.

Roulette: The roulette tool is a small revolving wheel fitted to a simple holder. Several versions exist- a thin wheel with a single, serrated edge or a relatively thick wheel with a granulated surface (drum). Roulette wheels are chiefly used for perforating wax grounds, and in mezzotint, for cutting 'mechanical' textures into small areas of plate surface.

Scraper: A small hand tool consisting of a length of steel, triangular in section, hollow ground on each side and tapering at one end to a point. All three edges need to be sharp. The scraper is usually fixed into a wooden chisel type handle. Mainly used for removing burr or spikes of metal from an engraved plate and for digging out faulty etching. Special scrapers are employed to lighten mezzotint and acquatint grounds; these are generally flat with only one or two cutting edges.

LITHOGRAPHY

In this type of printing the image and the background are in the same plane. Lithography is the main surface process and depends on the antipathy
of grease and water. Lithography is the main surface process and depends on the antipathy of grease and water. Lithography was invented by Alois Senefelder in 1798. The most suitable stone for this is a lime stone quarried in Kalheim and Solehoven in Bavaria which absorb water and grease equally.

Lithography is a planographic process; the image is neither cut into nor significantly raised above the surface of the stone. The printing is achieved by chemical treatment of the image and blank area of the stone, which makes the drawing attract ink and blank areas reject it.

CHROMOLITHOGRAPHY

Chromolithography is a method of making multi-colour prints. This type of colour printing stemmed from the process of lithography and it includes all types of lithography printed in colour. Chromolithograph or colour lithograph, also called Oleograph, produced by preparing a separate stone by hand for each colour to be used and printing one colour in register over another.

PHOTO-LITHOGRAPHY

Photolithography is the process of creating an ink receptive image on stone or metal by photographic means. The surface of the stone or plate is first given a light sensitive coating, and then exposed to light, through a negative image. The coating in the light-exposed areas hardens and accepts ink; the coating in the unexposed areas washes away, and the plate or stone is desensitized in these areas with a gum etch preparation.

An albumin-bichromate sensitizing solution that had been in use has recently been supplanted, to a large extent, by some of the newer diazo
compounds. The diazo coatings require slightly longer exposure times than the bichromate-sensitized solution. Most of the 'wipe-on solutions now in use employ diazole compounds.

**MATERIALS AND TERMINOLOGY**

**Absorption:** The creation of an insoluble surface film which clings to the non-printing areas and the interstices of the grain of a stone or plate.

On the other hand, it also means the penetration of a substance into the pores of a stone.

**Benelux:** A pressed hard wood used in the making of scraper bars.

**Carborundum:** A powdered abrasive used in graining the stone.

**Counter-etch:** A solution that cleans or desensitizes a stone or plate to receive an image.

**Desensitizing:** The treatment of non-drawn areas to make them ink-repellent and water receptive.

**Grain:** The quality of texture of the working surface of the stone or plate. The texture, which has been applied to it by the process of graining, also, an indication of the direction in which the fibres are lined up in machine-made papers.

**Ghost:** The reappearance of a previous image after the graining or etching of a stone or plate has taken place.

**Gum-etch:** Solution of gum Arabic to which have been added small amounts of the appropriate etching solution-usually nitric acid and water.
**Gumming out:** The process of drawing an image in gum or gum-etch before applying the ink, chalk or transfer. The method produces a negative image of light against dark.

**Gumming up:** The process of coating the surface of the plate or stone with gum arabic solution, after the drawing is complete, or whenever it becomes necessary at any other stage to protect the background, e.g., after etching or erasing ink.

**Levigator:** A steel disk used in stone grinding.

**Proofing:** The process of printing the plates in sequence, in color, before taking a firm decision about the choice of colors for the final edition.

**Pumice stone:** A very porous volcanic stone that is fine and gritty, used for cleaning and polishing stones.

**Resensitising:** An alternative term to describe the preparation of plates or stones to make them more sensitive to grease, or the resensitising of non-printing areas to make them sensitive to grease.

**Reversal:** The changing of negative areas into positive areas on all or a portion of a stone or plate.

**Registration:** Correct placement of an image with respect to the paper or previously printed image.

**Roll up:** To bring up an image with ink using a roller.

**Snake slip stone (Water-of Ayr stone):** A soft, close textured stone used as an abrasive for the removal of unwanted areas on a stone.
**Tusche:** The greasy ink used for drawing on plates and stones. Supplied either as a stick, in which case it must be dissolved in distilled water or white spirit, or as a ready-prepared fluid, which can be diluted only with water.

**Tympan:** A smooth flat sheet placed between the blotter and the scraper bar on the printing press.

**Wash out:** To remove old ink or drawing from a stone or plate.

**Zincographic ink:** A highly greasy substance with low viscosity used to create solid areas and lines on a stone or a plate.

**SERIGRAPHY**

The silk screen or Serigraph has developed from the simple stencil. Essentially it is made by stretching silk mesh over wooden frame blocking, blocking out chosen areas by various method, and making a print by forcing ink through the unblock areas. Great variations in consistency are obtainable with silk screen inks. Colours can be printed opaque or thinned they become transparent.

Serigraphy has been produced with quite ordinary materials. Given many of the simple items are: a printing wooden frame, metal clamp, squeegee, a base board, a length of bolting cloth or nylon, printing ink, gum strip, cello tape, a sponge and rags etc.

**MATERIALS AND TERMINOLOGY**

**Angle iron:** Flat pieces of L-shaped metal used to strengthen the corners of wooden printing frames.
Alignment blocks: Small pieces of wood, fixed to the sides of the baseboard that keep the frame in line with the baseboard and in registration with the print.

Baseboard: A flat board that serves as a fixed printing bed to which screens can be attached.

Binders: Mediums that provide body to dyes and inks and act as fixing agents.

Bleeding: Ink seeping under the stencil during printing and ruining part of the image.

Block out medium: Lacquers and other mediums used to block out parts of the screen to make direct stencils.

Degreasing: Removing traces of grease from the screen prior to securing a stencil.

Drying in: A state where ink has started to dry onto the screen, causing the mesh to clog and resulting in loss of detail and poor definition.

Flooding: Pushing the squeegee back across the screen to ink it before printing.

Lift off: The space between the screen and the printing bed that ensures the screen mesh progressively lifts away from the paper during printing.

Mesh: Fabric that is stretched onto the frame to produce the finished screen.

Masking fluid: A product that can be used on positives to achieve reversed out effects of drawing.
**Master copy:** A finished drawing, design or photo positive from which a set of stencils can be made.

**Photo positive:** A finished drawing or design usually on acetate from which a photo stencil can be made.

**Posterisation:** A photographic method of gaining the effect of varied tones by means of making a series of different timed exposures from a transparency; solid stencils made from these, when printed, can simulate multi-toned effects.

**Printing bed:** The flat printing surface of a screen printing press.

**Proofing:** The stage of making a number of trial prints to judge the final result prior to editioning.

**Squeegee:** The flexible blade and holder used in screen printing to force the ink through the screen fabric.

**Snap:** The action of the mesh continually lifting away from the paper during printing.

**Tooth:** An action to roughen the surface of the screen prior to adhering a photo stencil.

**Tusche:** An oily lithographic ink used in screen printing as a resist method of making direct stencils.

**Tinters:** Highly concentrated colors that can be used to adjust other inks or can be mixed with a transparent base to provide a wide range of colors.
GUM PRINTING

Gum printing is photographic reproduction method, without the use of silver halides, rather uses salts of dichromate, also using gum Arabic, water color and dichromate.

LYANOTYPE

As the name implies, the Linotype is a machine that produces a solid ‘line of type’ introduced about 1886. It was used for generations by newspapers and general printers. It is one-man machine: the operator sit at the top of the key board. Along with the letter press printing, linotype was the industry standard for newspaper, magazines and posters from the late 19th century to 1960 and 70s, when it was largely replaced by offset lithography printing and computer typesetting.

CYANOTYPE

Cyanotype is a photographic printing process that gives a cyan-blue print. The process was in engineering circles well into the 20th century. The simple and low-cost process enabled them to produce large scale copies of their work referred to as blue prints potassium ferricyanide and ferric ammonium (III) citrate are used in the process along with UV light source such as the sun.

GICLÉE PRINT

Giclée is a neologism coined in 1991 by print maker Jack Duganne for fine art digital prints made on in inkjet printers. The name originally applied to fine art prints created on IRIS printers in a process invented in the late 1980
but has since come to mean any inkjet print. It is often used by artists, galleries, and print shops to denote high quality printing but since it is an unregulated word it has no associated warranty of quality.

**PLATOGRAPY**

In the platography process the lithographic stone is replaced by an aluminum plate which is generally used for offset printing.

**OFFSET LITHOGRAPHY**

Offset lithography is a process used for printing on a flat surface, using printing plates. An image is transferred to a printing plate, which can be made of a variety of materials such as metal or paper. The plate is chemically treated so that only image areas (such as type, colors, shapes and other elements) applied to the plate, Because of the chemical treatment, ink only ‘sticks’ to the image image areas, which reject the water. Areas without images reject the ink. The plate is then rolled onto a rubber cylinder applying the inked area, and in turn the rubber cylinder (or ‘blanket’) applies the image to the paper. The system ‘offset’ because the plate is does not come in direct contact with the paper, which preserved the quality of the plate.

**POLYESTER LITHOGRAPHY**

Polyester plate printing started as low cost yet professional form of commercial offset lithography. CMYK plates are made straight from the desktop and often thousands of copies are printed from those as business cards, pamphlets, posters and the like. The medium, also known as Pronto Plate Lithography, is capable of reproducing the full spectrum of lithographic
mark such as hard drawn brush strokes, ink wash, texture, crayon and pencil works and is equally well many artists, print shops and art schools are adopting this very straight-forward lithographic method for the creation of unique and limited edition of artist prints, books and installation. George Roberts developed polyester lithography a new and nontoxic form of lithography printing when he was Professor of Print making at Boise State University.

**SOLAR ETCHING**

Print making with Solar Plate is a simple approach and safe alternative to traditional etching and relief printing. Solar Plate is a prepared light sensitive polymer surface on a steel backing for artists to produce fine prints. Since Dan Welden's development of the process in the 1970s print makers, painters, photographers, art teachers interested in multiple impressions have found print making with Solar Plate an exciting adventure. All one needs is inspiration, a graphic image created on a transparent film (acetate or glass), sun or UV light and ordinary tap water, and the process is ready to begin. Both positives and negatives can be utilized; intaglio and relief printing techniques can be applied.

**PAPER MAKING**

Paper making as a craft always relied heavily on the choice of fibers and the resultant color and texture of the paper and is close to various craft-intensive art forms. Paper, as a medium or genre of art making, is fascinating by its versatility. On one hands the purest form of waterleaf sheets, which
speak only of 'paperness', on the other hand the heavily saturated mass has the ability to deny the substance.

ZINCOGRAPHY

Zincography is a planographic printing process that employs zinc plate, as substitute of Bavarian sand stone since early period of lithography of Alois Senefelder.

TERMS AND MARKS USED ON ORIGINAL PRINTS

Print making is an approach of forming an intimate relationship with a creative process, revisiting, editing, reworking; allowing successive states until a final work is achieved. A print is created as intervention of a process and machinery between artist and paper, contrary to a painting. A print maker is an artist whose work involves a disciplined process at every level.

Defining a reproduction is an arguable issue. A reproduction is an effort to copy an existing image, often in another medium. With the credit that artists have certain rights to their work, it has become normal practice to place identifying marks on original prints to help preserve those rights. The actual numbers of marks are many and varied, and the following is an attempt to list them and their uses. The purpose of signing and numbering is to identify the print, the artist, the date, the number of the edition, the printer or publisher and so on. Most of the marks are made in pencil, except for chop marks which are often embossed with a steel die. Many of terms listed below assume that a printer is involved. For print makers working at home or in their own
workshops, it is likely that only working proofs, finished proofs and the edition (including artists' proofs) would be used.

**Artist’s proof (A/P or a/p)**

Originally and theoretically, an artist’s proof was outside the quota of the edition but printed at the same time as the edition. In recent years, this has changed somewhat and the practice is sometimes abused. By custom, the artist is allowed to keep a number of prints (10% of the edition or five prints in the case of smaller edition) from the finished edition for his own use or personal sale, and if these come onto the market they acquire the added value of personal association with the artist.

**Chop mark**

This is a small mark from an embossed seal or from a wooden or rubber stamp that is impressed onto the print by the publisher, workshop or printer.

**Bon a tier (B.A.T)**

When the artist is satisfied with the print from the finished plate, he works with the printer to make one perfect print. This is then marked BAT (French: good to pull). The printer then prints the edition matching it exactly to the BAT.
Cancellation print

When the edition of prints has been completed, the plate, screen or block is defaced, changed or modified in some way so that it cannot be identically reprinted again. The safest method is to destroy a plate.

Dates

The artist may put the date (generally the year only) after his signature or title on the print in pencil. This represents the date the print was signed, not the date the plate or the edition was made.

The edition

This is the total number of prints decided by the artist that he requires to make from the plate, stone or screen, matched to the BAT.

Hors commerce (h/c)

From the French (not for sale), these are prints pulled with the edition but marked by the artist for business use only, used for purpose of display, advertising, to travel with and so on; they often get torn, creased, damaged and dirty.

Imp

From the Latin ‘/impressit’ meaning ‘has printed’. In modern prints this is usually written after the artist’s signature and denotes that the artist himself has printed the work.
Printer’s proof (p/p)

Custom allow the printer to retain one perhaps two (in the case of a larger edition) prints for himself and the print is marked and signed p/p by the artist.

State proof (Epreure d’Ariste)

A series of proofs are often taken after each of the steps in completion of a print.

Signature

James McNeil Whistler was the first artist to sign his original print (as opposed to signing the plate) and in the late 1880s, he issued a lithograph which was signed in pencil under the image with added margins, and which he promptly proceeded to sell for exactly twice the price of an identical image unsigned and on smaller paper. Thus the ritual of signing and the debate about value began.

An original signature on a print is the authentication by the artist that this is his/her works as he he/she requires it to be.

Trial proof

When an artist working on a matrix, he pulls an impression at a particular stage to see how the work is progressing. These prints can be marked trial proofs because they present the unfinished state of the print and are not considered part of the edition.