

PRINT MAKING 1

BAFA (P) - 106 DS2



Directorate of Distance Education

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LINO CUT

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1.1 LEARNING OBJECTIVE

After reading this unit, you will

- Describe about Lino Cut Printing and its history.
- Explain about Methods and Technique of Lino cut printing.
- Define about Material And Tools used in Lino cut printing.

1.2 INTRODUCTION

Lino printmaking is an easy way to make your drawings bolder, and reproduce them in vast quantities. Lino printmaking is a method of relief printing, which involves carving a drawing into a soft linoleum block, rolling a thin layer of ink over it, and pressing paper on top to transfer the image. The areas where you have carved away often create quite beautiful results. A relief printmaking technique, also called linocut, that is usually characterized by flat, clearly delineated areas of color. An image is cut or gouged from a sheet of linoleum, which is softer and easier to carve than wood. The surface is inked and paper laid on top, with printing accomplished either by rubbing manually with a spoon or similar tool, or on a printing press.

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Lino prints look bold and powerful, with hard lines, flat areas of colour, and high contrast between the paper and ink. You can spend a long time carving, or just make a simple design, but the printing is fairly fast, so multiple copies can be made quickly and easily. Many artists find that working in lino changes their style, and drawings that look tentative or flimsy in pencil take on a more confident, powerful quality when transformed into lino prints. In this unit, you will learn the basics of lino printmaking as we explain how to make a simple lino print using a few basic materials.

1.3 PRINT MAKING

Printmaking is the process of creating artworks by printing, normally on paper. Printmaking normally covers only the process of creating prints that have an element of originality, rather than just being a photographic reproduction of a painting. Except in the case of monotyping, the process is capable of producing multiples of the same piece, which is called a print. Each print produced is considered an "original" work of art, and is correctly referred to as an "impression", not a "copy" (that means a different print copying the first, common in early printmaking). Often impressions vary considerably, whether intentionally or not. The images on most prints are created for that purpose, perhaps with a preparatory study such as a drawing. A print that copies another work of art, especially a painting, is known as a "reproductive print".

Prints are created by transferring ink from a matrix to a sheet of paper or other material, by a variety of techniques. Common types of matrices include: metal plates, usually copper or zinc, or polymer plates and other thicker plastic sheets for engraving or etching; stone, aluminum, or polymer for lithography; blocks of wood for woodcuts and wood engravings; and linoleum for linocuts. Screens made of silk or synthetic fabrics are used for the screen printing process. Other types of matrix substrates and related processes are discussed below.

Multiple impressions printed from the same matrix form an edition. Since the late 19th century, artists have generally signed individual impressions from an edition and often number the impressions to form a limited edition; the matrix is then destroyed so that no more prints can be produced. Prints may also be printed in book form, such as illustrated books or artist's books.

In other words, Printmaking is an artistic process based on the principle of transferring images from a matrix onto another surface, most often paper or fabric. Traditional printmaking techniques include woodcut, etching, engraving, and lithography, while modern artists have expanded available techniques to include screenprinting.

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A matrix is essentially a template, and can be made of wood, metal, or glass. The design is created on the matrix by working its flat surface with either tools or chemicals. The matrix is then inked in order to transfer it onto the desired surface. To print from a matrix requires the application of controlled pressure, most often achieved by using a printing press, which creates an even impression of the design when it is printed onto the paper or fabric. (More modern printmaking techniques, such as screenprinting, do not require a press.) The resulting print is often the mirror image of the original design on the matrix. One of the great benefits of printmaking (save for monotype) is that multiple impressions of the same design can be printed from a single matrix.

Printmaking techniques are generally divided into the following basic categories:

- Relief, where ink is applied to the original surface of the matrix. Relief techniques include woodcut or woodblock as the Asian forms are usually known, wood engraving, linocut and metalcut.
- Intaglio, where ink is applied beneath the original surface of the matrix. Intaglio techniques include engraving, etching, mezzotint, aquatint.
- Planographic, where the matrix retains its original surface, but is specially prepared and/or inked to allow for the transfer of the image. Planographic techniques include lithography, monotyping, and digital techniques.
- Stencil, where ink or paint is pressed through a prepared screen, including screen printing and pochoir.

Other types of printmaking techniques outside these groups include collagraphy and viscosity printing. Collagraphy is a printmaking technique in which textured material is adhered to the printing matrix. This texture is transferred to the paper during the printing process. Contemporary printmaking may include digital printing, photographic mediums, or a combination of digital, photographic, and traditional processes.

Many of these techniques can also be combined, especially within the same family. For example, Rembrandt's prints are usually referred to as "etchings" for convenience, but very often include work in engraving and drypoint as well, and sometimes have no etching at all.

Various printmaking techniques

1. Woodcut
2. Engraving
3. Etching
4. Mezzotint

5. Aquatint

6. Drypoint

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7. Lithography

8. Screenprinting

1.4 BLOCK PRINTING

Block printing is the process of printing patterns by means of engraved wooden blocks. It is the earliest, simplest and slowest of all methods of textile printing. Block printing by hand is a slow process. It is, however, capable of yielding highly artistic results, some of which are unobtainable by any other method.

Woodblock printing or block printing is a technique for printing text, images or patterns used widely throughout East Asia and originating in China in antiquity as a method of printing on textiles and later paper. As a method of printing on cloth, the earliest surviving examples from China date to before 220 AD. Woodblock printing existed in Tang China by the 7th century AD and remained the most common East Asian method of printing books and other texts, as well as images, until the 19th century. Ukiyo-e is the best-known type of Japanese woodblock art print. Most European uses of the technique for printing images on paper are covered by the art term woodcut, except for the block-books produced mainly in the 15th century.

Technique

Wooden blocks for textile printing may be made of box, lime, holly, sycamore, plane or pear wood, the latter three being most generally employed. They vary in size considerably, but must always be between two and three inches thick, otherwise they are liable to warping, which is additionally guarded against by backing the wood chosen with two or more pieces of cheaper wood, such as deal or pine. The several pieces or blocks are tongued and grooved to fit each other, and are then securely glued together, under pressure, into one solid block with the grain of each alternate piece running in a different direction.

The block, being planed quite smooth and perfectly flat, next has the design drawn upon, or transferred to it. This latter is effected by rubbing off, upon its flat surface, a tracing in lampblack and oil, of the outlines of the masses of the design. The portions to be left in relief are then tinted, between their outlines, an ammoniacal carmine or magenta, for the purpose of distinguishing them from those portions that have to be cut away. As a separate block is required for each distinct colour in the design, a separate

tracing must be made of each and transferred (or put on as it is termed) to its own special block.

Having thus received a tracing of the pattern the block is thoroughly damped and kept in this condition by being covered with wet cloths during the whole process of cutting. The blockcutter commences by carving out the wood around the heavier masses first, leaving the finer and more delicate work until the last so as to avoid any risk of injuring it during the cutting of the coarser parts. When large masses of colour occur in a pattern, the corresponding parts on the block are usually cut in outline, the object being filled in between the outlines with felt, which not only absorbs the colour better, but gives a much more even impression than it is possible to obtain with a large surface of wood. When finished, the block presents the appearance of flat relief carving, the design standing out like letterpress type.

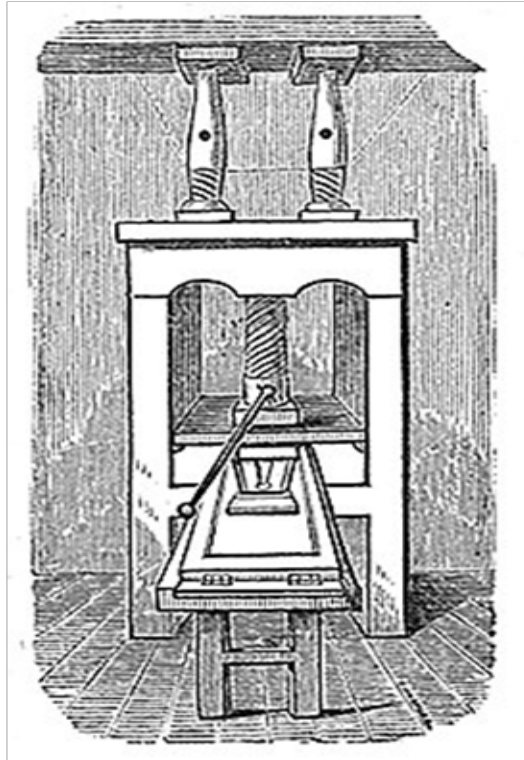
Fine details are very difficult to cut in wood, and, even when successfully cut, wear down very rapidly or break off in printing. They are therefore almost invariably built up in strips of brass or copper, bent to shape and driven edgewise into the flat surface of the block. This method is known as coppering, and by its means many delicate little forms, such as stars, rosettes and fine spots can be printed, which would otherwise be quite impossible to produce by hand or machine block printing.

Frequently, too, the process of coppering is used for the purpose of making a mold, from which an entire block can be made and duplicated as often as desired, by casting. In this case the metal strips are driven to a predetermined depth into the face of a piece of lime-wood cut across the grain, and, when the whole design is completed in this way, the block is placed, metal face downwards in a tray of molten type-metal or solder, which transmits sufficient heat to the inserted portions of the strips of copper to enable them to carbonize the wood immediately in contact with them and, at the same time, firmly attaches itself to the outstanding portions.

When cold a slight tap with a hammer on the back of the limewood block easily detaches the cake of the type-metal or alloy and along with it, of course, the strips of copper to which it is firmly soldered, leaving a matrix, or mold, in wood of the original design. The casting is made in an alloy of low melting-point, anti, after cooling, is filed or ground until all its projections are of the same height and perfectly smooth, after which it is screwed onto a wooden support and is ready for printing. Similar molds are also made by burning out the lines of the pattern with a red-hot steel punch, capable of being raised or lowered at will, and under which the block is moved about by hand along the lines of the pattern.

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Woodcut press, from engraving in *Early Typography*, 1872

Other tools

In addition to the engraved block, a printing table and colour sieve are required. The table consists of a stout framework of wood or iron supporting a thick slab of stone varying in size according to the width of cloth to be printed. Over the stone table top a thick piece of woolen printers blanket is tightly stretched to supply the elasticity necessary to give the block every chance of making a good impression on the cloth. At one end, the table is provided with a couple of iron brackets to carry the roll of cloth to be printed and, at the other, a series of guide rollers, extending to the ceiling, are arranged for the purpose of suspending and drying the newly printed goods. The colour sieve consists of a tub (known as the swimming tub) half filled with starch paste, on the surface of which floats a frame covered at the bottom with a tightly stretched piece of mackintosh or oiled calico. On this the colour sieve proper, a frame similar to the last but covered with fine woolen cloth, is placed, and forms when in position a sort of elastic colour trough over the bottom of which the colour is spread evenly with a brush.

Printing process

The printer commences by drawing a length of cloth, from the roll, over the table, and marks it with a piece of coloured chalk and a ruler to indicate

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where the first impression of the block is to be applied.

Then applies the block in two different directions to the colour on the sieve and finally presses it firmly and steadily on the cloth, ensuring a good impression by striking it smartly on the back with a wooden mallet. The second impression is made in the same way, the printer taking care to see that it fits exactly to the first, a point which he can make sure of by means of the pins with which the blocks are provided at each corner and which are arranged in such a way that when those at the right side or at the top of the block fall upon those at the left side or the bottom of the previous impression the two printings join up exactly and continue the pattern without a break. Each succeeding impression is made in precisely the same manner until the length of cloth on the table is fully printed. When this is done it is wound over the drying rollers, thus bringing forward a fresh length to be treated similarly. If the pattern contains several colours the cloth is usually first printed throughout with one, then dried, re-wound and printed with the second, the same operations being repeated until all the colours are printed.

Many modifications of block printing have been tried from time to time, but of these only two tobying and rainbowing are of any practical value. The object of toby printing is to print the several colours of a multicolour pattern at one operation and for this purpose a block with the whole of the pattern cut upon it, and a specially constructed colour sieve are employed. The sieve consists of a thick block of wood, on one side of which a series of compartments are hollowed out, corresponding roughly in shape, size and position to the various objects cut on the block. The tops of the dividing walls of these compartments are then coated with melted pitch, and a piece of fine woolen cloth is stretched over the whole and pressed well down on the pitch so as to adhere firmly to the top of each wall; finally a piece of string soaked in pitch is cemented over the woolen cloth along the lines of the dividing walls, and after boring a hole through the bottom of each compartment the sieve is ready for use. In operation each compartment is filled with its special colour through a pipe connecting it with a colour box situated at the side of the sieve and a little above it, so as to exert just sufficient pressure on the colour to force it gently through the woolen cloth, but not enough to cause it to overflow its proper limits, formed by the pitch-soaked string boundary lines.

The block is then carefully pressed on the sieve, and, as the different parts of its pattern fall on different parts of the sieve, each takes up a certain colour that it transfers to the cloth in the usual way. By this method of tobying from two to six colours may be printed at one operation, but it is obvious that it is only applicable to patterns where the different coloured objects are placed at some small distance apart, and that, therefore, it is of but limited application.

Origin

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Printing patterns on textiles is so closely related in its ornamental effects to other different methods of similar intention, such as by painting and by processes of dyeing and weaving, that it is almost impossible to determine from the picturesque indications afforded by ancient records and writings of pre-Christian, classical or even medieval times, how far, if at all, allusion is being made in them to this particular process. Hence its original invention must probably remain a matter of inference only. As a process, the employment of which has been immensely developed and modified in Europe in the nineteenth century by machinery and the adoption of stereotypes and engraved metal plates, it is doubtless traceable to a primeval use of blocks of stone, wood, etc., so cut or carved as to make impressions on surfaces of any material; and where the existence of these can be traced in ancient civilizations, e.g. of China, Egypt and Assyria, there is a probability that printing ornament upon textiles may have been practiced at a very early period. Nevertheless, highly skilled as the Chinese are, and for ages have been, in ornamental weaving and other branches of textile art, there seem to be no direct evidences of their having resorted so extensively to printing for the decoration of textiles as peoples in the East Indies, those, for instance, of the Punjab and Bombay, from whose posterity 16th-century European and especially Dutch merchants bought goods for Occidental trade in Indianes or printed and painted calicoes.

Ancient world

As in, the case of weaving and embroideries, specimens of printed stuffs have of recent years been obtained from disused cemeteries in Upper Egypt (Akhmim and elsewhere) and tell us of Egypto-Roman use of such things. Some few of them are now lodged in European museums. For indications that earlier Egyptians, Greeks and Romans were likely to have been acquainted with the process, one has to rely upon less certain evidence. Of textiles painted by Egyptians there are many actual examples. Apart from these there are wall paintings, e.g., those of Beni Hassan—about 2100 B.C. in which are represented certain Afro-Asiatic people wearing costumes irregularly patterned with spots, stripes and zigzags, which may have been more readily stamped than embroidered or woven. A rather more complicated and orderly pattern well suited to stamping occurs in a painting about 1320 BC, of Hathor and King Meneptha I. Herodotus, referring to the garments of inhabitants of the Caucasus, says that representations of various animals were dyed into them so as to be irremovable by washing. Pliny describes a very remarkable process employed in Egypt for the colouring of tissues. After pressing the material, which is white at first, they saturate it, not with colours, but with mordants that are calculated to absorb colour. He does not

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explain how this saturation is done. But as it is clearly for the purpose of obtaining a decorative effect, stamping or brushing the mordants into the material may be inferred. When this was finished the cloth was plunged into a cauldron of boiling dye and removed the next moment fully coloured. It is a singular fact, too, that although the dye in the pan is of one uniform colour, the material when taken out of it is of various colours according to the nature of the mordants that have been respectively applied to it. Egypto-Roman bits of printed stuffs from Akhmim exhibit the use, some three hundred years later than the time of Pliny, of boldly cut blocks for stamping figure-subjects and patterns onto textiles. Almost concurrent with their discovery was that of a fragment of printed cotton at Arles in the grave of St Caesarius, who was bishop there about A.D. 542. Equal in archaeological value are similar fragments found in an ancient tomb at Quedlinburg. These, however, are of comparatively simple patterns.

Medieval Europe

Museum specimens establish the fact that more important pattern printing on textiles had become a developed industry in parts of Europe towards the end of the 12th and the beginning of the 13th century.

According to Forrer (*Die Kunst des Zeugdrucks*, 1898) medieval Rhenish monasteries were the cradles of the artistic craft of ornamental stamp or block cutting, although it is now recognised that some of the examples he relied on are modern forgeries. In rare monastic manuscripts earlier in date than the 13th century, initial letters (especially those that recurred frequently) were sometimes stamped from hand-cut blocks; and German deeds of the 14th century bear names of block cutters and textile stampers as those of witnesses. Amongst the more ancient relics of Rhenish printed textiles are some of thin silken stuff, impressed with patterns in gold and silver foil. Of these, and of a considerable number of later variously dyed stout linens with patterns printed in dark tones or in black, specimens have been collected from reliquaries, tombs and old churches.

The first written reference to printed textiles in Europe is found in Florentine trade regulations from the fifteenth century. In 1437, Cennino Cennini published a treatise describing the technique.

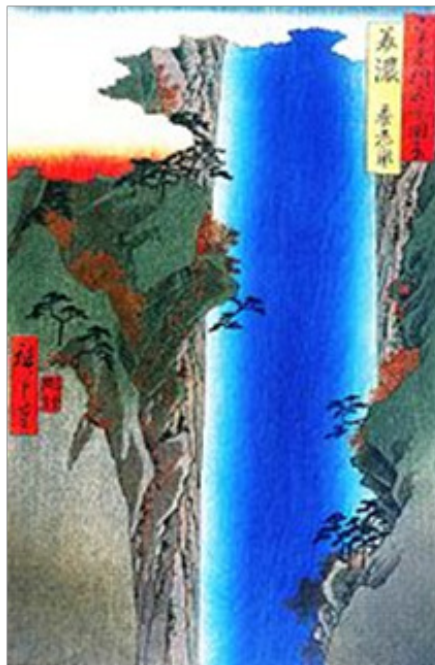
Early modern Europe

Augsburg, famous in the 17th century for its printing on linens, etc., supplied Alsace and Switzerland with many craftsmen in this process. After the revocation of the edict of Nantes, French refugees took part in starting manufactories of both painted and printed cloths in Holland, England and Switzerland; some few of the refugees were allowed back into France to do the same in Normandy: manufactories were also set up in Paris, Marseilles,

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Nantes and Angers; but there was still greater activity at Geneva, Neuchtel, Zurich, St Gall and Basel. The first textile printing works in Great Britain are said to have been begun towards the end of the 17th century by a Frenchman on the banks of the Thames near Richmond, and soon afterwards a more considerable factory was established at Bromley Hall in Essex; many others were opened in Surrey early in the 18th century. At Muihouse the enterprise of Koechlin, Schmatzer and Dollfus in 1746, as well as that of Oberkampf at Jouy, led to a still wider spread of the industry in Alsace.[clarification needed] In almost every place in Europe where it was taken up and followed, it was met by local and national prohibitions or trade protective regulations and acts, which, however, were gradually overcome.

Jia xie is a method for dyeing textiles (usually silk) using wood blocks invented in the 5th–6th centuries in China. An upper and a lower block are made, with carved out compartments opening to the back, fitted with plugs. The cloth, usually folded a number of times, is inserted and clamped between the two blocks. By unplugging the different compartments and filling them with dyes of different colours, a multi-coloured pattern can be printed over quite a large area of folded cloth. The method is not strictly printing however, as the pattern is not caused by pressure against the block.

Colour woodblock printing

Mino province: Yoro-taki from the series Views of Famous Places in the Sixty

The earliest woodblock printing known is in colour—Chinese silk from the Han dynasty printed in three colours.

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Colour is very common in Asian woodblock printing on paper; in China the first known example is a Diamond sutra of 1341, printed in black and red at the Zifu Temple in modern-day Hubei province. The earliest dated book printed in more than 2 colours is Chengshi moyuan, a book on ink-cakes printed in 1606 and the technique reached its height in books on art published in the first half of the 17th century. Notable examples are the Hu Zhengyan's Treatise on the Paintings and Writings of the Ten Bamboo Studio of 1633, and the Mustard Seed Garden Painting Manual published in 1679 and 1701.

1.5 LINO CUT

What is linocut? Maybe you remember it from school?

A linocut is a type of relief, or block print, and bears a lot of similarities to woodblock printing. Essentially, the artist carves an image into a linoleum (lino) block and what's left of the block is inked and printed.

Linocut, also known as lino print, lino printing or linoleum art, is a printmaking technique, a variant of woodcut in which a sheet of linoleum (sometimes mounted on a wooden block) is used for a relief surface. A design is cut into the linoleum surface with a sharp knife, V-shaped chisel or gouge, with the raised (uncarved) areas representing a reversal (mirror image) of the parts to show printed. The linoleum sheet is inked with a roller (called a brayer), and then impressed onto paper or fabric. The actual printing can be done by hand or with a printing press.



Emergence of the technique in America

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In 1911 “linoleum art” was first displayed in New York City by the Czech émigré Vojtěch Preissig. In his publications on linocuts (1926–29) the respected American printmaker, Pedro Joseph de Lemos, simplified the methods for art schools and introduced new techniques for color linocuts, including the printing of the key block first.

The first large-scale colour linocuts made by an American artist were created ca. 1943–45 by Walter Inglis Anderson, and exhibited at the Brooklyn Museum in 1949. Today, linocut is a popular technique among street artists and street art-related fine art.

Linocut becomes popular in the UK, Europe and US

Linocuts were popular among the German Expressionist and Russian Constructivist movements in the beginning of the 20th century, including German artist Gerd Arntz, who liked the stark contrasts the technique offered.

The Grosvenor School of Modern Art opened in London in 1925. Claude Flight taught linocut classes there, showing students to produce multi-colour linocut prints by using different blocks for each colour. These British prints were highly influenced by cubism and Futurism. The First Exhibition of British Linocuts was curated by Flight in 1929.

In the 1940s, American artist Walter Anderson began producing large-scale linocut prints at his Gautier, Mississippi home, to be used as wallpaper, hung like scrolls. His work was exhibited in 1949 at the Brooklyn Museum in New York.

Pablo Picasso Linocuts

In the late 1950s, Pablo Picasso advanced linocuts in fine art by developing the reductive printmaking technique. Picasso thought linocuts lent themselves to producing graphic posters and Picasso’s first prints in the early 1950s were made up of bold and simple images. He liked the linocut technique as he thought it lent itself well to graphic posters, and he began experimenting with creating multiple colour prints using a single block. His technique involved printing the lightest layer first, with each successive layer being carved away from the linoleum and printed over the last. This reductive technique meant it was impossible to reproduce the work afterwards so artists could create predetermined editions.

Linocut printing in the modern day

The linocut technique of printing has risen and fallen in popularity over the

years. With artists like Picasso and Matisse popularising and demonstrating the potential of the technique, its acceptance as a fine art practice was solidified. But as the printmaker and publishers collaborated to produce more complex images, it is practiced much more rarely nowadays.

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Types of Lino for Printing

By itself, lino doesn't look very inspiring. It's like a rubbery bit of cardboard that, if you put your nose to it, smells of linseed oil. Traditional lino comes in a dull grey known as "battleship grey" and a goldish ocher. If cold, it can be tough to cut. Placing it in the sun or near a heater for a while softens it and makes cutting it considerably easier. Unsurprisingly, lino that's softer and easier to cut has been developed by art materials companies. You can tell which you've got because traditional lino has a mesh of string on the back, whereas softer-cut lino doesn't. It's worth trying different types of lino to see which you like using the best. Some people prefer the fine control traditional lino gives; other people like softer synthetic lino for the ease of cutting curved lines.



1.6 HOW DID LINOLEUM PRINTING COME ABOUT?

Linocut printmaking is an artistic process. Specifically, a linocut is a type of relief print. The artist first carves an image into a block of linoleum, then ink is rolled onto the uncut surface of the block and, finally, paper is laid on top of the block and pressure is applied to produce a print. It's also known as a lino print or linoleum block print. Linoleum was created in the 1800s and used in the late 1800s as a floor covering. Traditional wood and metal block were expensive and time consuming to create.

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Linoleum was cheaper to produce, and offered an easier surface to carve than wood and metal, especially when heated. It wasn't as tough as metal, and didn't have the surface grains and patterns that made wood trickier to carve. As linoleum was a softer material, it was much quicker to achieve results with the new linocut technique. According to India Crafts, the word "linoleum" dates to 1863 when Frederick Walton of England combined the Latin word for flax, "linum," with the Latin word for oil, "oleum," according to India Crafts. So linoleum started out as a cheap alternative, and was often used by amateurs or as a teaching product in schools, according to the Printmaking Dictionary. But when artists such as Henri Matisse and Pablo Picasso started using linoleum in the early 1900s, its popularity grew.

1.6.1 History of Lino Printing

Linoleum was invented by Frederick Walton (UK) in the mid-1800's, first patenting the material in 1860. At that time, its main use was that of a floor material, and later in the 1800's as actual wallpaper. However, by the 1890's artists had started to use it as an artistic medium. From my research so far, the transition of linoleum from flooring and wallpaper to printmaking material does not seem to be thoroughly documented. There also seems to be discrepancies within the available literature on the matter. Germany, Austria (through Franz Cizek) and the United States seem to have been amongst the first to turn to linoleum for creating art around the turn of the 20th century.

Linoleum was invented and used as a floor covering in the late 1800s. As printmakers using wood blocks looked for easier and less expensive ways of block printing, they turned to the new product, according to the Printmaking Dictionary. The word "linoleum" dates to 1863 when Frederick Walton of England combined the Latin word for flax, "linum," with the Latin word for oil, "oleum," according to India Crafts. In the late 1800s, linoleum was considered a poor engraver's wood and often used by amateurs or as a teaching product in schools, according to the Printmaking Dictionary. But when artists such as Henri Matisse and Pablo Picasso started using linoleum in the early 1900s, its popularity grew.

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Linocut Art from 1895-1920

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Early artists who dabbled in lino printing in its infancy included both painters and woodblock printmakers who were experimenting with a different material for relief printmaking. Some of the earliest lino prints I've found were used for books and periodical covers. The first linocuts that I've been able to find through trustworthy sources (like major museum collections around the world) have been from the United States. I'd like to note that this doesn't necessarily mean that the United States was the first to adopt linoleum. I've found two linocuts from 1895 from US artists (Will H. Bradley and San Francisco's Bruce Porter).

Examples of linocuts made in the first 10-25 years of the art include:

- The Inland Printer, Christmas 1895 by Will H. Bradley (1895)

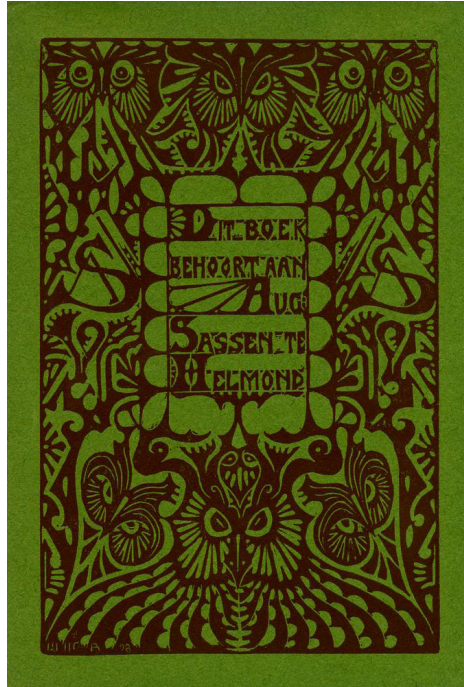


- The Lark by Bruce Porter (1895)



- A Bookplate Print by Willem Coenraad Brouwer (1898)

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- Print (a series of three linocuts) by Emil Orlik (1901)



- Old Munich by Gustave Baumann (1905)

Lino Cut



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- Die Froschkönigin by Erich Heckel (1905)



- Seelandschaft by Ernst Stohr (1905—1906)

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- Selbstbildnis by Ernst Ludwig Kirchner (1905-06)



- The Mirror by Vasily Kandinsky (1907)

Lino Cut



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- Am meer by Kathleen Bagot (1907-09)



- The Conversation by Gabriele Muntz (1908)

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- Nomads (Wanderer) by Christian Rohlf (1910)



- Wrestlers by Henri Gaudier-Brzeska (ca 1914)

Lino Cut

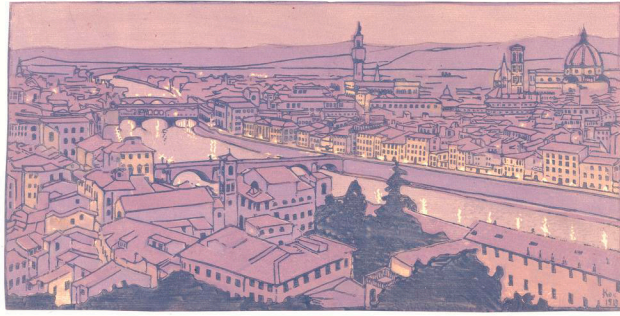


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- Bather by Horace Brodzky (1913)



- Florence by Konstantin Evtikhievich Kostenko (1913)



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- Sandgrube I (Sandmine I) by Joseph Albers (1916)



- Burial (Begrabnis) by Walter Gramatte (1916)



- Chechoslovaks! Join Our Free Colors by Vojtech Preissig (1918)

Lino Cut



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The Art of Lino Printing from 1920-1960

By the 1920's, books were starting to be written about the virtues of linoleum as a relief printing material. Some of the early books in English that I've tracked down in research, include:

- Block-Cutting and Print-Making by Hand by Margaret Dobson (1930)
- Lino Prints by Margaret Dobson (1931)
- Lino-Cuts: a Hand-Book of Linoleum-Cut Colour Printing by Claude Flight (1927)
- The Lino Cut in Elementary, Secondary, Art and Technical Schools by F.J. Glass (1930)
- Colour Block Print Making from Linoleum Blocks by Hesketh Hubbard (1927)
- Essentials of Linoleum-Block Printing by Ralph W. Polk (1927)
- Linoleum Block Printing by Charles W. Smith (1925)
- How to Make Linoleum Blocks by Curtis Sprague (1928)
- Linoleum Block Printing by Ernest W. Watson (1929)
- Linoleum Block Printing for the Amateur by Lyle B. Yeaton (1931)
- Linoleum Block Printing for the Amateur by Lyle B. Yeaton (1931).

Even though artists had been using linoleum for decades, linoleum was still considered by some to be a material for students and amateurs but there were enduring contributions to the art form that fought that perception.

The art of linocut evolved in the 20th century and was embraced by a wide variety of artists around the world. It has a particularly illustrious history in England due, in part, to the legacy of the Grosvenor School. The lino printmakers associated with this school produced avant-garde multi-

color prints in the 1920's-1930's.

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The list of famous artists who contributed to the art form in its first 50-60 years is long, but they include Edward Bawden, Pablo Picasso, Sybil Andrews, Claude Flight, Frances Gearhart, Leopoldo Mendez, William Rice, and Lill Tschudi, just to name a few.

- Swing-Boats by Claude Flight (1921)
- The Tube Staircase by Cyril Power (1929)
- Lake Tahoe by Frances Gearhart (c. 1930)
- Wet Afternoon by Ethel Spowers (1930)
- Fixing the Wires by Lill Tschudi (1932)
- Primavera by Henri Matisse (1938)
- Back of Brice's Barn by William S. Rice (c. 1940)
- Deportation to Death (Death Train) by Leopoldo Mendez (1942)
- Sharecropper by Elizabeth Catlett (1952)
- The Royal Pavilion by Edward Bawden (1956)
- Portrait of a Woman after Cranach the Younger by Pablo Picasso (1958)

When Was Lino First Used for Printmaking?

The use of lino to create art is "primarily attributed to German Expressionists such as Erich Heckel (1883-1944) and Gabriele Muntz (1877-1962)"². Russian Constructivist artists were using it by 1913, and black-and-white linocuts appeared in the UK in 1912 (attributed to Horace Brodzky). The development of color linocuts was "driven by the influence of Claude Flight (1881-1955)" who taught linocut in London at the Grosvenor School of Modern Art between 1926 and 1930.

Picasso is known to have produced his first linocuts in 1939 and continued doing so into the early 1960s. Picasso is often credited with inventing reduction linocuts, where a piece of lino is used multiple times in one print, being recut after each color has been printed. But reduction lino "seems to have been in use by small-scale commercial printers for some time before [Picasso] made it his own. It was one such printer of posters who suggested to Picasso that he might find it an easy way of keeping the various colors in registration with one another."

Matisse also made linocuts. Another artist famous for his linocuts is Namibian John Ndevasia Muafangejo. His prints often contain explanatory words or narratives in English on them.

1.7 LINO CUT TECHNIQUE

Since the material being carved has no directional grain and does not tend to split, it is easier to obtain certain artistic effects with lino than with

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most woods, although the resultant prints lack the often angular grainy character of woodcuts and engravings. Lino is generally diced, much easier to cut than wood, especially when heated, but the pressure of the printing process degrades the plate faster and it is difficult to create larger works due to the material's fragility.

Linocuts can also be achieved by the careful application of arts on the surface of the lino. This creates a surface similar to a soft ground etching and these caustic-lino plates can be printed in either a relief, intaglio or a viscosity printing manner.



Using a handheld gouge to cut a design into linoleum for a linocut print



Linocut printing; using a design cut into linoleum to make a print on paper

Colour linocuts can be made by using a different block for each colour as in a woodcut, as the artists of the Grosvenor School frequently did, but, as Pablo Picasso demonstrated, such prints can also be achieved using a single piece of linoleum in what is called the 'reductive' print method. Essentially, after each successive colour is imprinted onto the paper, the artist then cleans the lino plate and cuts away what will not be imprinted for the subsequently applied colour.

Due to ease of use, linocut is widely used in schools to introduce

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children to the art of printmaking, using it to complete many tasks in the art lesson rather than going straight for the pencil and eraser; similarly, non-professional artists often cut lino rather than wood for printing. Nevertheless, in the contemporary art world the linocut is an established professional print medium, because of its extensive use by the artists of the Grosvenor School, followed by Pablo Picasso and Henri Matisse.

1.8 MATERIALS AND TOOLS FOR LINO CUT

In most situations, all we need to do is leave a nice raised flat surface that will take the ink and print it cleanly on to our paper (or fabric). This means that, especially in the detail of most images and if correctly inked, the shallowest of cuts is all you need. Fine 'positive' printing lines and other 'isolated' marks will need to be carved so they do not crumble and break off. Some areas will need to be removed altogether and slightly larger gouges will speed up that work. And with experience, a small range of tools will make a wide variety of marks, simply by varying the angle and depth of cut. With practice – lino gouges will make images that have qualities unobtainable with any other media.

Most important of all, your tools must be sharp and kept sharp. A quality gouge will not only take a good edge, but with practice, can be quickly 'stropped' to retain it. Such tools can also be sent away and professionally re sharpened if required.

To make a lino print, you'll need:



The most basic form of lino cutting tool is a plastic handle which can hold any of the various shapes of blade available. If you get serious about lino printing, you may find wooden handles more comfortable to use for extended periods, and consider having multiple handles so you don't have to stop to swap blades.

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Which shape blades you prefer is definitely a matter of personal preference. Each is designed to give a different style of cut, from narrow and deep to broad and shallow. Introductory lino sets usually include a few blades, but if you're buying them separately remember that you'll be able to cut away a large area with a narrow blade but not easily make thin cuts with a broad one.

The most important thing to remember about the tools you use to cut lino is to keep all your fingers behind the blade, to cut away from your other hand not towards it. Think about what the tool is designed to cut, an accidental slip and you could make a nasty gouge in your hand. It's tempting to hold the far edge of the piece of lino as you're cutting, to stop it moving away from you. But what you want to do is to press down on the near edge, behind where you're cutting.



- 1. Linocut tools:** A good beginner set is the Essdee lino cutters and handle set with 5 lino cutters.



- Pfeil linocut tools LSC set. From left to right they are L 8/7, L 8/3, L 9/2, L 12/4, L 15/2, L 11/0.5

2. Softcut lino: Essdee Softcut lino comes in various pack sizes

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3. Glass slab:



4. Ink roller or brayer:



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5. Printing ink:



6. Smooth cartridge paper

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7. Wooden spoon: For hand burnishing the inked up lino block onto the paper.

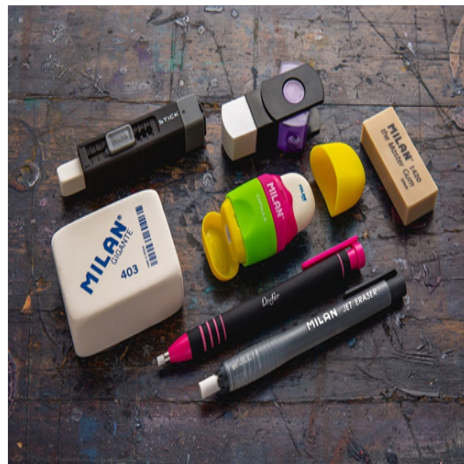


8. Tracing paper

Wood Cut



9. Pencils, pens and rubber

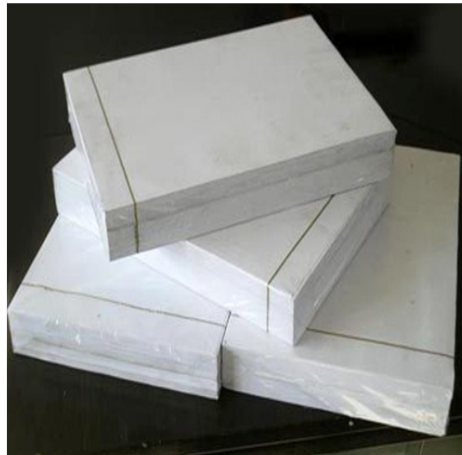


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10. Photocopy paper: For drawing and printing proofs or test prints



1.9 STARTING PRINT MAKING USING LINO CUT

1. Draw and transfer your design

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Draw your design out before you start

Start off with a simple drawing. You can draw directly onto the lino or you can transfer a photograph or drawing using carbon paper.

2. Create areas of light and dark

You will have to clear away all the 'paper' areas on the lino block with your tools – it's an inverse of drawing with a black pen on white paper. It can help to use a marker pen to clarify the light and dark areas of your image

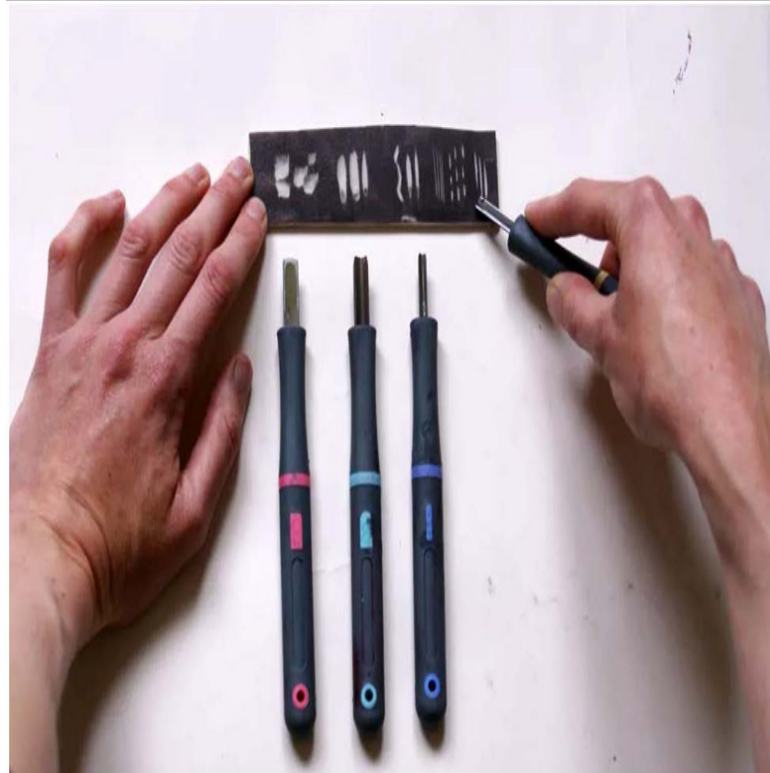


Highlighting the areas that will be light or dark can help you understand what you're creating

You will have to clear away all the 'paper' areas on the lino block with your tools – it's an inverse of drawing with a black pen on white paper. It can help to use a marker pen to clarify the light and dark areas of your image.

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3. Make a test piece to practice



Different tools create different textures

Try shading a test piece of lino with your marker pen (so you can see what you're doing) and try and use every tool in the box to make as many textures as you can. Holding the tool in one hand a bit like a pen, insert it into the surface of the lino and push forward. You should see a slither of lino being lifted away. Push forwards and tilt the angle of your hand to remove it completely, and have a look at the mark you have made. You'll find that the V tools are better for narrow, sketchy lines like a fine point pen, while the U tool cuts wider marks like a marker.

The flat tool can be used for clearing larger areas Use one hand to carve and the other to steady it. The pressure, speed and angle of the tool will all make a difference. Always cut away from your fingers – these blades can be sharp! Keep turning the block as you work on it rather than turning to cut back towards yourself.

4. Carve out your design

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Consider which tools you'll use for different areas of your design

After practising with your tools on your test piece, choose the marks and textures you want to use in your design. You might want some areas to be drawn like a pencil line using the V tool, and others as flat areas of black or white.

5. Shade your carvings with a marker pen



Marker pens can help you see what you're doing

Use a chunky marker pen to shade over where you are carving – it will bring out the marks you are making, and give a better idea of what your block will look like when it is printed.

6. Roll your ink onto the sheet

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Create a thin, even layer of ink on your sheet

Now it's time to get messy! You'll need your 'slab' or 'sheet' for rolling out the ink. We are using a plastic lid. Start by squeezing a thin strip of ink at the bottom of your slab, straight from the tube. Dip the roller in the ink and then roll forward onto the plastic, spreading ink out evenly across it until it covers it in a thin, even, flat layer. Too thick and it will sound squelchy and have little peaks, a bit like orange peel. Try and aim for a 'whisper' as the roller runs up and down, and a texture a bit like brushed suede.

7. Roll ink onto the lino



Aim for a shiny, inky texture on your lino

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When you have a nice even layer of ink on your slab, roll directly onto your lino. This is the exciting bit where you start to get a sense of what your image will look like. Roll in lots of different directions and after rolling two or three times on your block, go back and roll in the inky slab to re-fill your roller by rolling across it again. When you have covered your block, it should be covered in an even, shiny texture, showing you that you have inked the entire image.

8. Press paper onto your lino

Place a piece of paper over your lino and press down with your hands

Now for the printing! A great thing about lino printmaking is that it can be done at home without the need for a printing press – all you need is your hands. Put a piece of paper directly on top of your image, and smooth down with your hands all over.

9. Press with a wooden spoon

Press down with a wooden spoon to make sure your image prints correctly on your paper

Take a wooden spoon and, starting in the middle of the image, begin rubbing the round base of the spoon in small circles, moving outwards to cover the block, and making sure you reach the edges. You should see the paper go slightly shiny where you have rubbed, and you may see a light embossing from your image. This will help you keep track of where you have covered.

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10. Peel off your print



Now for the big reveal

When you think you have printed the whole image, gently peel up the corners and have a peek. Apply further pressure if you think it still looks a bit patchy. Then, take two corners of your paper and gently lift it up from the block. Voilà! You have your first lino cut. Make as many copies as you want.

11. Compare your lino block and your print



Decide if you're happy with your image

Your final print will be a reversal of your lino block. Look at areas of texture created by the tools where you have carved away and decide if you want to make any changes. You can wash your block and continue to carve if you wish.

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12. Leave your lino prints to dry



Your final print

Leave your prints to dry over a few days, by placing them separately somewhere flat and warm. Make sure you wash all your tools thoroughly – you can clean your lino block and inking slab and roller with warm, soapy water and a rag – and you're done.

1.9.1 Reduction Linocuts (Multiple Color Lino Print)

Reduction linocuts are printed from one piece of lino, cutting it again for each new color in your design. All the prints for an edition have to be printed before you move on to the next color, because once the lino is recut you can't make any more. Depending on how many colors you use, at the end there may be very little of your lino block left uncut.

The first cut is for any areas in the design to be left white (or the color of the paper), and you print it with color #1. The second cut takes away those areas in the design you want to be color #1 in the final print. You then print color #2 on top of color #1. (Ensure the ink is dry before printing the next color.) The result is a print with white and two colors.

You can keep going for however many colors you wish, but the more you use, the more carefully you need to plan. One wrong cut, or one forgotten

cut, could ruin the design. Add to this the challenges of ensuring each color is correctly registered (aligned) when you print it and I'm sure you'll begin to see why reduction linocut is also known as suicide printing. However, when things do all workout, the results are tremendously satisfying!

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As with anything new, start with a simple design and get a feel for the technique first. Plan your design using layers of tracing paper, one for each color, before you start cutting. (Remember the paper color too.) When you've recut the lino, do a test print on a separate sheet of paper to ensure the cut is how you want it, before printing onto your actual prints.

Ensuring that the colors are aligned properly takes a little practice, so always print some extra prints to allow for misprints. You can do it by eye, carefully putting the paper down onto the block. More reliable is to make a registration sheet with outlines of where to place the linoblock and where to place the paper. You put the inked lino in place, then carefully align one corner of the paper with your marks and gradually drop it down.



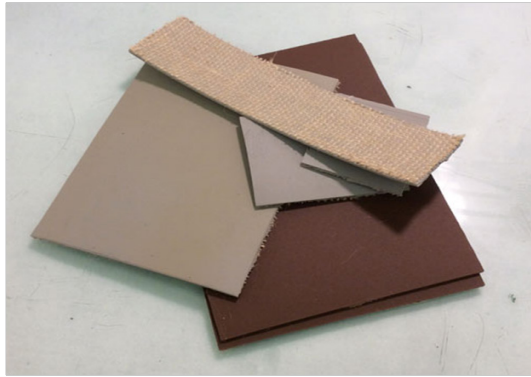
1.10 SOME IMPORTANT TIPS FOR LINOCUT PRINTMAKING

1. How to choose the right lino

There are several products on sale for lino printing described as 'easy' or 'soft' lino. Traditional lino is a blend of cork and wood flour mixed with linseed oil and pressed onto a hessian backing. It has a brittleness that will help your cutting enormously. Soft cut materials require you cut in and out of every stroke to prevent the material tearing; traditional lino will snap obligingly whenever needed, finishing the cut for you to give both a neater

effect and saving you time.

Wood Cut



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2. Remember that traditional lino has a shelf life

If you too remember struggling with rock hard lino at school, this tip is for you. Traditional lino will go hard and brittle over a couple of years as the linseed evaporates. Fresh lino should be bendy at room temperature, easily cut and smell of linseed. It will harden in cold weather and can be warmed slightly on a radiator for cutting if necessary. If your lino remains hard in a warm room and resists cutting, it is beyond salvation and needs to be returned to the shop or thrown away.



3. How to cut and prepare traditional lino

To cut traditional lino to size, score your measured line with a knife and bend the lino. It will snap neatly along your score mark, leaving you to trim through the hessian to complete the cut. Always give the lino's surface a gentle sanding with fine grade sandpaper. The result is invisible, but will key the surface and make it easier to get a consistent result when inking. You can also stain the surface with diluted ink to help you see where to cut, but make sure the ink is wiped away before you ink up to print.

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4. How to get the most from your design

Spend lots of time looking at linocuts and recommend you do the same to see what works. Lino suits bold and generous designs and loves a pattern. Patterns could be in the way you cut, repeating shapes or subjects in your design. Lino also responds well to outlined shapes and borders. Always work on the whole image when you are drawing for lino: a tree drifting off into nothing is fine in a pencil sketch, but will look weak as a lino cut. Don't be afraid to manipulate your source images to fit the design.



5. How to get the most from cutting

Make sure you think about the balance of your cutting. If your cut marks are the same weight and density over the entire design, it will be harder to read than a design that has a variety of busy and quiet areas, bold marks and intricate cutting. On the subject of intricate cutting,



6. Where to spend your money

It isn't necessary to spend a lot of money to get a good result. You can get by with economy inks, tools and paper, but splash out on a good roller and your results will be infinitely improved. Cheap hard rollers will push the ink around on your mixing slab, picking up a patchy coat of ink while a soft roller will pick up a fine consistent layer of ink and transfer it easily to the block. I use soft rubber or durathene rollers and these are expensive, but I have listed an economy version at the end of the article.

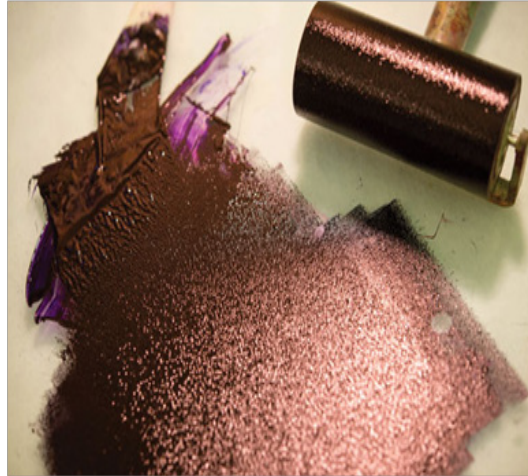


7. Keeping tools sharp

Stropping/honing paste as an easy way to prepare new tools and to keep tools sharp without damaging the blade. Use a sturdy piece of leather, a charity shop belt will do (use the unfinished side). Spread a little paste on the leather, look for the very tip of your tool, put it onto the leather at the angle of that tilt and draw down the leather, pressing firmly. Work only

with the outside of the tool blade. Sharpen 'u' gouges in sections and 'v' gouges one side at a time. Keep testing the tool until the angled part is sharp and shines like a mirror.

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8. How to ink up

Inking is a skill that must be learned just like cutting. The aim is to get a fine consistent layer of ink over the block that neither floods detailed cutting nor leaves skimpily inked areas. It's easy to blame tools, ink or paper, when in fact inexperience is the problem. When you have mastered creating a perfect sweep of smooth ink on paper, then you should play with creative inking.



9. Be patient

Always wait for your ink to be completely dry before you work on the next

colour layer. If you print while the previous layer is damp, the result will be clumsy. You can speed up the process by using water-based ink or adding driers to oil-based inks. Patience goes for cutting too, take your time to cut neatly and well and you will be so much happier with the end result. While a rushed drawing can look brilliant, rushed lino always looks shoddy.

10. Best printing inks for linocut printing

- **Oil based Inks**

The inks are semi transparent which means the colours can be layered to create other colours. They also have a luminosity and depth. The finished effect is a lot like those used in screen printing.

- **Water based inks**

They are quick to dry and easy to clean up with water, so ideal if you don't have a studio and are printing on your kitchen table. For beginners it is recommend using a mid level ink. Very cheap inks can result in patchy coverage.

1.11 FAMOUS LINO PRINT ARTISTS

UK Modernist artists Cyril Power and Sybil Andrew produced successful linocuts both independently and in partnership, often inspired by the boats on the Thames. Spanish Cubist artist Pablo Picasso turned his hand to the lino printing process in the 1940s and 1950s, producing striking graphic posters presenting abstract portraits and bullfighting. Current US street artist Swoon leaves linocut human figures in public spaces.



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Swoon – Motherlands



Cyril Power – Tube Train



Picasso – Lamp Still Life

2**WOOD CUT****NOTES****STRUCTURE**

- | | |
|------|--|
| 2.1 | Learning Objective |
| 2.2 | Introduction |
| 2.3 | Wood Cut Printing |
| 2.4 | History Of Wood Cut Printing |
| 2.5 | Methods and Technique of wood cut printing |
| 2.6 | Japanese wood cut printing |
| 2.7 | Coloured woodcuts |
| 2.8 | Material And Tools For Wood cut |
| 2.9 | Start Print Making Using Wood cut |
| 2.10 | Famous Wood Cut Prints |
| 2.11 | Some Famous Wood Cut Printmakers |

2.1 LEARNING OBJECTIVE

After reading this unit, you will

- Describe about Wood Cut Printing and its history.
- Explain about Methods and Technique of wood cut printing.
- Define about Material And Tools used in Wood cut printing.

2.2 INTRODUCTION

Woodcut is a relief printing technique in printmaking. An artist carves an image into the surface of a block of wood—typically with gouges—leaving the printing parts level with the surface while removing the non-printing parts. Areas that the artist cuts away carry no ink, while characters or images at surface level carry the ink to produce the print. The block is cut along the wood grain (unlike wood engraving, where the block is cut in the end-grain). The surface is covered with ink by rolling over the surface with an ink-covered roller (brayer), leaving ink upon the flat surface but not in the non-printing areas.

Multiple colors can be printed by keying the paper to a frame around the woodblocks (using a different block for each color). The art of carving

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the woodcut can be called "xylography", but this is rarely used in English for images alone, although that and "xylographic" are used in connection with block books, which are small books containing text and images in the same block. They became popular in Europe during the latter half of the 15th century. A single-sheet woodcut is a woodcut presented as a single image or print, as opposed to a book illustration.

Since its origins in China, the practice of woodcut has spread across the world from Europe to other parts of Asia, and to Latin America. In this unit, you will learn the basics of wood cut printmaking as we explain how to make a simple wood cut print using a few basic materials.

2.3 WOOD CUT PRINTING

Woodcut is a relief printing technique in printmaking. An artist carves an image into the surface of a block of wood—typically with gouges—leaving the printing parts level with the surface while removing the non-printing parts. Areas that the artist cuts away carry no ink, while characters or images at surface level carry the ink to produce the print. The block is cut along the wood grain (unlike wood engraving, where the block is cut in the end-grain). The surface is covered with ink by rolling over the surface with an ink-covered roller (brayer), leaving ink upon the flat surface but not in the non-printing areas.

Multiple colors can be printed by keying the paper to a frame around the woodblocks (using a different block for each color). The art of carving the woodcut can be called "xylography", but this is rarely used in English for images alone, although that and "xylographic" are used in connection with block books, which are small books containing text and images in the same block. They became popular in Europe during the latter half of the 15th century. A single-sheet woodcut is a woodcut presented as a single image or print, as opposed to a book illustration. Since its origins in China, the practice of woodcut has spread across the world from Europe to other parts of Asia, and to Latin America.

The oldest form of printmaking, woodcut is a relief process in which knives and other tools are used to carve a design into the surface of a wooden block. The raised areas that remain after the block has been cut are inked and printed, while the recessed areas that are cut away do not retain ink, and will remain blank in the final print. The wooden block is usually made from pear wood, which is sawn along the grain and planed smooth. The block is then seasoned to reduce the moisture content in the wood, which prevents warping and cracking. The size of the woodblock is determined by the image, but is ultimately limited by the size of the printing press. This means that for a large-scale print, multiple blocks are cut and printed

separately, after which the image is assembled. Smaller blocks are less likely to crack due to age or the pressure placed upon them during the printing process.

The thickness of the block is also important for ease of use and the prevention of wear; the ideal thickness is around one inch. After the woodblock has been prepared, the design can be drawn directly onto the surface of the block or a sketch can be pasted on to it. Alternatively, the design can be transferred from a sheet of paper directly onto the surface of the block by applying chalk or graphite to the back of the sheet. The design is then placed onto the surface of the block and its lines are traced by the printmaker with a stylus, which transfers the chalk and the thus the design onto the block.

Woodcut technique of printing designs from planks of wood incised parallel to the vertical axis of the wood's grain. It is one of the oldest methods of making prints from a relief surface, having been used in China to decorate textiles since the 5th century CE. In Europe, printing from wood blocks on textiles was known from the early 14th century, but it had little development until paper began to be manufactured in France and Germany at the end of the 14th century. Cuts with heavy outline and little shading, as the Christ Before Herod, may date from 1400, while the earliest dated print of German origin is the St. Christopher print of 1423 from the Buxheim Monastery. In Bavaria, Austria, and Bohemia, religious images and playing cards were first made from wood blocks in the early 15th century, and the development of printing from movable type led to widespread use of woodcut illustrations in the Netherlands and in Italy.

With the 16th century, black-line woodcut reached its greatest perfection with Albrecht Dürer and his followers Lucas Cranach and Hans Holbein. In the Netherlands Lucas van Leyden and in Italy Jacopo de' Barbari and Domenico Campagnola—who were, like Dürer, engravers on copper—also made woodcuts.

The woodcut process was widely used for popular illustrations in the 17th century, but no major artist employed it. In the early 19th century it was replaced by wood engraving, which reproduced paintings and sculpture more easily and accurately than did woodcuts. With the mid-19th-century development of photoengraving, however, wood engraving lost its popularity. About that time, artists rediscovered the expressive potential of woodcuts. Instead of the fine-grained hardwoods traditionally used in woodcuts, the Norwegian artist Edvard Munch began to incorporate the grain of softwood into his designs, and the French painter Paul Gauguin achieved new tones and textures by treating the wood surface with sandpaper. Woodcuts also play an important role in the history of Japanese art. During the 17th century, a style of genre art called ukiyo-e gained prominence in Japan. Woodcuts served as a convenient and practical way of filling the large demand for

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inexpensive ukiyo-e pictures.

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Woodcut became an important medium to the German Expressionists, who, inspired by the vitality of medieval woodcuts, gouged and roughly hewed the wood to achieve a brutal effect. In the United States, woodcuts gained importance in the 1920s and '30s through the illustrations of Rockwell Kent and artists working in the Works Progress Administration (WPA). After World War II the artists Misch Kohn, Leonard Baskin, and Carol Summers further developed the woodcut medium in the United States. In the late 1970s and early 1980s it was again revived, in large part because of changing aesthetics in painting.



The Kiss, coloured woodcut by Edvard Munch, 1902

Woodcuts also play an important role in the history of Japanese art. During the 17th century, a style of genre art called ukiyo-e gained prominence in Japan. Woodcuts served as a convenient and practical way of filling the large demand for inexpensive ukiyo-e pictures. The creation of the ukiyo-e woodcut is attributed to Hishikawa Moronobu (c. 1618–c. 1694), whose designs for illustrations of popular literature were immediately successful. A special branch of ukiyo-e was the making of miniature prints, called suri-mono, to commemorate special occasions. They usually carried a poem and were made on special paper decorated with gold or silver dust. In the 18th century, ukiyo-e culminated in the landscape prints of Hokusai and Hiroshige. Many ukiyo-e woodcuts found their way to the West in the late 19th century and influenced avant-garde artists. In the 20th century the technique was revived by such Japanese hanga masters as Munakata Shiko, Hiratsuka Un'ichi, Maekawa Sempan, and Onchi Kōshirō.



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The Four Horsemen c. 1496–98 by Albrecht Dürer, depicting the Four Horsemen of the Apocalypse.

Colour woodcut

The standard procedure for making a woodcut with two or more colours is to cut a separate block for each colour. If the colour areas are distinctly separated and the block is large, one block can be used for more than one colour. All blocks must be the same size to assure that in the finished print the colours will appear in their proper relation to one another, that is, properly registered. The first, the key block, is generally the one that contains most of the structural or descriptive elements of the design, thus serving as a guide for the disposition of the other colours. After the key block is finished and printed, the print is transferred to the second block. This procedure is repeated until all of the blocks are finished.

The registering system depends on the method of printing used. On a press the registering presents no problem: the wood block is locked into position and the uniformly cut paper is automatically fed into the proper position by the press. For hand rubbing, several registering methods can be used. One method uses a mitred corner nailed to a table or special board. A sheet of paper is attached to one side of this corner, after which the wood block is placed securely in position and the print is made. Once the first colour has been printed, the paper is folded back and the first block is replaced with the second, and so on. In woodcut colour printing, the artist must consider whether he can print wet on wet or whether the print should dry before it is overprinted.

Usually a second colour can be printed immediately but, if the ink deposit is heavy, the print will have to dry before additional colours can be

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printed. This problem arises mainly with oil colours, which dry more slowly than water-base colours. When using oil paints, the artist has to understand how variations in viscosity affect the overprinting of colours. Movable small blocks have also come to be used by a number of printmakers. These involve some planning in order to print them in register with the large blocks. The easiest way is to put a light cardboard that is exactly the size of the main block (the key block) in position. Once the small blocks are registered, their location can be marked on the cardboard. Then the small blocks can be glued down to the cardboard in order to avoid the danger of shifting.

The conception and technique of the Japanese colour woodcut was totally different from that of the European woodcut. Except for chiaroscuro prints, no real colour woodcut existed in Europe before the 19th century. In the West, the woodcut was primarily a reproductive facsimile process: usually, the artist made a completed drawing that was copied by the cutter. The Japanese print, on the other hand, was the result of intricate, perfectly coordinated effort by the designing artist, the cutter, and the printer.

Instead of painting a complete picture to be copied, the artist furnished a separate drawing for each colour. The engraver or cutter pasted each drawing on a wood block and cut away the white (negative) part. In this process the drawing was destroyed. Printing started only after all of the blocks had been cut. As the Japanese used water-base colours, often blending tones, printing itself was a very delicate and crucial operation, requiring perfect coordination and speed.

Wood engraving

Wood engraving is a variation of woodcut. The main difference is that, for wood engraving, the block—usually pear, apple, cherry, sycamore, or beech—is cut cross-grained rather than plankwise; on the end-grain block the artist can thus cut freely in any direction, allowing him to do much more intricate work with much finer tools. The image is created by fine white lines and textures. On most wood engravings, the whites appear as the positive image against a dominant black. The blocks are usually cut at the same height as printing type so that they can be printed on a press. Invented in the 18th century, wood engraving was primarily used by illustrators.

Woodcuts vs. Wood Engravings

While both are relief printing methods, Woodcuts are distinguished from wood engravings by both the grain direction of the wood used and the tools employed. Wood engravings are typically made in hardwood blocks cut across the grain or endgrained, that is, perpendicular to the growth of the tree using gravers and scorpings tools. Woodcuts are made in wood plank or plywood with the grain parallel to the direction of growth using knives,

2.4 HISTORY OF WOOD CUT PRINTING

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Woodcut, which appeared in the 8th century in the East and in the early 15th century in the West, is the earliest known relief-printing method. In this method, the design is first either painted directly onto the wood block or pasted on it. Then the surface of the wood is cut away around the design. For fine details and outlines the knife is used; larger areas are removed with gouges. The depth of the relief depends on the design: open areas must be cut deeper than the fine details so that the roller will not deposit ink in these areas. Although woodcuts are generally conceived in bold lines, or large areas, tonal variations can be achieved with textures, a variety of marks made with gouges, chisels, or knives. In contemporary woodcuts many other methods, such as scraping, scratching, and hammering, are also used to create interesting textures. Originally, woodcut was a facsimile process; i.e., the cutting was a reproduction of a finished design. With most contemporary woodcuts, however, the artist creates his design in the process of cutting.

As wood is a natural material, its structure varies enormously and this exercises a strong influence on the cutting. Wood blocks are cut plankwise. The woods most often used are pear, rose, pine, apple, and beech. The old masters preferred fine-grained hardwoods because they allow finer detail work than softwoods, but modern printmakers value the coarse grain of softwoods and often incorporate it into the design. The printing of woodcuts is a relatively simple process because it does not require great pressure. Although presses are used, even hand rubbing with a wooden spoon can produce a good print. The ink used to print woodcuts must be fairly solid and sticky, so that it lies on the surface without flowing into the hollows. The printing ink can be deposited on the relief either with dabbers or with rollers. Japanese rice or mulberry papers are particularly suitable for woodcuts because they make rich prints without heavy pressure.

Woodcut originated in China in antiquity as a method of printing on textiles and later on paper. The earliest woodblock printed fragments to survive are from China, from the Han dynasty (before 220), and are of silk printed with flowers in three colours.[4] "In the 13th century the Chinese technique of blockprinting was transmitted to Europe." [5] Paper arrived in Europe, also from China via al-Andalus, slightly later, and was being manufactured in Italy by the end of the thirteenth century, and in Burgundy and Germany by the end of the fourteenth. In Europe, woodcut is the oldest technique used for old master prints, developing about 1400, by using, on paper, existing techniques for printing. One of the more ancient woodcuts on paper that can be seen today is *The Fire Madonna* (Madonna

del Fuoco, in the Italian language), in the Cathedral of Forlì, in Italy.

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The explosion of sales of cheap woodcuts in the middle of the century led to a fall in standards, and many popular prints were very crude. The development of hatching followed on rather later than engraving. Michael Wolgemut was significant in making German woodcuts more sophisticated from about 1475, and Erhard Reuwich was the first to use cross-hatching (far harder to do than engraving or etching). Both of these produced mainly book-illustrations, as did various Italian artists who were also raising standards there at the same period. At the end of the century Albrecht Dürer brought the Western woodcut to a level that, arguably, has never been surpassed, and greatly increased the status of the "single-leaf" woodcut (i.e. an image sold separately).

Because woodcuts and movable type are both relief-printed, they can easily be printed together. Consequently woodcut was the main medium for book illustrations until the late sixteenth century. The first woodcut book illustration dates to about 1461, only a few years after the beginning of printing with movable type, printed by Albrecht Pfister in Bamberg. Woodcut was used less often for individual ("single-leaf") fine-art prints from about 1550 until the late nineteenth century, when interest revived. It remained important for popular prints until the nineteenth century in most of Europe, and later in some places.

The art reached a high level of technical and artistic development in East Asia and Iran. Woodblock printing in Japan is called moku-hanga and was introduced in the seventeenth century for both books and art. The popular "floating world" genre of ukiyo-e originated in the second half of the seventeenth century, with prints in monochrome or two colours. Sometimes these were hand-coloured after printing. Later, prints with many colours were developed. Japanese woodcut became a major artistic form, although at the time it was accorded a much lower status than painting. It continued to develop through to the twentieth century.

Early History of Woodcuts

Appearing in Chinese art during the 5th century, woodcuts first appeared in Europe during the early Renaissance period. The earliest dated example is *Madonna with Four Virgin Saints in a Garden* (1418). However, some point to *St Christopher Bearing the Infant Jesus*, which was found in a monastery in Buxheim, dated 1423 as the oldest work.

Woodcut art developed extensively in the 14th century with the advent of paper being produced in larger quantities, which meant that religious prints and illuminated manuscripts could be produced more easily. Given the difficulties in scraping out wood between lines, and the dangers that if the lines were too thin (the wood would crumble), early woodcuts consisted

of thick outlines with little shading. Like modern day children's colouring books, the woodcut was only designed to print the outline of an image, and the details were meant to be coloured in by hand. However, as the demands for books increased, so did the woodcut process and the subject matter. It was artists like Albrecht Durer (1471-1528) of the Northern Renaissance who transformed the media with woodcuts like *Samson Rending the Lion* (c.1497, Metropolitan Museum of Art, New York). The detail he achieved was stunning, considering that each line was created by carving the wood to either side. His subtle tones and textures made Erasmus of Rotterdam (1466-1536) claim that to add colour would 'injure the work'.

Chiaroscuro woodcuts

In Italy, woodcut was taken in a new direction by the Venetian painter Titian (1485-1576). He chose the medium as a way to publicise his drawn inventions. In his *Saint Jerome in the Wilderness* (1523, Metropolitan Museum of Art, New York), his daring bold line-work suggests he may have drawn directly onto the block, then used a cutter to follow his marks as closely as possible. It was by woodcut that colour was first introduced into printmaking, via prints known as chiaroscuro woodcuts. The earliest coloured woodcuts were meant to imitate the appearance of a type of drawing which was created on colour paper, these drawings were known as chiaroscuro. In these drawings, the coloured paper served as the mid tone, and artists worked towards light (*chiaro*) by adding white gouache and towards dark (*scuro*) by adding cross-hatching in dark wash or ink.

The chiaroscuro woodcut was developed in 1509 by Hans Burgkmair (1473-1531), and also Hans Baldung Grien (1484-1545) and Parmigianino (1503-40). It involved using line blocks to create a cross-hatching effect and tone blocks to create flat areas of colour. The Italian artist Ugo da Carpi (1455-1523) brought the technique to Italy, working in collaboration with Titian. However, by the end of the 16th century, Titian appears to have lost interest in woodcuts, preferring the effects of the *intaglio* technique of engraving.

Developments in European Woodcut Printing (1600s-1800s)

Fifteenth century Germany was an early centre of both fine art and text printing. The book illustrators Michael Wolgemut (1434-1519) and Erhard Reuwich (c.1450-1505), as well as Martin Schongauer (1448-91), were early pioneers (the latter introduced cross-hatching, more problematical in woodcuts than etching or engraving). They were followed by the master artist and printmaker of the German Renaissance, Albrecht Durer (1471-1528), whose skills remain unsurpassed. Later in the sixteenth century, the Swiss painter and printmaker Urs Graf (1485-1529) reputedly developed white-line woodcut, in which the image is carved in thin lines, similar to

engraving. However, due to the advent of engraving, woodcut became a much ignored art medium for two centuries. In the 17th and 18th century books were primarily illustrated with fine copper engravings. Woodcuts prints were reserved for cheap books called 'chap books'.

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These images were created from crudely chopped wood blocks. Woodcuts were popular with the press because they printed easily with letterpress type. Artists revolted against the mass production effects of woodcut, and took their inspiration instead from the etching prints of Rembrandt (1606-69) and Goya (1746-1828). The virtues of fine drawing and delicate lines created by printed etchings were promoted by the Barbizon School (c.1830-70). The Impressionists Edouard Manet (1832-83), Edgar Degas (1834-1917) and Camille Pissarro (1830-1903) extended the possibilities of etching with lithography and aquatint.

Woodcut Printing (1900s onwards)

Towards the end of the 18th century, a metal engraver, Thomas Bewick (1753-1828) recognised the potential of wood-engraving and advanced the medium to a new level. He developed the use of the white line technique. Unlike his predecessors, Bewick carved into harder woods, particularly box wood. He worked against the grain, using fine tools normally favoured by metal engravers. This style proved to be far superior, and has been the most popular method used ever since. The Swiss printmaker and artist Felix Vallotton (1865-1925), who was associated with Les Nabis, revived white-line woodcuts, a process which coincided with the Japonism fashion for prints which hit Europe in the 1860s. Influences of Post-Impressionism, Symbolism and the Japanese Ukiyo-e woodblock prints can be clearly seen in Vallotton's works. In fact, his woodcut prints take on a more graphic art feel, which influenced the artists Edvard Munch (1863-1944), Franz Masereel (1889-1972), Aubrey Beardsley (1872-98) and Ernst Ludwig Kirchner (1880-1938). Exponents of German Expressionism revelled in woodcut, producing powerful works, for example *The Prophet* (1912, private collection) by Emil Nolde (1867-1956). Karl Schmidt-Rottluff (1884-1976) was another German expressionist who produced exceptionally powerful woodcuts. Other artists influenced included American Mary Cassatt (1844-1926) and Paul Gauguin (1848-1903).

Woodblock Prints in the Ukiyo-e Style

Woodblock prints were first used in Japan in the 8th century for printing text, in particular Buddhist scriptures. Although the designer Tawaraya Sotatsu (died c.1640) used wood stamps in the early 17th century to print designs on paper and silk, woodblock printing remained primarily a tool for text printing until the 18th century. In 1765 a new technology made it possible to create single-sheet printed in a range of colours. Soon colourful

artwork of courtesans and kabuki actors were appearing, accompanied by stories which became hugely popular among the middle classes. The term Ukiyo-e means 'floating world', and referred generally to the degenerate themes that artists chose to portray, including bars and brothels. Ukiyo-e wood-block prints first appeared early in the Edo Period (1600-1868) and great print masters included Ando Hiroshige (1797–1858) and Suzuki Harunobu (1725–1770).

To create a woodblock print, first the artist drew the design on paper, and then transferred it to a thinner, more transparent paper. The paper was pasted to the woodblock, and then the carver followed the drawing, chiselling the edges to create a design in relief. Ink was applied to the surface of the woodblock. A new sheet of paper was applied to the block, then rubbed with a round pad to transfer the image. Reproductions, sometimes in the thousands could be produced until the woodblocks became too worn.

Today Ukiyo-e remains an important part of Japanese culture, and elements of its design have been incorporated into modern graphic art and cartoons. Reproduction posters are highly popular.

2.5 METHODS AND TECHNIQUE OF WOOD CUT PRINTING

The woodcut is the earliest and simplest of the printmaking techniques. It is also the most enduring, having been in constant use for centuries, both as an artistic and a commercial means of disseminating ideas to a wide audience. Woodcuts are relief prints. The design is drawn on the surface of a wooden block or plank. The areas that are to be blank are cut away, leaving raised the design that is to be printed. Ink is then rolled or daubed over the raised area. A sheet of paper is placed on top of the block and pressed against it, either in a press or by hand. This pressure transfers the ink to the paper. Since the print is the mirror image of the design on the block, the image must be conceived in reverse. A rubber stamp is a common example of a relief printing process.

The block for a woodcut can be cut from the log either lengthwise, along the grain, or crosswise, across the grain, each method producing a slightly different look in the final print. Virtually any kind of wood that can be cut is suitable. In his bird's eye view of Venice, printed in 1500, Jacopo da Barbari used six walnut blocks. Albrecht Dürer used pearwood, and Gauguin used boxwood. Early woodcut artists preferred a close grain which made it possible to cut very fine lines. In the past hundred years, artists have often used wood with a coarser grain, incorporating its natural pattern into their prints. Some modern artists use plywood. In this century, linoleum has been a frequent alternative to wood. The blocks are cut with

straight knives or scooped ones called gouges. In recent years some artists have begun to use power tools.

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An important feature of the woodcut is its technical simplicity. Wood is readily available and inexpensive. Cutting a block does not necessarily require special tools or training, and though a press is generally used, it is not required. This simplicity has made the woodcut popular throughout the ages both with folk artists and with more sophisticated practitioners who value the direct involvement with the printing process that it makes possible.

With a little comparative looking, woodcuts can easily be distinguished from other types of prints. The lines in a woodcut indent the paper; they tend to be bolder and heavier and vary more in width than lines produced by the etching or engraving processes. The dark areas in an engraving or etching are really a fine network of many incised lines, whereas the dark areas in a woodcut may be a continuous, dark shape, printed from a solid area of wood. Sometimes the actual grain of the wood is visible in the print. Woodcut is a relief printing technique in printmaking. An artist carves an image into the surface of a block of wood—typically with gouges—leaving the printing parts level with the surface while removing the non-printing parts. Areas that the artist cuts away carry no ink, while characters or images at surface level carry the ink to produce the print. The block is cut along the wood grain (unlike wood engraving, where the block is cut in the end-grain). The surface is covered with ink by rolling over the surface with an ink-covered roller (brayer), leaving ink upon the flat surface but not in the non-printing areas.

Multiple colors can be printed by keying the paper to a frame around the woodblocks (using a different block for each color). The art of carving the woodcut can be called "xylography", but this is rarely used in English for images alone, although that and "xylographic" are used in connection with block books, which are small books containing text and images in the same block. They became popular in Europe during the latter half of the 15th century. A single-sheet woodcut is a woodcut presented as a single image or print, as opposed to a book illustration. Compared to intaglio techniques like etching and engraving, only low pressure is required to print. As a relief method, it is only necessary to ink the block and bring it into firm and even contact with the paper or cloth to achieve an acceptable print. In Europe, a variety of woods including boxwood and several nut and fruit woods like pear or cherry were commonly used; in Japan, the wood of the cherry species *Prunus serrulata* was preferred.

There are three methods of printing to consider:

1. **Stamping:** Used for many fabrics and most early European woodcuts (1400–40). These were printed by putting the paper/fabric on a table or

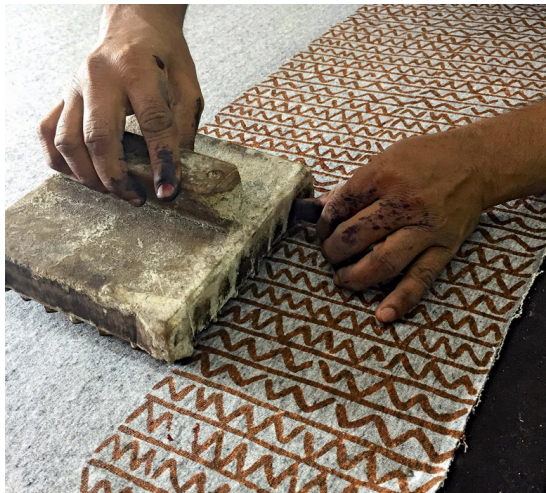
other flat surface with the block on top, and pressing or hammering the back of the block.

Wood Cut



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- 2. Rubbing:** Apparently the most common method for Far Eastern printing on paper at all times. Used for European woodcuts and block-books later in the fifteenth century, and very widely for cloth. Also used for many Western woodcuts from about 1910 to the present. The block goes face up on a table, with the paper or fabric on top. The back is rubbed with a "hard pad, a flat piece of wood, a burnisher, or a leather frotton". A traditional Japanese tool used for this is called a baren. Later in Japan, complex wooden mechanisms were used to help hold the woodblock perfectly still and to apply proper pressure in the printing process. This was especially helpful once multiple colors were introduced and had to be applied with precision atop previous ink layers.



- 3. Printing in a press:** presses only seem to have been used in Asia in relatively recent times. Printing-presses were used from about 1480 for European prints and block-books, and before that for woodcut book illustrations. Simple weighted presses may have been used in Europe

before the print-press, but firm evidence is lacking. A deceased Abbess of Mechelen in 1465 had "unum instrumentum ad imprintendum scripturas et ymagines ... cum 14 aliis lapideis printis"—"an instrument for printing texts and pictures ... with 14 stones for printing". This is probably too early to be a Gutenberg-type printing press in that location.

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Woodcuts and Movable Type

In the 1450s Johannes Gutenberg perfected a standardized system for printing with movable type; the result was a revolution in the production of books. This development gave the woodcut a significant role as an accompaniment to text, because it became possible for the first time to print identical copies of illustrated books on anatomy, botany, geometry, and architecture. Previously, works on these subjects were often not illustrated or were incorrectly illustrated as a result of differing interpretations by successive hand copyists. Geography and travel books that pictured exotic lands were also popular. The woodblocks withstood the wear of many printings, and since both the woodcut illustrations and the type were in relief, they could be printed simultaneously. Printed books became cheaper and more numerous.

To meet the demand, large print shops appeared in Italy and Germany, in which artists such as Albrecht Dürer received their early training. As a rule, the artist would draw directly on the block as a guide. The block would then be cut by a professional craftsman.

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Dürer and the Artist's Woodcut

Dürer infused the woodcut medium with a new and powerful individual style and was among the first to sign and date his prints consistently. In *The Four Horsemen from the Apocalypse*, the strong black lines model form and distinguish textures without losing their expressive calligraphic quality. His hundreds of woodcut images, especially those in his series of the *Apocalypse* and the *Life of the Virgin*, are some of the most famous in Western art. Dürer was both a technical and a stylistic innovator, and his influence upon other sixteenth-century printmakers such as Hans Baldung and Albrecht Altdorfer was profound. In addition to being a prolific in woodcut, Dürer was also a master engraver and an early etcher.

Although no woodcut artist of Dürer's stature emerged in the following centuries, there was no decrease in the flow of matter printed or illustrated with woodcuts. The basic woodcut process was not greatly changed, though some innovations in the printing of flat areas of tone or color were explored. In 1516, an Italian artist named Ugo da Carpi had applied to the Senate of Venice for a patent for a woodcut process, *chiaroscuro* ["light and dark"] woodcut printing, already in use in Germany. To produce these prints, which looked very much like wash drawings, separate blocks were cut to print large areas of tone. The blocks were then printed in succession, one on top of the other, using different colors of ink, and the result was a print with far more tonal variations than the usual woodcut.

Originating in China and reaching the West in the 13th century, woodcuts were mastered by the 15th-century German artist Albrecht Dürer who took the ancient method to a whole new artistic level. Centuries later, Expressionists like Ernst Ludwig Kirchner and Emil Nolde revived the woodcut tradition, examining the medium's graphic potential with aggressive marks and flat planes of color.

The Woodcut and the Mass Media

In 1780 Thomas Bewick, a Scotsman, found that by using an engraver's burin on the end grain of the wood, he could produce a print with the virtues of both woodcut and engraving. Wood engravings, as his prints were called, had the fine lines and precise detail of more expensive engravings on metal. However, since they were relief prints, wood engravings could be printed simultaneously with type, whereas engravings on metal had to be printed separately. Bewick's own output was limited in scale, confined

primarily to charming miniature book illustrations [notably those for *A History of English Birds*] and bookplates. However, his discovery was of great importance, for it provided an efficient and economical way to satisfy the demands of an increasingly literate public for inexpensive illustrated reading matter.

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Following Bewick's invention, thousands of illustrated periodicals appeared. To meet the need for wood engravings, large shops arose, with craftsmen whose job was to transfer drawings to blocks and cut them accordingly. Often artists would draw on a large block composed of several small ones; these were then separated, each section going to a different cutter. In the final step, all the sections were given to a specialist who cut the edges to match so that the block produced one unified illustration. The public's curiosity about current events like the Crimean and Civil wars could be satisfied by wood engravings in journals such as *The Illustrated London News* and *Harper's Weekly*. Winslow Homer was one of the artists who designed wood engravings for *Harper's Weekly*. Illustrated books were popular throughout the nineteenth century, and deluxe gift editions were often embellished with wood engravings designed by well-known artists. The public's visual conception of characters from Dante's *Inferno*, Lewis Carroll's *Alice in Wonderland*, and the novels of Anthony Trollope were based on wood engravings by Gustave Doré, John Tenniel, and John Everett Millais respectively.

White-line woodcut



Using a handheld gouge to cut a "white-line" woodcut design into Japanese plywood. The design has been sketched in chalk on a painted face of the plywood.

This technique just carves the image in mostly thin lines, similar to a rather crude engraving. The block is printed in the normal way, so that most of the print is black with the image created by white lines. This process was

invented by the sixteenth-century Swiss artist Urs Graf, but became most popular in the nineteenth and twentieth century, often in a modified form where images used large areas of white-line contrasted with areas in the normal black-line style. This was pioneered by Félix Vallotton.

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Revival of the Artist's Woodcut

Two printing methods perfected in the early and mid -nineteenth century, lithography and photography, soon began to compete with the wood engraving and eventually supplanted it as a mass medium. However, there was a revival of interest in the woodcut technique among artists.

When Paul Gauguin returned from Tahiti in 1893, one of his first projects was the illustration with woodcuts of his manuscript, "Noa Noa." While Gauguin used the tools of the traditional wood engraver, he worked in an idiosyncratic and novel way. He worked his blocks with a combination of knives, gouges and abrasives to produce prints with an initially primitive impact which belies their complexity. In woodcuts such as *Manao Tupapau* Gauguin also experimented with color, using multiple blocks, stencils, and other processes that remain mysterious. Gauguin prepared the way for many other artists, who also appreciated the special graphic qualities of the woodcut and valued the freedom for variation and expression made possible by hand printing.

The Norwegian artist Edvard Munch also cut his own blocks and experimented with color combinations to produce varying interpretations of one image. Munch, like Gauguin, used the wood itself as an element in the design, allowing the grain of the plank to show. Munch also led the way for subsequent artists by using woodcut and lithography in the same print; in the twentieth century, many artists have experimented with new combinations and variations of traditional techniques.

The woodcut's technical simplicity and the rapidity and vigor with which it could be produced attracted German Expressionists such as Ernst Ludwig Kirchner, Erich Heckel, and Emil Nolde. These artists produced images that have a forceful graphic power and roughhewn look that was quite new and startling at the time of their first publication in the early twentieth century.

In France during the same period, the woodcut appealed to the Fauve artists: Maurice de Vlaminck, Raoul Dufy, and Andre Derain. Pablo Picasso produced a few rare early woodcuts; his later linoleum cuts represent his greatest contribution to the relief media.

Contemporary Woodcuts

In this country, there was a resurgence of interest in the woodcut in the

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1970s. Painter Helen Frankenthaler saw its potential as a medium of expression for the ideas about color and surface saturation which she had explored in her painting. For works such as *Savage Breeze*, 1977, Frankenthaler cut sheets of veneered plywood into rhythmic shapes with a jigsaw. After inking the surface of these close-grained pieces in different colors, she fitted them back together and printed them over an underlying layer of fine wood grain printed in white. Thus the final image is made up of interlocking fields of color, textured by the grain of the plywood and broken by a few thin white lines.

Frankenthaler's lead was followed by other artists who are key figures in the development of contemporary art, such as Roy Lichtenstein and Jim Dine. While bringing new ideas to the woodcut, these artists have adhered to certain venerable traditions. Like Dürer, they all work closely with professional craftsmen. In *Two Hearts in a Forest*, Jim Dine combines woodcut and lithography as Munch did earlier in the century. The heart shapes are roughly gouged from the wooden plank, which is then printed in black to create an overall texture while the cut-away areas reveal the colored lithograph below.

The most recent generation of artists also finds the woodcut or linocut appropriate to their manner of working. Artists such as Georg Baselitz and Anselm Kiefer, working out of the tradition of the German Expressionists, emphasize the rough tactile qualities of the materials. These and other characteristics of the woodcut will no doubt continue to inspire artistic experimentation and expression in the future.

2.6 JAPANESE WOOD CUT PRINTING

In the 1860s, just as the Japanese themselves were becoming aware of Western art in general, Japanese prints began to reach Europe in considerable numbers and became very fashionable, especially in France. They had a great influence on many artists, notably Édouard Manet, Pierre Bonnard, Henri de Toulouse-Lautrec, Edgar Degas, Paul Gauguin, Vincent van Gogh, Félix Vallotton and Mary Cassatt. In 1872, Jules Claretie dubbed the trend "Le Japonisme".

Though the Japanese influence was reflected in many artistic media, including painting, it did lead to a revival of the woodcut in Europe, which had been in danger of extinction as a serious art medium. Most of the artists above, except for Félix Vallotton and Paul Gauguin, in fact used lithography, especially for coloured prints. See below for Japanese influence in illustrations for children's books.

Artists, notably Edvard Munch and Franz Masereel, continued to use the medium, which in Modernism came to appeal because it was relatively

easy to complete the whole process, including printing, in a studio with little special equipment. The German Expressionists used woodcut a good deal.

Wood Cut



Odawara-juku in the 1830s

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Wood-block prints

Woodblocks are amongst the oldest printing techniques, originally used in carved and formed stamps and seals. However printmaking would not have been possible without the invention of the paper. Scientists date the origins of paper making back to ca. 105 AD in China. Stone carving probably developed as the first printing technology: stones were rubbed with moist paper and ink, created engraved calligraphy. Afterwards or in parallel, the woodblock print developed. The first Chinese woodblock print book, the Diamant-Sutra from Dunhuang, dates back to 868 and is so technically advanced that one assumes woodblocks must have developed long before then.

There is a Japanese print, "Dharanis", that dates further back to 770 and was strongly influenced by Chinese prints. Dharanis consisted of Buddhist prayers and had a circulation of one million. But it is unclear whether they were made by wood block printing plates. In general, wood cuts were used in the first centuries in China exclusively to spread Buddhist texts and amulets. A movement that paralleled and occasionally intersected with the aforementioned developments in painting was that of

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the production of ukiyo-e, or “pictures of the floating world,” which depicted the buoyant, fleeting pleasures of the common people. This specialized area of visual representation was born in the late 16th and early 17th centuries as part of a widespread interest in representing aspects of burgeoning urban life. Depictions of the brothel quarters and Kabuki theatre dominated the subject matter of ukiyo-e until the early 19th century, when landscape and bird-and-flower subjects became popular. These subjects were represented in both painting and wood-block print form.

Wood-block printing had been a comparatively inexpensive method of reproducing image and text monopolized by the Buddhist establishment for purposes of proselytization since the 8th century. For more than 800 years no other single societal trend or movement had demonstrated a need for this relatively simple technology. Thus, in the first half of the 17th century, painters were the principal interpreters of the demimonde. The print format was used primarily for production of erotica and inexpensive illustrated novellas, reflecting the generally low regard in which print art was held. This perhaps resulted from the idea that the artist, when creating a painting, was essentially the producer and master of his own work. However, when engaged in wood-block print production, the artist was more accurately classified as the designer, who had been commissioned and was often directly supervised by the publisher, usually the impresario of a studio or other commercial enterprise.

The simplest prints were made from ink monochrome drawings, on which the artist sometimes noted suggestions for colour. The design was transferred by a skilled carver to a cherry or boxwood block and carved in relief. A printer made impressions on paper from the inked block, and the individual prints could then be hand-coloured if desired. Printing in multiple colours required more blocks and a precise printing method so that registration would match exactly from block to block. Additional flourishes such as the use of mica, precious metals, and embossing further complicated the task. Thus, while the themes and images of the floating world varied little whether in painting or print, the production method for prints involved many more anonymous and critical talents than those of the artist-designer whose name was usually printed on the single sheet, and the mass-produced prints were considered relatively disposable despite the high level of artistry that was frequently achieved.

Nevertheless, with the exponential increase in literacy in the early Edo period and with the vast new patronage for images of the floating world—a clientele and subject matter not previously serviced by any of the traditional ateliers—mass production was necessary, and new schools and new techniques responded to the market.

In the last quarter of the 17th century, bold ink monochrome prints with limited hand-colouring began to appear. The *Insistent Lover* by

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Sugimura Jihei provides an excellent example of the lush and complex mood achievable with the medium. Within a seemingly uncomplicated composition Jihei represents a tipsy brothel guest lunging for a courtesan while an attendant averts her eyes. This scene, likely played out hundreds of times each evening in the urban licensed quarters, skillfully suggests the multileveled social games, including feigned shock and artful humouring of the insistent guest, that prevailed in the floating world. This print too, with an almost naive representational quality, is an example of the generally straightforward, exuberant mood of the times in regard to the necessary indulgences.



The Insistent Lover, wood-block print by Sugimura Jihei, c. 1680

From the late 17th until the mid-18th century, except for some stylistic changes and the addition of a few printed rather than hand-applied colours, print production remained basically unchanged. The technical capacity to produce full-colour, or polychrome, prints (*nishiki-e*, “brocade pictures”) was known but so labour-intensive as to be uneconomical until the 1760s, when Suzuki Harunobu, whose patrons were within the shogun’s circle, was commissioned to produce a so-called calendar print. Calendar manufacture was a government monopoly, but privately produced works were common. Seeking to avert any censorship, the private calendars were disguised within innocent-looking pictures. Harunobu’s young woman rescuing a garment from the line as a shower bursts is an example of the technique. The ideograms for the year 1765 are part of the hanging kimono’s pattern.

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More importantly, the work is a full-colour print. Even though it was commissioned for limited distribution, it excited general audiences to the possibilities of expanding the repertoire and appearance of wood-block prints. Harunobu's productions, through the end of the decade, elegantly suggested the new possibilities. His work so raised the level of consumer expectation that publishers began to enter full-colour production on the assumption that consumption levels would outweigh production costs. Not all prints were produced with the subtlety and care of Harunobu's, but the turn in taste toward full-colour prints, of whatever quality, was irreversible.

The last quarter of the 18th century was the heyday of the classic ukiyo-e themes: the fashionable beauty and the actor. Katsukawa Shunshō and his pupils dominated the actor print genre. His innovative images clearly portrayed actors not as interchangeable bodies with masks but as distinctive personalities whose postures and colourfully made-up faces were easily recognizable to the viewer. Masters at portraying feminine beauty included Torii Kiyonaga and Kitagawa Utamaro. Both idealized the female form, observing it in virtually all its poses, casual and formal. Utamaro's bust portraits, while hardly meeting a Western definition of portraiture, were remarkable in the emotional moods they conveyed. A mysterious artist active under the name of Tōshūsai Sharaku produced stunning actor images from 1794 to 1795, but little else is known of him.



Japan Bridge, colour woodblock print by Andō Hiroshige,

At the close of the 18th century, a palpable tightening of government censorship control and perhaps a shift in public interest from the intense introspection provided by artists of the demimonde forced publishers to

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search for other subject matter. Landscape became a theme of increasing interest. In Edo the artist Katsushika Hokusai, who as a young man trained with Katsukawa Shunshō, broke with the atelier system and experimented successfully with new subjects and styles. In the 1820s and '30s, when he was already a man of some age, Hokusai created the hugely popular print series *Thirty-six Views of Mt. Fuji*. Andō Hiroshige followed with another landscape-travelogue series, *Fifty-three Stations of the Tōkaidō*, which offered scenes of the towns and way stations on the central highway connecting Edo and Kyōto. Both these and other artists capitalized on public interest in scenes of distant places. These landscape prints in some way assuaged the restrictive travel codes enforced by the shogunate and allowed viewers imaginative journeys.

Hokusai was also an important painter. His energetic rendering of the thunder god is a fine example of the quirky and amusing quality of his figural painting. A characteristic swiftly modulating brush defines the figure, and light cast from an unseen source, perhaps lightning, allows for a play of light and shadow over the figure to model a sense of body volume. All the more remarkable is the fact that Hokusai was in his 88th year when he painted this vigorous work. Hiroshige painted as well, but his legacy is a vast number of prints celebrating scenes of a Japan soon to vanish. His *View from Komagata Temple near Azuma Bridge* is part of a series of 100 views of Edo. It demonstrates Hiroshige's finely honed abilities to effect atmosphere. The appearance of the cuckoo screeching in the sky alludes to classical poetry associated with late spring and early summer, as well as to unrequited love, while the tiny figures and the red flag of the cosmetics vendor suggest the transitory nature of life and beauty.

The depiction of famous views allowed for their idealization and also for important experiments with composition. Fragmentary foreground elements were used effectively to frame a distant view, a point of view adopted by some European painters after their study of 19th-century Japanese prints. Ironically, in their return to landscape and flora and fauna subjects, Japanese print arts revived the metaphoric vehicles of personal expression so familiar to the classic Japanese and Chinese painting traditions. Although the time-tested themes of erotica, brothel, and theatre continued to be represented in 19th-century prints, an emerging taste for gothic and grotesque subjects found ample audiences as well. Historical themes were also popular, especially those that could be interpreted as critiques of contemporary politics. Ukiyo-e prints seemed to have been transformed from a celebration of pleasure to a means of widely distributing observations on social and political events. As the century closed, the print form, while active, was subsumed by the development of the newspaper illustration. This new form served many of the same purposes as prints and thus dramatically reduced the print audience, but it did not satisfy the needs of connoisseurs.

2.7 COLOURED WOODCUTS

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Coloured woodcuts first appeared in ancient China. The oldest known are three Buddhist images dating to the 10th century. European woodcut prints with coloured blocks were invented in Germany in 1508, and are known as chiaroscuro woodcuts (see below). However, colour did not become the norm, as it did in Japan in the ukiyo-e and other forms.

In Europe and Japan, colour woodcuts were normally only used for prints rather than book illustrations. In China, where the individual print did not develop until the nineteenth century, the reverse is true, and early colour woodcuts mostly occur in luxury books about art, especially the more prestigious medium of painting. The first known example is a book on ink-cakes printed in 1606, and colour technique reached its height in books on painting published in the seventeenth century. Notable examples are Hu Zhengyan's *Treatise on the Paintings and Writings of the Ten Bamboo Studio* of 1633, and the *Mustard Seed Garden Painting Manual* published in 1679 and 1701.



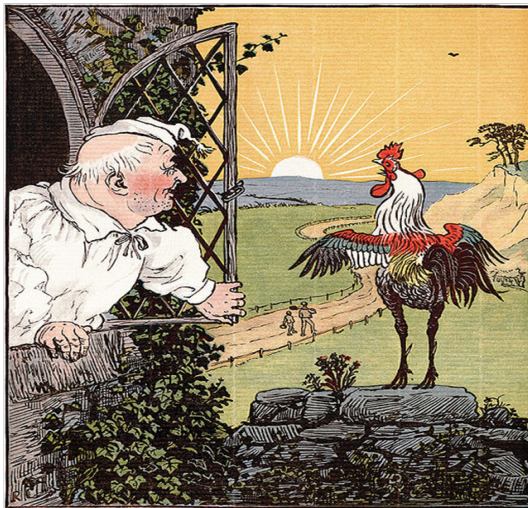
Bijin (beautiful woman) ukiyo-e by Keisai Eisen, before 1848

In Japan colour technique, called nishiki-e in its fully developed form, spread more widely, and was used for prints, from the 1760s on. Text was nearly always monochrome, as were images in books, but the growth of the

popularity of ukiyo-e brought with it demand for ever-increasing numbers of colors and complexity of techniques. By the nineteenth century most artists worked in colour. The stages of this development were:

- Sumizuri-e - monochrome printing using only black ink
- Benizuri-e - red ink details or highlights added by hand after the printing process green was sometimes used as well
- Tan-e - orange highlights using a red pigment called tan
- Aizuri-e , Murasaki-e , and other styles that used a single color in addition to, or instead of, black ink
- Urushi-e - a method that used glue to thicken the ink, emboldening the image; gold, mica and other substances were often used to enhance the image further. Urushi-e can also refer to paintings using lacquer instead of paint; lacquer was very rarely if ever used on prints.
- Nishiki-e - a method that used multiple blocks for separate portions of the image, so a number of colors could achieve incredibly complex and detailed images; a separate block was carved to apply only to the portion of the image designated for a single color. Registration marks called kentō ensured correspondence between the application of each block.

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Children's book illustration by Randolph Caldecott; engraving and printing by Edmund Evans, 1887

A number of different methods of colour printing using woodcut (technically Chromoxylography) were developed in Europe in the 19th century. In 1835, George Baxter patented a method using an intaglio line plate (or occasionally a lithograph), printed in black or a dark colour, and then overprinted with up to twenty different colours from woodblocks. Edmund Evans used relief and wood throughout, with up to eleven different colours, and latterly specialized in illustrations for children's books, using fewer blocks but overprinting non-solid areas of colour to achieve blended colours. Artists such as Randolph Caldecott, Walter Crane and Kate Greenaway

were influenced by the Japanese prints now available and fashionable in Europe to create a suitable style, with flat areas of colour.

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Ernst Ludwig Kirchner, Portrait of Otto Müller (1915)

In the 20th century, Ernst Ludwig Kirchner of the Die Brücke group developed a process of producing colored woodcut prints using a single block applying different colors to the block with a brush à la poupée and then printing (halfway between a woodcut and a monotype). A remarkable example of this technique is the 1915 Portrait of Otto Müller woodcut print from the collection of the British Museum.

Modern woodcut printing



José Guadalupe Posada, Calavera Oaxaqueña, 1910

Woodcut printmaking became a popular form of art in Mexico during the early to mid 20th century. The medium in Mexico was used to convey

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political unrest and was a form of political activism, especially after the Mexican Revolution (1910-1920). In Europe, Russia, and China, woodcut art was being used during this time as well to spread leftist politics such as socialism, communism, and anti-fascism. In Mexico, the art style was made popular by José Guadalupe Posada, who was known as the father of graphic art and printmaking in Mexico and is considered the first Mexican modern artist. He was a satirical cartoonist and an engraver before and during the Mexican Revolution and he popularized Mexican folk and indigenous art. He created the woodcut engravings of the iconic skeleton (calaveras) figures that are prominent in Mexican arts and culture today (such as in Disney Pixar's *Coco*). La Calavera Catrina for more on Posada's calaveras.

In 1921, Jean Charlot, a French printmaker moved to Mexico City. Recognizing the importance of Posada's woodcut engravings, he started teaching woodcut techniques in Coyoacán's open-air art schools. Many young Mexican artists attended these lessons including the Fernando Leal.

After the Mexican Revolution, the country was in political and social upheaval - there were worker strikes, protests, and marches. These events needed cheap, mass-produced visual prints to be pasted on walls or handed out during protests. Information needed to be spread quickly and cheaply to the general public. Many people were still illiterate during this time and there was push after the Revolution for widespread education. In 1910 when the Revolution began, only 20% of Mexican people could read. Art was considered to be highly important in this cause and political artists were using journals and newspapers to communicate their ideas through illustration. *El Machete* (1924–29) was a popular communist journal that utilized woodcut prints. The woodcut art served well because it was a popular style that many could understand.

Artists and activists created collectives such as the Taller de Gráfica Popular (TGP) (1937–present) and The Treintatreintistas (1928-1930) to create prints (many of them woodcut prints) that reflected their socialist and communist values. The TGP attracted artists from all around the world including African American printmaker Elizabeth Catlett, whose woodcut prints later influenced the art of social movements in the US in the 1960s and 1970s. The Treintatreintistas even taught workers and children. The tools for woodcut are easily attainable and the techniques were simple to learn. It was considered an art for the people.

Mexico at this time was trying to discover its identity and develop itself as a unified nation. The form and style of woodcut aesthetic allowed a diverse range of topics and visual culture to look unified. Traditional, folk images and avant-garde, modern images, shared a similar aesthetic when it was engraved into wood. An image of the countryside and a traditional farmer appeared similar to the image of a city. This symbolism was beneficial for politicians who wanted a unified nation. The physical actions of carving

and printing woodcuts also supported the values many held about manual labour and supporting worker's rights.

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How Were Woodblock Prints Made?

At least four people were needed to work together to produce a Ukiyo-e woodblock print. They included a publisher, an artist or designer, a block-cutter and a printer.



Woodcut Print by Utagawa, Yoshiume, c.1830s

1. The publisher would commission the artist to draw an original design. The artist would provide the publisher with a preparatory sketch called a shita-e.
2. The shita-e sketch was traced by the hikko or block copyist, on to very thin paper, which was pasted face down onto the woodblock of cherry wood.
3. The printer would then cut through the paper, leaving only the raised lines of the design, to create the key block, which printed the black outline to be followed when cutting the colour blocks.
4. Next, the cutter would chisel the design into the woodblock. The block would then be inked and a sheet of dampened paper (called a 'key print')

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is rubbed until the impression is transferred on to it.

5. The artist would then choose the colours he wanted to use within the print and a separate block would be carved for every colour. A separate block was cut for each colour - often up to 20 - although sometimes two colours could share a block if there was sufficient distance between them. How many colour blocks do you think were made for the print pictured here?
6. Finally, the blocks would be sent to the printer, who, using mulberry paper, rubbed the dyes onto the blocks and transferred each impression.

Prints were probably made in sets of 200 at a time, with further batches being made on demand. A popular image could run to thousands of copies. These prints were relatively affordable pieces of artwork, within the reach of middle class households throughout Japan and the world.

2.8 MATERIALS AND TOOLS FOR WOODCUT

The ancient art of woodblock printing is a perfect craft to get started with printmaking. And the uses are endless. From decorative wrapping paper to wall art, there's so much you can do with woodblock prints. Of course, block printing can also be done using linoleum or rubber, but it's also just as easy to use wood scraps you have around the house or pick up at the hardware store. There are so many methods around today that we can use to print a picture. Though the majority of them are quicker and more efficient, some of us find fullness, tranquility, and artistic expression in the ancient art of hand printing that is unmatched by any other media.



Though the majority of them are quicker and more efficient, some of us

find fullness, tranquility, and artistic expression in the ancient art of hand printing that is unmatched by any other media.

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1. Sheet of drawing paper.



2. Lead pencil.



3. Block of wood.

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4. Curved burnisher or bone fold.



5. Set of wood carving gouges.

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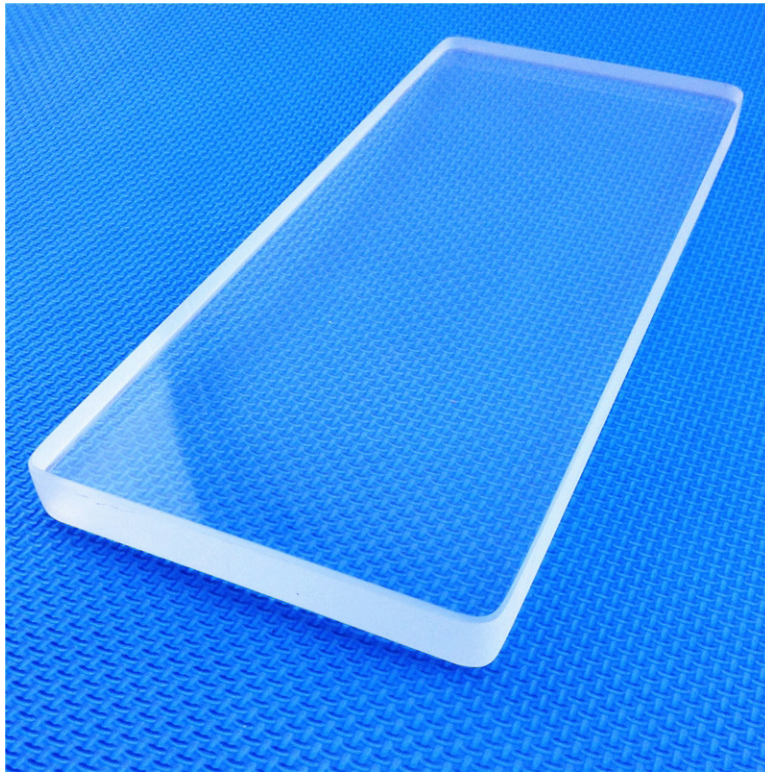


6. Rubber or non-slip mat (optional).



7. Glass surface (like the glass from a frame).

Wood Cut



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8. Water-based block printing ink.



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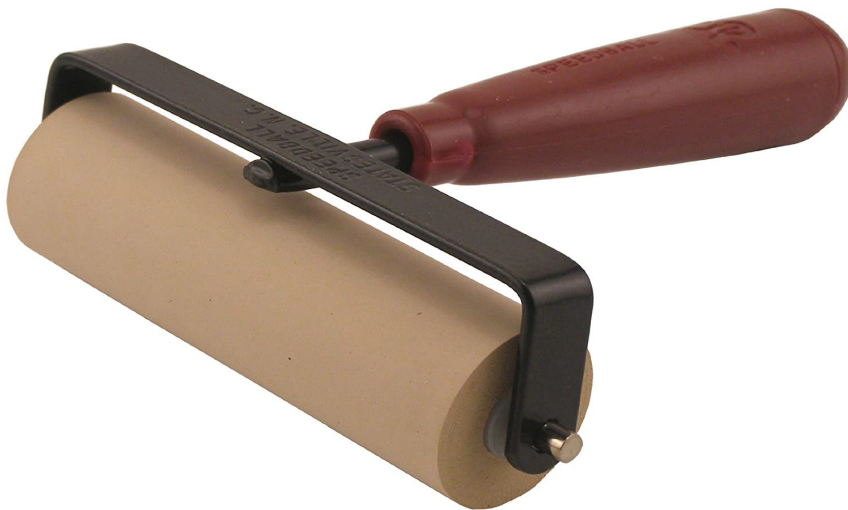
9. Putty knife.



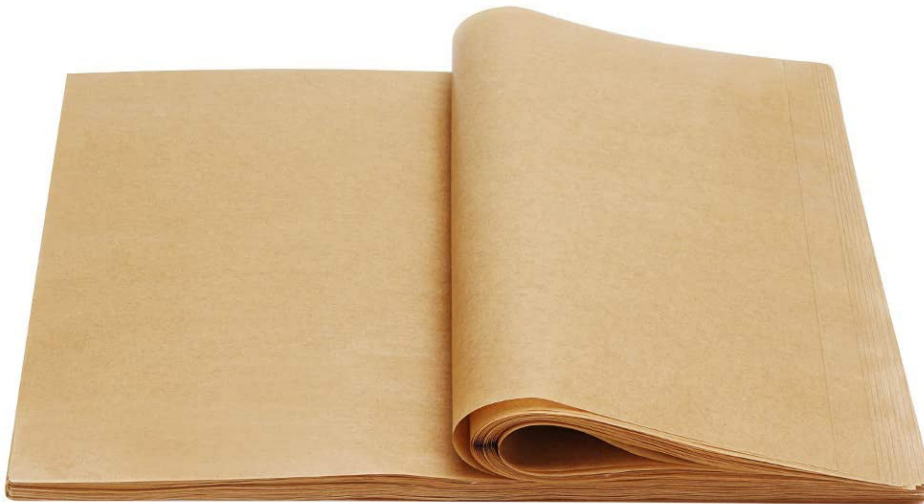
10. Rubber brayer.



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11. Block printing paper like Kozo or mulberry.



12. Rice spoon.

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2.9 START PRINT MAKING USING WOOD CUT

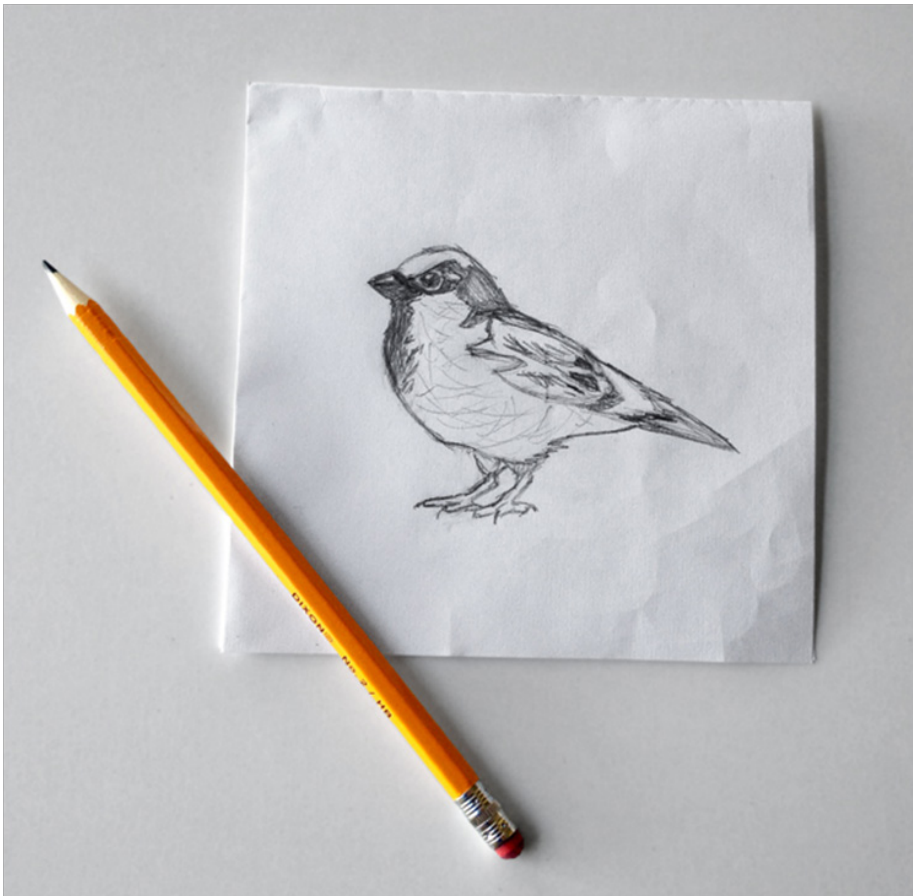
There are so many methods around today that we can use to print a picture. Though the majority of them are quicker and more efficient, some of us find fullness, tranquility, and artistic expression in the ancient art of hand printing that is unmatched by any other media. With this tutorial, you'll learn the technique for carving and printing your very own woodblock.

The best wood to use as a beginner is birch plywood. It is cheap, but still has a nice surface to work with. Regular birch, pine and poplar are also great for block printing. You need sharpening tools for your carving gouges. Such tools include a strip of tooling leather, a Slipstrop, or a sharpening stone. To sharpen your knives, follow the instructions included with the tool or do a search for "how to sharpen a gouge knife".

1. Draw Your Image

Step 1

Sketch your design on a piece of plain white paper using lead pencil.



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Step 2

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If you're not into drawing an original design, you could print an image from the computer and cover the areas you want to print in lead pencil. If you're using an image that is not your own, make sure you have the rights to use it.

Try out some images from PhotoDune or Envato Elements. I bought an image from PhotoDune and used it as a reference while I free-handed it in pencil. (Original image no longer available, but this one is a good alternative.)

Again, even if you are purchasing an image, you need to read the fine print and make sure you are using it legally.

2. Transfer Your Drawing

Step 1

Turn your drawing face down onto the wood you want to carve. Take your burnisher or bone fold and firmly rub the back of the drawing. The pencil will transfer to the wood.



Step 2

Carefully lift up a corner of your paper to check that your image is completely transferred.

Wood Cut

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Step 3

Go over the illustration with a pen so it's easier to see.

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3. Start Carving

Step 1

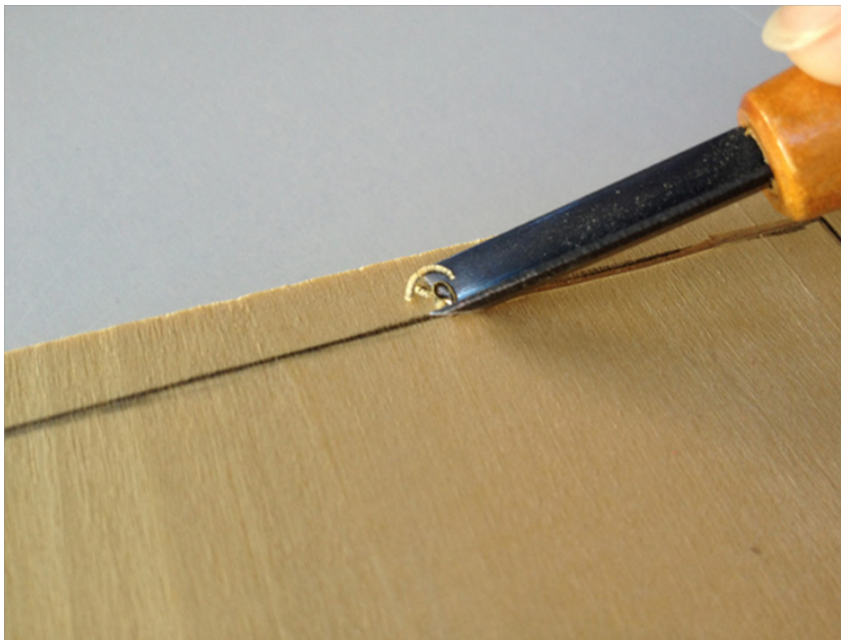
Place your wood on top of the rubber mat so that it doesn't slip.

Begin to carve out your design.

Here are some pointers to follow:

- The wood can be bigger than the carving. I have extra wood surface at the bottom of my image which gives my wrist somewhere to sit and a dry surface to hold when printing.
- Cut away from your body.
- Keep all body parts away from the direction your knives are cutting. Be aware of where your free hand is at all times. You might think it's easier to carve with one hand out front to hold your wood, but it's not worth it!
- You don't need to carve too deeply. A simple scratch on the surface of the wood can show up in your print. I tend to carve deeply, but that's a personal preference.
- Use the V-shaped gouge to carve against the grain of the wood and to draw out detail.

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Step 2

Use the U-shaped gouges to carve with the grain of the wood.



Step 3

Use the small U-shaped gouge to carve detail.

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Step 4

Do not cut straight down into the wood. If you do, your carving will be weak and break apart. Cut at a shallow angle.

If you are having trouble getting a clean cut, you may need to sharpen your knives.



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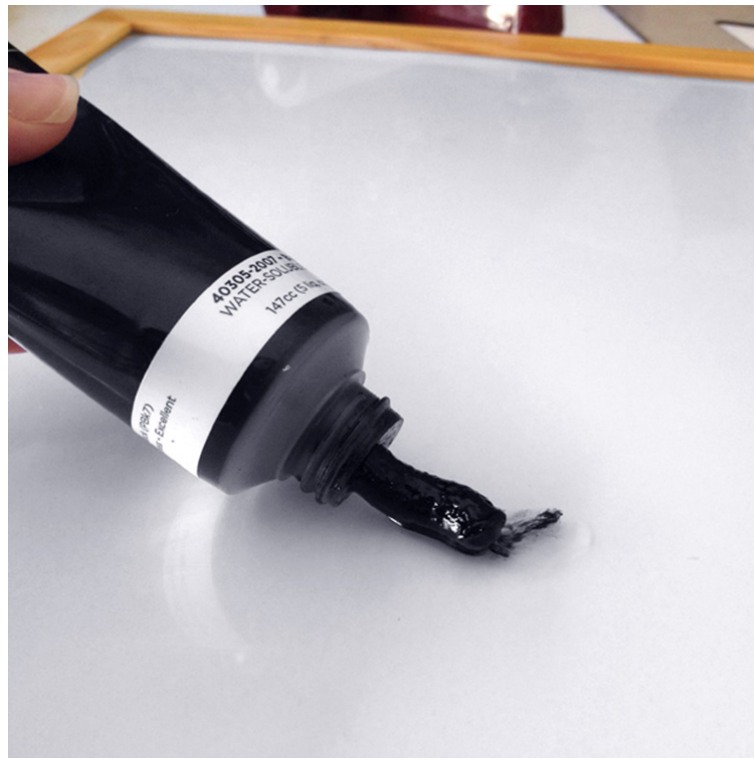
4. Proof Your Block

Step 1

Once you have your image carved out, it's a good idea to proof your block. It is not easy to tell what your print will look like just from looking at the carving.

Apply a line of ink to your sheet of glass.

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Step 2

Work the ink with your putty knife until the ink is mixed and smooth.



Step 3

Make an even line of ink with the putty knife and use your rubber brayer to roll out an even surface of ink.

If you have the right amount of ink, you will hear a quiet hissing sound while rolling the brayer. If you have too much ink, the hissing will be louder and sound more like Velcro. If this happens, scoop up all the ink with the putty knife and try again with less ink.



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Step 4

Roll the brayer onto the block moving from all four directions. Each time you roll the ink on, you will have to "charge" the brayer by rolling more ink onto it. You do not need to push down on to the block when inking it. Just roll the ink along the surface and make sure it is evenly covered.



Step 5

At this point, you might see some areas that are picking up ink that you don't like. This is the time to fix it with additional carving. If you do this, wash your brayer and glass with water before the ink dries.

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5. Print Your Block

Step 1

Once you think you've got the image carved the way you like, it's time to print.

Cut your paper to the preferred size. If you're planning on framing the piece, keep standard frame sizes in mind. Other than that, you can make the paper size whatever you want.

If you are just starting out, it might be wise to cut out some practice paper if you don't want to waste the good stuff. Newsprint or printer paper can be good for this. Just remember that the print may look different depending on the paper you use.

Step 2

Apply a line of ink, roll it out with the brayer, and ink your block as

demonstrated in Step 4 (proofing your block).

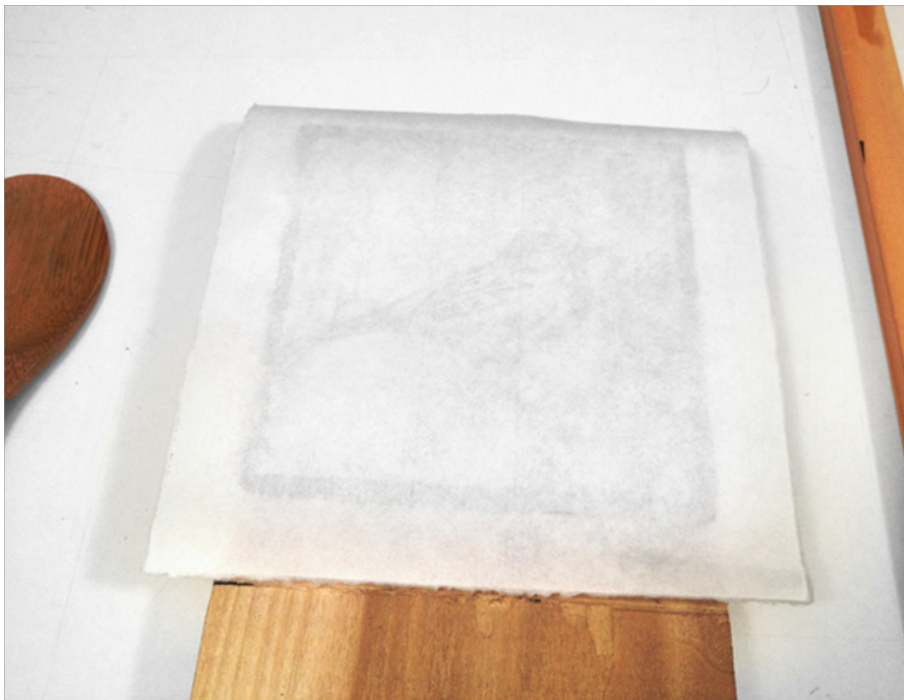
Wood Cut



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Step 3

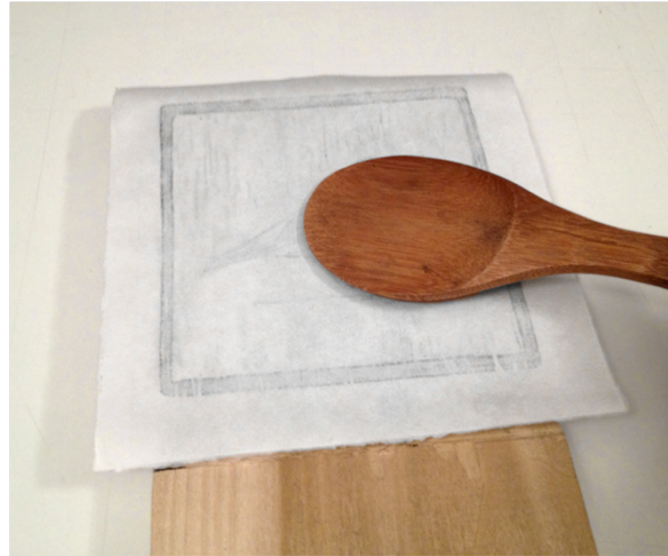
Once your carving is coated with ink, carefully place your paper face down onto the block. If you are using Kozo paper, the face side is bumpy and the back side is smooth.



Step 4

Starting from the centre, lightly press down on the back of the paper with the bottom of your rice spoon. Be very careful to keep your paper from sliding around. Professional printers would normally use a baren for this and it is great to get even pressure over the whole block, but a rice spoon or some other flat, smooth surface works just fine.

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Step 5

Do another pass with the rice spoon, starting from the centre again, but press a little harder. Keep rubbing the entire image. You will start to see the ink show through the paper. Don't try to make the process faster by rubbing hard. You might make your print blurry or even rip the paper.



Step 6

Wood Cut

Slowly lift the paper from the block. Make sure your hands are clean! After all that work, I'm sure you don't want to see any fingerprints.

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6. Allow to Dry

Step 1

Your print is complete. Lay it out or hang it to dry.



You may want to make changes to the block again and that's totally okay! Just make sure your block is dry so your knife does not slip while carving.

Is your print too blotchy? Print again with less ink on the block. Is your print too light? Roll on more ink. If you are going to print multiples, you should keep count of how many times you rolled ink onto your block. You could even write that number on the back of the block to remember for future printing.

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Step 2

Clean up with water. Since you used water-based ink, you don't need to use any cleaning products. Just try to use as little water as possible to not be wasteful. You don't have to clean the woodblock, but if you want to, you can use a little water and lightly scrub with a soft brush or cloth. Be careful, though, not to scrape or scratch the surface.

Frame Your Print



Nice work! Now that you've got it down, keep going. The more you carve, the better you will get. You can even get experimental and use other tools like screwdrivers or dremel tips to work the surface of the wood. Try printing on fabric or other types of paper. Both the block and the prints can be given

as gifts, or you can even construct a library of stamps for your own printing lab.

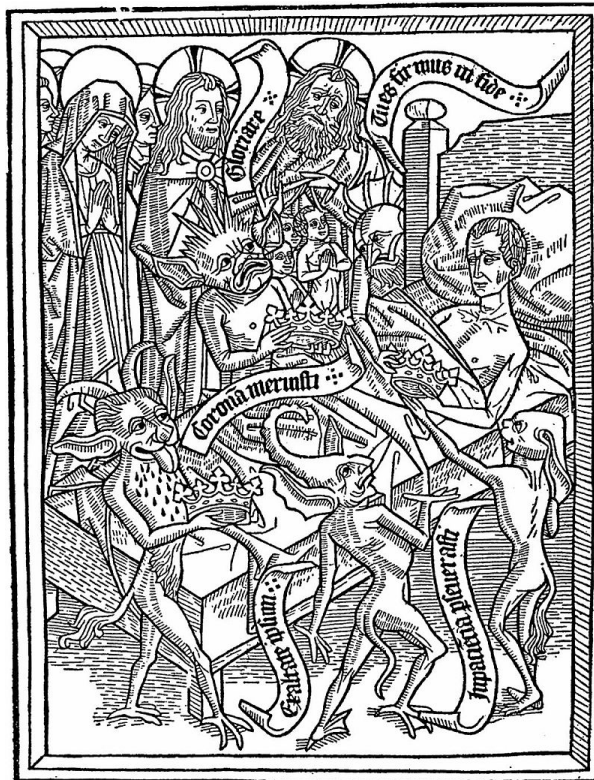
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2.10 FAMOUS WOODCUT PRINTS

Europe

- **Ars moriendi**

The *Ars moriendi* are two related Latin texts dating from about 1415 and 1450 which offer advice on the protocols and procedures of a good death, explaining how to "die well" according to Christian precepts of the late Middle Ages. It was written within the historical context of the effects of the macabre horrors of the Black Death 60 years earlier and consequent social upheavals of the 15th century. There was originally a "long version" and a later "short version" containing eleven woodcut pictures as instructive images which could be easily explained and memorized. These woodcut images were circulated in both print and individual engravings. They could then easily be pinned to a wall for viewing. The authors of the two texts are unknown, but assumed to be Dominican churchmen, as they echo Jean de Gerson's publication, the *Opusculum Tripartitu*, containing a section named *De arte Moriendi*. Gerson may have been influenced by earlier references in 'compendia of faith' dating back to the thirteenth century, but the content was uniquely his own.

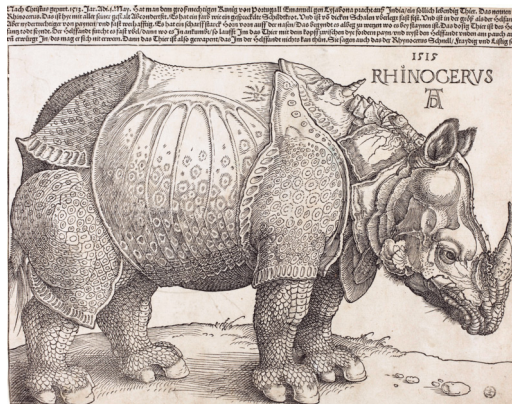


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The eleven different sets of blockbook woodcuts, there is a set by Master E. S. in engraving. The lengthy controversy over their respective dating and priority is now resolved by the discovery by Fritz Saxl of an earlier illuminated manuscript, of well before 1450, from whose tradition all the images in the printed versions clearly derive. Studies of the watermarks of the blockbooks by Allen Stevenson at the British Museum in the 1960s confirmed that none of them predated the 1460s, so Master E. S.' engravings are the earliest printed versions, dating from around 1450. The images remain largely the same in all media for the rest of the century.

- **Dürer's Rhinoceros**

Dürer's Rhinoceros is the name commonly given to a woodcut executed by German painter and printmaker Albrecht Dürer in 1515. The image is based on a written description and brief sketch by an unknown artist of an Indian rhinoceros that had arrived in Lisbon in 1515. Dürer never saw the actual rhinoceros, which was the first living example seen in Europe since Roman times. In late 1515, the King of Portugal, Manuel I, sent the animal as a gift for Pope Leo X, but it died in a shipwreck off the coast of Italy in early 1516. A live rhinoceros was not seen again in Europe until a second specimen, named Abada, arrived from India at the court of Sebastian of Portugal in 1577, being later inherited by Philip II of Spain around 1580.



Dürer's woodcut is not an entirely accurate representation of a rhinoceros. He depicts an animal with hard plates that cover its body like sheets of armour, with a gorget at the throat, a solid-looking breastplate, and what appear to be rivets along the seams. He places a small twisted horn on its back and gives it scaly legs and saw-like rear quarters. None of these features is present in a real rhinoceros, although the Indian rhinoceros does have deep folds in its skin that can look like armor from a distance. Despite its anatomical inaccuracies, Dürer's woodcut became very popular in Europe and was copied many times in the following three centuries. It was regarded by Westerners as a true representation of a rhinoceros into the late 18th century. Eventually, it was supplanted by more realistic drawings and paintings, particularly those of Clara the rhinoceros, who

toured Europe in the 1740s and 1750s. It has been said of Dürer's woodcut: "probably no animal picture has exerted such a profound influence on the arts".

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- **Apocalypse (Dürer)**

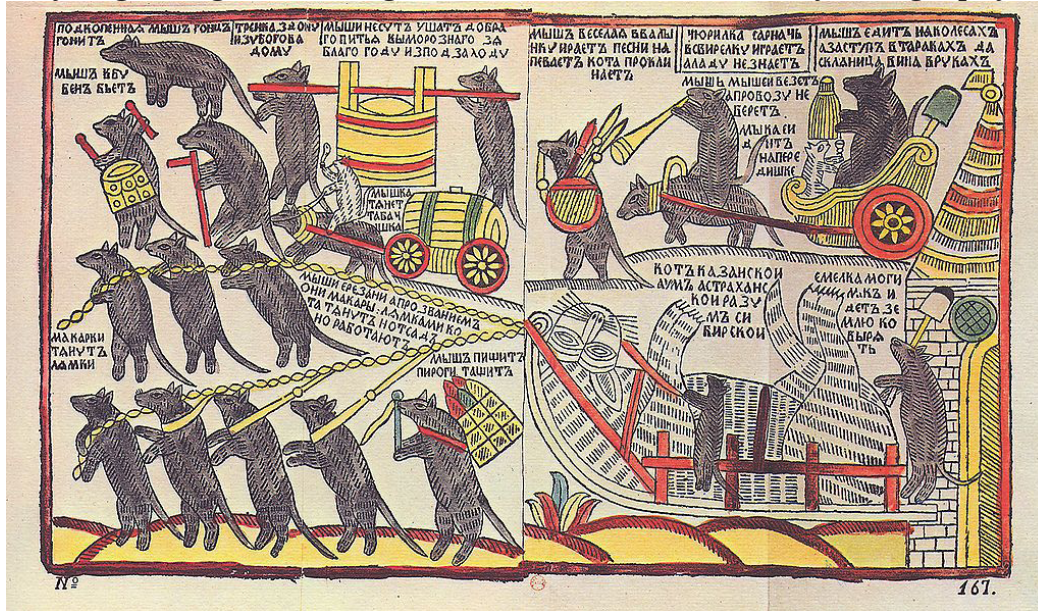
The Apocalypse, properly Apocalypse with Pictures is a series of fifteen woodcuts by Albrecht Dürer published in 1498 depicting various scenes from the Book of Revelation, which rapidly brought him fame across Europe. These woodcuts likely drew on theological advice, particularly from Johannes Pirkheimer, the father of Dürer's friend Willibald Pirkheimer. Work on the series started during Dürer's first trip to Italy (1494–95), and the set was published simultaneously as a 15-page book in Latin and German at Nuremberg in 1498, at a time when much of secular Europe feared an invasion of the Ottoman Empire and Christian Europe anticipated a possible Last Judgment in the year 1500. Dürer was the publisher and seller of this series, and became the first artist to publish a book and create a copyright. Considering the 15 woodcuts, The Four Horsemen of the Apocalypse (c. 1497–98), referring to Revelation 6:1–8, is often viewed as the most famous piece. The overall layout of the cycle has the illustrations on the recto (right) and the text on the verso (left). This would suggest the importance of illustration over text.



In 1511, Dürer published the second edition of Apocalypse in a combined edition with his Life of the Virgin and Large Passion; single impressions were also produced and sold

- **Lubok**

A lubok is a Russian popular print, characterized by simple graphics and narratives derived from literature, religious stories, and popular tales. Lubki prints were used as decoration in houses and inns. Early examples from the late 17th and early 18th centuries were woodcuts, followed by engravings or etchings, and from mid-19th century lithography.



They sometimes appeared in series, which might be regarded as predecessors of the modern comic strip. Cheap and simple books, similar to chapbooks, which mostly consisted of pictures, are called lubok literature. Both pictures and literature are commonly referred to simply as lubki. The Russian word lubok derives from lub - a special type of board on which pictures were printed.

Japan

- **Thirty-six Views of Mount Fuji**

Thirty-six Views of Mount Fuji is a series of landscape prints by the Japanese ukiyo-e artist Hokusai (1760–1849). The series depicts Mount Fuji from different locations and in various seasons and weather conditions. The immediate success of the publication led to another ten prints being added to the series. The series was produced from c. 1830 to 1832, when Hokusai was in his seventies and at the height of his career, and published by Nishimura Yohachi. Among the prints are three of Hokusai's most famous: The Great Wave off Kanagawa, Fine Wind, Clear Morning, and Thunderstorm Beneath the Summit. The lesser-known Kajikazawa in Kai Province is also

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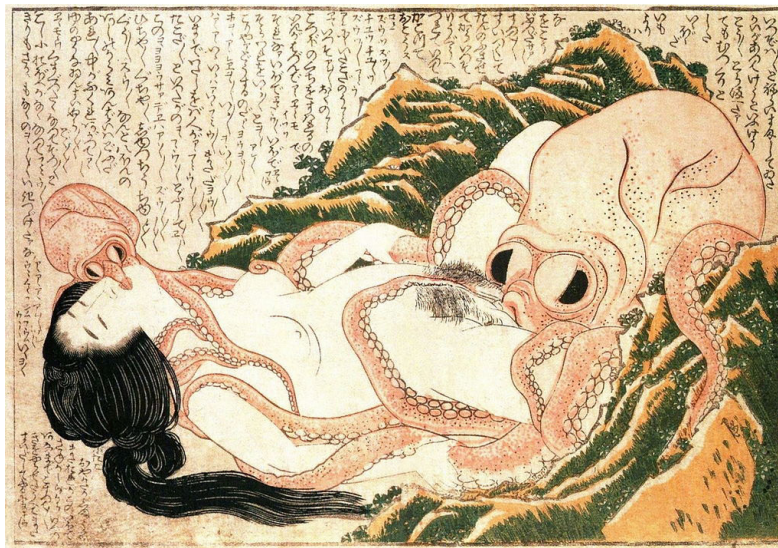
considered one of the series' best works. The Thirty-six Views has been described as the artist's "indisputable colour-print masterpiece".

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- **The Dream of the Fisherman's Wife**

The Dream of the Fisherman's Wife also known as Girl Diver and Octopi, Diver and Two Octopi, etc., is a woodblock-printed design by the Japanese artist Hokusai. It is included in *Kinoe no Komatsu*, a three-volume book of shunga erotica first published in 1814, and has become Hokusai's most famous shunga design. Playing with themes popular in Japanese art, it depicts a young ama diver entwined sexually with a pair of octopuses.



2.11 SOME FAMOUS WOOD CUT PRINTMAKERS

- **Aubrey Beardsley**

Aubrey Vincent Beardsley (21 August 1872 – 16 March 1898) was an English illustrator and author. His black ink drawings were influenced by Japanese woodcuts, and emphasized the grotesque, the decadent, and the erotic. He was a leading figure in the aesthetic movement which also included Oscar Wilde and James McNeill Whistler. Beardsley's contribution to the development of the Art Nouveau and poster styles was significant despite his early death from tuberculosis. He is one of the important Modern Style (British Art Nouveau style) figures.



Beardsley was the most controversial artist of the Art Nouveau era, renowned for his dark and perverse images and grotesque erotica, which were the main themes of his later work. His illustrations were in black and white against a white background. Some of his drawings, inspired by Japanese shunga artwork, featured enormous genitalia.

His most famous erotic illustrations concerned themes of history and mythology; these include his illustrations for a privately printed edition of Aristophanes' *Lysistrata* and his drawings for Oscar Wilde's play *Salome*, which eventually premiered in Paris in 1896. Other major illustration projects included an 1896 edition of *The Rape of the Lock* by Alexander Pope.

He also produced extensive illustrations for books and magazines and worked for magazines such as *The Studio* and *The Savoy*, of which he was a co-founder. As a co-founder of *The Savoy*, Beardsley was able to pursue his writing as well as illustration, and a number of his writings, including *Under the Hill* and "The Ballad of a Barber" appeared in the magazine.

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Wood Cut

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- **Giovanni Battista Palumba**

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Giovanni Battista Palumba, also known as the Master I.B. with a Bird, was an Italian printmaker active in the early 16th century, making both engravings and woodcuts; he is generally attributed with respectively 14 and 11 of these. He appears to have come from northern Italy, but later worked in Rome. He specialized in subjects from classical mythology, as well as the inevitable religious subjects. Despite his relatively small output, he was a sophisticated artist, whose style shows a number of influences and changes, reflecting awareness of the currents in artistic style at the start of the High Renaissance. The signed prints are usually dated to around 1500–1511. His earlier name comes from the monogram with which most of his prints are signed, the initials IB followed by a small image of a pigeon-like bird. The Italian word palumbo means 'pigeon', and in Latin the initial for Giovanni is I, for Iohannes. He is not to be confused with the Master I.B., a German printmaker active in Nuremberg c. 1523–1530. He is also attributed with various woodcuts for book illustrations from both before and after the 1500s, though all of these are rejected by some, and he is generally accepted as the author of a drawing in the British Museum related to his print of Leda and the Swan, with their Children.

His Work

Wood Cut

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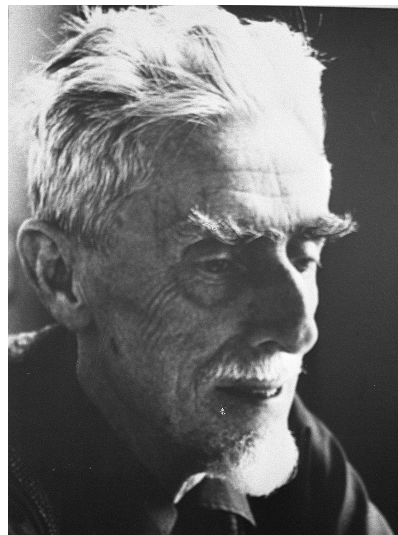
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- **M. C. Escher**

Maurits Cornelis Escher (Dutch pronunciation: 17 June 1898 – 27 March 1972) was a Dutch graphic artist who made mathematically inspired woodcuts, lithographs, and mezzotints. Despite wide popular interest, Escher was for long somewhat neglected in the art world, even in his native Netherlands. He was 70 before a retrospective exhibition was held. In the late twentieth century, he became more widely appreciated, and in the twenty-first century he has been celebrated in exhibitions across the world.

His work features mathematical objects and operations including impossible objects, explorations of infinity, reflection, symmetry, perspective, truncated and stellated polyhedra, hyperbolic geometry, and tessellations. Although Escher believed he had no mathematical ability, he interacted with the mathematicians George Pólya, Roger Penrose, Harold Coxeter and crystallographer Friedrich Haag, and conducted his own research into tessellation.



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Early in his career, he drew inspiration from nature, making studies of insects, landscapes, and plants such as lichens, all of which he used as details in his artworks. He traveled in Italy and Spain, sketching buildings, townscapes, architecture and the tilings of the Alhambra and the Mezquita of Cordoba, and became steadily more interested in their mathematical structure.

Escher's art became well known among scientists and mathematicians, and in popular culture, especially after it was featured by Martin Gardner in his April 1966 Mathematical Games column in *Scientific American*. Apart from being used in a variety of technical papers, his work has appeared on the covers of many books and albums.

He was one of the major inspirations of Douglas Hofstadter's Pulitzer Prize-winning 1979 book *Gödel, Escher, Bach*. Maurits Cornelis Escher (Dutch pronunciation: 17 June 1898 – 27 March 1972) was a Dutch graphic artist who made mathematically inspired woodcuts, lithographs, and mezzotints. Despite wide popular interest, Escher was for long somewhat neglected in the art world, even in his native Netherlands. He was 70 before a retrospective exhibition was held.

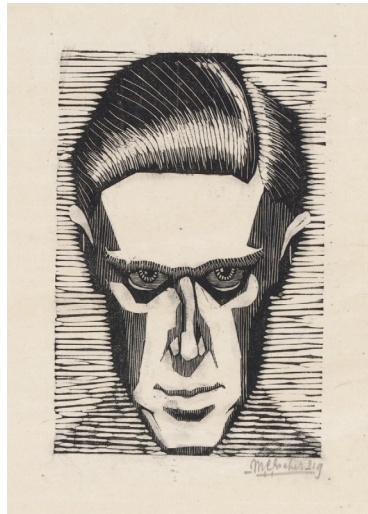
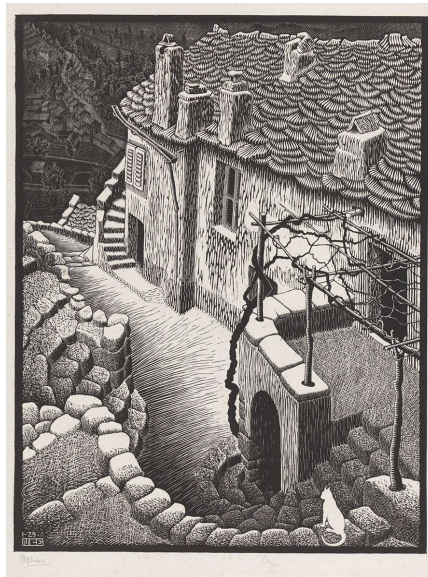
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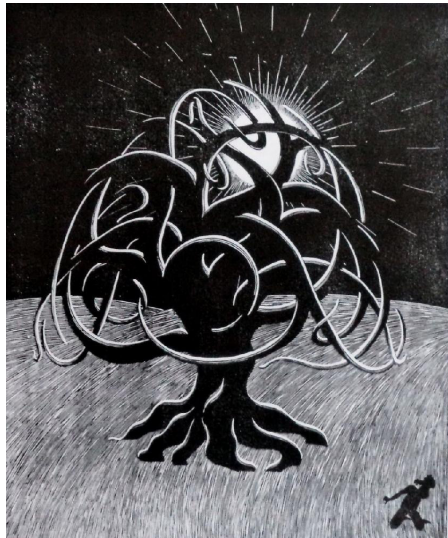
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- **Torsten Billman**

Torsten Edvard Billman (6 May 1909 – 6 April 1989) was a Swedish artist who worked as a printmaker, illustrator, and buon fresco painter. He counts as one of the 20th century's premier wood-engravers.

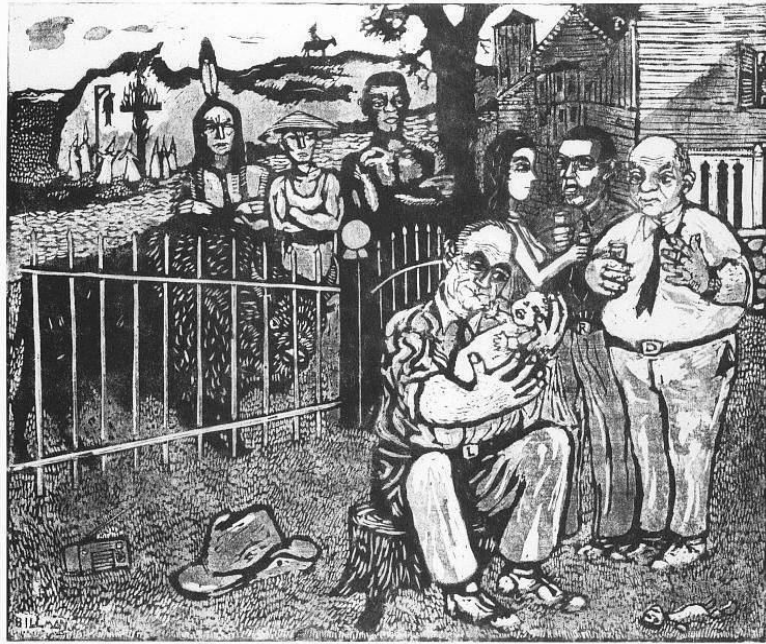


The poet Gunnar Ekelöf wrote about Torsten Billman: "To those, who with the word art visualise large, magnificent, 'striking' canvases Torsten Billman doesn't have not much to offer. His art serves the simple, neglected, homeless of existence. It features the fellows from the Nippon and other ships, marked by the hard life in ports as well as on board. His art shows the interiors of East End bars, where you get acquainted with the dark side of life. His art however isn't any 'social' art of the arrogant, placarding character there was so much of especially during the 1920s and 30s. It's social, not in attitude or trend, but with objectivity and revealing sharpness in the human portrayal that sometimes seems almost brutal - repulsive, but sadly true. Yet it's, however always carried by compassion. Never by sentimentality. This involves a simple statement of: 'Such is man'. But from

the ravaged features, and the gout-ridden limbs stiff from work there's still a notion emanating of how man should look like and could look like."

His Work

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- **Félix Edouard Vallotton**

Félix Edouard Vallotton (December 28, 1865 – December 29, 1925) was a Swiss and French painter and printmaker associated with the group of artists known as Les Nabis. He was an important figure in the development of the modern woodcut. He painted portraits, landscapes, nudes, still lifes,

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His earliest paintings were influenced by Holbein and Ingres. He developed a simpler style during his association with Les Nabis during the 1890s, and produced woodcuts which brought him international recognition. Characterized by broad masses of black and white with minimal detail, they include street scenes, bathers, portraits, and a series of ten interiors titled *Intimités* (Intimacies) that portray charged domestic encounters between men and women. He produced few prints after 1901, and concentrated instead on painting. His later paintings include highly finished portraits and nudes, and landscapes painted from memory.

He was also active as a writer. He published art criticism during the 1890s, and his novel *La Vie meurtrière* (The Murderous Life) was published posthumously.

His Work

Wood Cut

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Some other Artists

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- Irving Amen
- Mary Azarian
- Hans Baldung
- Leonard Baskin
- Gustave Baumann
- Carroll Thayer Berry
- Emma Bormann
- Erich Buchholz
- Hans Burgkmair
- Domenico Campagnola
- Ugo da Carpi
- Billy Childish
- Salvador Dalí
- Gustave Doré
- Albrecht Dürer
- James Flora
- Antonio Frasconi
- Robert Gibbings
- Vincent van Gogh
- Urs Graf
- Suzuki Harunobu
- Hiroshige
- Damien Hirst
- Jacques Hnizdovsky
- Hokusai
- Tom Huck
- Stephen Huneck
- Alfred Garth Jones
- Hussein el gebaly
- Ernst Ludwig Kirchner
- Gaga Kovenchuk
- Käthe Kollwitz
- J.J. Lankes
- Frans Masereel
- Hishikawa Moronobu
- Edvard Munch
- Emil Nolde
- Jacob Pins
- J. G. Posada
- Endi E. Poskovic
- Hannah Tompkins
- Henriette Tirman
- Clément Serveau
- Paul Signac
- Eric Slater
- Marcelo Soares
- Utamaro
- Karel Vik
- Leopold Wächtler
- Sylvia Solochek Walters
- Susan Dorothea White