ART OF PRINTMAKING AS A SCIENCE AND COMMERCE

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"Print has always been something of an amalgam of art, craft and science of creativity, skill and technology." (Robinson 6)

ABSTRACT

Many forms of printmaking involve drawing or painting on to a plate to produce a matrix and then producing prints from that matrix by mechanical processes. One might be skeptical about the artistic significance of such prints, on the basis that only the process of drawing or painting the matrix enables printmakers to exercise intentional control over the features of the resultant prints. This might lead one to think that such forms of printmaking lack artistic significance independent of drawing and painting. I examine whether or not such skepticism is warranted and argue that it is not. Nevertheless, I identify limitations on the independent artistic significance of another form of printmaking, namely that which involves producing prints from multiple matrices

Keywords: Print making, Art of Print, Lithography, Print Forms, Techniques, Graphic Art

Printmaking is a form of art used to create designs. The designs are first made on special material, including blocks of linoleum or wood, and then they are pressed onto another material, usually being paper. The design can then be multiplied through the same pressing process as many times as necessary. This is one of the many reasons why printmaking is important. Being able to reproduce a piece of art helps preserve the artwork. Also, photo recreations can never be as precise as the original artwork, which makes printmaking crucial in the sharing of artwork.

One style of printmaking is known as *relief printmaking*. Originating from Egypt, it is a process in which ink is put on the front of a printmaking material, giving those spots color once printed. The spots that are not occupied by ink stay colorless. Through this process, a block of material can be directly placed onto a piece of paper to produce artwork.

Printmaking was first created in early AD, notably in China. The man credited for its creation is HishikawaMoronobu. He would usually display his pieces of art to common people on the street, and most of these pieces showed off the traditions of the time. It then spread and began to be used by many.

Printmaking was revolutionary from the moment it was invented. It was originally used to display cultures of religious people, which spread these customs and ideas across the world. Printmaking also made it easy to spread this artwork without fear of losing it or damaging it, as it could be copied many times.

Printmaking was also revolutionary because it helped workers like goldsmiths document the work they had done. Printmaking could be copied onto the surface of book covers, which made these books more interesting to the eye.

This print originally caught my eye because of the woman in the front. Because her body takes up most of the frame, it is easy to see her and what she is doing. This automatically drew me to this pictures. The patterns of lines seen on her dress are also very pleasing to the eye. The lines are all heading to the same direction, which gives the viewer a calm view of the image. If the lines were all over the place with no common pattern, it would interrupt the eye and make it harder to look at. However, there are problems with the art. There is more than just the woman in the design, and a lot is going on behind her. Because she is so prominent in the frame, the viewer's eyes may miss the people in the back as well as even the beautiful background.

Overall, printmaking is a very interesting art style. It revolutionized art as a whole, and helped culture and religion spread across the world. This style also makes it easier to reproduce art, and is still used widely in many places today.

Printmaking is a fascinating and engaging activity, rich with possibilities for making images and processes for expressing conceptual models. It sits uncomfortably between the mass media world of commercial and mechanical reproduction and the esoteric fields of fine art. After centuries of tradition as the medium for disseminating published information, the technological advances in high volume print production and commercial publishing has left it as an essential creative vehicle in much the same way as the advent of photography caused the medium of painting to re-evaluate its meaning and purpose.

One could draw a similar parallel with the practise of Photography, a medium that evolved from the spheres of both science and art, whereby the invention of digital photography has caused a re-evaluation of the essential qualities of the film-based techniques and handmade print. Nearly all commercial photography, whose target is reproduction as printed or screen image, is now made digitally for ease of transmission, translation, speed and economy. This alternative route from camera to output has highlighted the beautiful and unique qualities of the handmade photographic print, further confirming its position as an artistic medium.

For six centuries the techniques of engraving, etching, woodcut and lithography were the methods of commercial illustration. The development of mechanised automatic printing presses at the end of the nineteenth century left the handmade printing techniques with the artists and highlighted how beautiful, complex, fascinating and precious those techniques are. Artists continued using the traditional methods for creating images, a practise that would become known as 'printmaking', to differentiate it from commercial printing.

As technology constantly moves on and machinery becomes outdated, printmakers are able to get hold of obsolete machinery and expand the possibilities for image making, particularly the ability to incorporate photographic imagery. The accelerated pace of change in the printing industry over the last two decades and the digital revolution, has opened up enormous possibilities for printmaking. Although the final product of printmaking practice is usually a two-dimensional image, the making of intaglio or relief prints is almost a sculptural process and the techniques of etching and engraving did originally evolve from the silversmiths' guilds and the armourers'workshops.Different*Types of Printmaking* are popularly known as Woodcut , Linocut , Collagraph , Engraving , Etching , Aquatint , Monotype , Lithography and Screen Print

Printmaking-as a distinctive art

Printmaking is generally treated as a distinctive art form, as different from both painting and drawing as

painting and drawing are from one another. There are artists who devote themselves entirely to printmaking, and connoisseurs and collectors who have a special interest in prints, as distinct from paintings or drawings. Nevertheless, one might be skeptical about the artistic significance of printmaking. The apparent grounds for such skepticism derive from two facts about the processes by which many prints are produced. First, the techniques involved in producing the matrices from which many prints are made may seem insufficiently dissimilar from ordinary drawing or painting techniques to be of independent artistic interest. These matrices, one might think, are simply drawings (or paintings) done on unusual surfaces. Second, the process by which prints are produced from these matrices might be considered too mechanical to contribute anything of artistic interest to the resultant prints. Thus, one might think that any artistic interest the resultant prints have is due entirely to the drawings or paintings from which they are produced. This conclusion seems to gain support from thefact that, instead of producing their own prints, many artists hand their matrices over to master printmakers who then produce prints from them.

Commercial artistic significance of printmaking

The thought that printmaking lacks artistic potential because it involves the mechanical production of prints from drawings or paintings poses a challenge specifically to those forms of printmaking whereby prints are mechanically produced from a single matrix which is made by drawing or painting onto a surface. A wide variety of prints are made in this way, including etchings, engravings, and many lithographs, aquatints, mezzotints, woodcuts and linoprints. To the extent that the process of producing the marked matrices from which prints of these kinds are made is drawing- or paintinglike, one might be skeptical about their artistic significance. Etching matrices are produced by drawing with an etching needle on a plate covered with a wax or acrylic ground. Once this drawing process is complete, the plate is then dipped in an acid bath, which eats away the plate where it is exposed through the ground. The remaining ground is then removed, leaving a metal plate on which the original drawing can be seen and from which prints can then be produced by inking the plate and transferring the image onto paper. Producing the matrices from which engravings are printed also involves a drawing-like process, but whereas only ordinary drawing skills are required for the drawing process involved in etching, engraving requires special metalwork skills that are generally difficult to learn. Nevertheless, engraving can be thought of as involving drawing skills, albeit skills for drawing in an unusual medium, just as drawing with pastels requires different skills from drawing in pencil. Lithography too involves drawing onto a lithography stone or plate with a greasy substance. Woodcuts and linoprints often involve drawing an image on a matrix, although production of this matrix also requires the additional skill of cutting the wood or lino block after the outline has been drawn. Let us call forms of printmaking such as the above, which involve the mechanical production of a print from a drawn surface, drawingdependent forms of printmaking. Likewise, let us call those of the above forms of printmaking that involve the production of a print from a painted surface painting-dependent forms of printmaking. Aquatint and mezzotint are arguably paintingdependent forms of printmaking. Is there good reason for doubting the artistic significance of drawing- or painting-dependent prints?

Multimatrix printmaking processes

I have so far discussed only prints that are produced from drawn matrices by a single printing process, and overlooked a large category of prints, namely those that are produced either by multiple printings from a single matrix, or from multiple matrices. These include colored woodcuts or linoprints, which are often produced by applying separate inkings of a matrix for each color, starting with the lightest, and cutting away sections of the matrix between each inking so that the color last printed will be visible in certain

sections of the completed print, and will not subsequently be overprinted. Because the process of successively cutting away sections of the matrix between inkings affords a means of intentionally controlling the features of the resultant prints different from any provided by drawing, and because these techniques enable printmakers to control both the formal and the representational features of the resultant prints, such forms of printmaking are art forms independent of drawing. Chromolithographs and screenprints, however, differ in interesting ways. They are produced from multiple matrices. Both often use a different matrix for each color in the resultant print. In order to produce a colored lithograph or screenprint from a series of monochrome matrices, one must ensure that, when each color is successively printed to form the final image, the different colors match up in order to produce an image with the features one intends it to have. This is usually done by starting with a drawing or painting with the features sought, and producing individual matrices for each color by copying from the painting or drawing the shape of the regions of a given color. Lithographers traditionally produced chromolithographs in this manner, painstakingly copying paintings to create lithographic plates from which proofs were produced, on the basis of which the plates were then corrected until the proofs looked as much as possible like the paintings by reference to which they were made. It is, of course, possible to make each monochrome matrix without reference to a pre-existingpainting or drawing. However, without an independent reference point, it would be very difficult for printmakers to gauge what effect those matrices would have on the features of the screenprint or lithograph they are used to produce. This difficulty increases dramatically with the complexity of the design and the number of colors used. The effect of any one matrix on the resultant print's formal and representational features depends on the features of the other matrices used in producing that print. For example, altering the shape of the matrix used to produce the yellow regions of a screenprint will not ensure that similarly shaped regions on the print are represented as yellow unless the matrices used to produce regions of other colors are altered correspondingly so that those colors do not overlap the yellow regions on the resultant prints. Alterations to one matrix thus often require corresponding alterations to other matrices in order to achieve their intended effects. Without producing a painting or drawing in order to work out what these required alterations are, and by reference to which they can be made, changes to a matrix are likely to have unanticipated effects on the features of the resulting print. The challenge to the independent artistic significance of drawing- and painting-dependent prints arose because the production of the matrix from which they were produced involved drawing- or painting-like processes, and because the processes by which such prints were produced from their matrices were often mechanical. Here, the challenge is somewhat different. The matrices from which chromolithographs and multicolored screenprints are produced are not made by drawing- or painting-like processes, and the method by which prints are produced from these matrices are not mechanical, because printmakers' choices of ink color and order of printing are sensitive to the representational and formal features of the matrices. Rather, the challenge arises because, while printmakers have independent intentional control over the shape of individual matrices and over ink color and printing sequence, they must refer to a painting or drawing in order to know the effects of their choices on the representational and formal features of the resultant prints. To the extent that this is the case, printmakers lack intentional control over the representational and formal features of the prints that is independent of the intentional control exercised in the production of the painting or drawing to which they refer. While printmakers may sometimes be able correctly to anticipate the effects of alterations to individual matrices on the features of the resultant prints without referring to a painting or drawing, and thus to exercise intentional control over those features independent of painting or drawing, this is likely to be possible only in cases that involve a relatively small number of colors (and therefore of matrices). It is not a contingent fact about printmaking practice that producing a chromolithograph or a screenprint with

many colors involves reference to a painting or drawing. Rather, it is a result of genuine limitations on printmakers' ability intentionally to control the features of such prints. Consequently, there are inevitable limitations on the independent artistic significance of chromolithography and multicolored screenprinting.

Printmaking as a Science

"Science is the natural backbone to all printmaking, whether it be done through chemistry or physically. Science is key to the understanding of 'how' things work, whereas the art is the element which serves our hearts."

Printmaking is the process of making artworks by printing, normally on paper. Printmaking covers only the process of creating prints that have an element of originality, rather than just being a photographic reproduction of a painting.

The process is capable of producing multiples, which are called original prints. Prints are not considered "copies". This is because each print varies to an extent due to variables intrinsic to the printmaking process, and also because the imagery of a print is not simply a reproduction of pre-existing work, but rather is a unique image designed from the start to exist only as a print.

Prints are created by transferring ink from a matrix or through a prepared screen to a sheet of paper or other material. Common types of matrices include metal plates, usually copper or zinc, or polymer plates for engraving or etching; stone, aluminium, 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.

Short Story of Printmaking in India

Contemporary Printmaking came to India when missionaries in Goa brought two presses in 1556, about a hundred years after Guttenberg's Bible was first printed. At this time, printmaking was used merely as a device to duplicate and reproduce. There is, however, evidence that the use of the concept of mass duplication dates even further back in India, to the time of the Indus Valley Civilization. For instance, grants of land were originally recorded by engraving the information on copper plates and etchings on different surfaces like wood, bone, ivory and shells have been documented as an important craft of that time. Nevertheless, printmaking as a media for artistic expression, as it is recognized today, emerged in India less than eighty years ago.

The book, Compendio Spiritual da Vide Christaa (Spiritual Compendium of Christian Life) by Gaspar De Leo was printed in Goa in 1561. This book has been recorded as the earliest surviving printed compilation in India. A few years later, in 1568, the first illustrated cover was printed in Goa for the book Constituciones do Arcebispadod'Goa (Constitution of Archdiocese Goa). The illustration, an image of a traditional doorway or entrance, was done using the relief technique of woodblock. Thirteen such books were printed in Goa between 1556 and 1588.

The process of intaglio printing was introduced in India by the Danish missionary, Bartholomew Ziegenbalg. He published a book titled The Evangelists and the Acts of The Apostles, which was printed in Tranqueber (a district in Tamil Nadu, which was then a colony of Denmark). The opening page of this book had an etching printed in a shade of brown. This became one of the first recorded instances of colour printing in India. Another book of Ziegenbalg's, GramaticaDamulica, displays the earliest example of plate engraving. A Gujarati businessman at Mumbai imported a press from England in 1674-75 In 1767, the British painter Tilly Kettle traveled to Madras.Several other artists followed soon after, and

between 1767 and 1820 about sixty amateur artists from other countries visited India. A number of these artists worked and eventually settled in Calcutta, then the capital of British India. Two prominent artists from this time were William Daniell and Thomas Daniell. In 1786 the Daniells published the album, Twelve Views of Calcutta, containing twelve original etchings of William's drawings of the city. All the etchings were printed in monochrome and individually stained in colour ink. This was the first time anyone had explored the possibility of single sheet printing on a large scale in India. Printmaking reached Bengal via East India Company by early 18th Century; use of metal type casting printed Bengali grammar book . First volume of 'Asiatick Researchers' printed by East India Company Press with engravings from Indian Artists in 1789

The earliest printed illustration (a woodblock print) can be found in the book entitled BalbodhaMuktavali, printed in Tanjore in 1806. However, the first example of an illustration printed by an Indian artist was part of the Bengali book, OnoodahMongal (a compilation of tales of Biddha and Soonder). The book was published by Ganga Kishore Bhattacheryee and printed at the Ferris and Company press, Calcutta, in 1816. There are two engraved illustrations in this book, which are accompanied by the inscription 'Engraved by Ramachand Roy'. Woodcut became popular for rending illustrations by 1820 Ram chand Roy was probably the first Indian engraver; native engravers evolved an indigenous style of preparing blocks

After studying publications of intaglio prints in Calcutta, it is evident that intaglio print presses were well established in the city by 1780s. However, the first lithographic single sheet print was printed there only in 1822 by a French artist, De Savignac. Savignac re-created, as a lithograph, a portrait of Hastings originally painted by George Chinnery. The first examples of lithographic illustrations were printed for a book, at the Government Lithographic press in Kolkata in 1824. As the demand for printed pictures for calendars, books and other publications grew in the 1870s, and as single sheet display prints (fine art prints) gained popularity, several art studios and printmaking presses flourished all over India.

Bat-tala, a name derived from a giant Banyan tree in the Shova Bazaar and Chitpur areas of Kolkata, and presently the name of a police station in the city, was the hub of Indian printmaking activities in the 19th century. The printing and publication industry that developed in the vicinity of the banyan was also known as Bat-tala, and maintained its reputation as one of the country's most important publication centers until the end of the 19th century.During their time spent in India, the British were keen to introduce their education system and encourage the talent of craft and design-oriented artists.

This in turn provided them with a means to fulfill the demand for Indian crafts in the foreign market they supplied.

The art school in Madras was founded by Dr. Alexander Hunter in 1850. Other schools that were established during the same period by the British included the School of Industrial Arts in Calcutta, in 1854; the Sir J.J. School of Arts in Bombay, in 1866; the Jeypore School of Industrial Art in Jaipur, in 1866; and the Mayo School of Art in Lahore, in 1875. Single sheet display prints by 1860 became popular and Bat-tala district in Bengal printed them in large numbers; Bishwanath Dev setup the first printing press in Calcutta By 1870, printing spread to Alwar and Punjab with prints of Sikh spiritual leaders, temples, Sikh battles, etc Arrival of lithography helped flourish printing in Calcutta; lithographic press established in Calcutta in 1825 Behar Amateur Lithorgraphic press in Patna in 1828Nawab Nasiruddin Haider of Oudh brought Archer to open the first Litho press and a book was madeChromo lithography or colour lithography arrived in India in 1860; flooded the market with garish colourprintsColour lithographs and large theatre posters printed in Litho press in 1880. Kalighat paintings were oleographed in Germany; establishment of art colleges in 1850 in Madras. School of Industrial Art, Calcutta in August 1854. JJ School of Art in

Mumbai in March 1857.

'The birth of Shakuntala', the first print in 1894, from Raja Ravi Varma's press.Raja Ravi Varma was the first artist in India who used printmaking, not as an artistic medium in itself, but as a means for his art to reach the masses. To achieve his purpose, he set up his own lithographic press towards the end of the 19th century, known as the Ravi Varma press in Ghatkopar, Bombay. Here he copied several of his religious and secular paintings and printed them as glossy oleographs.Daniell brothers published engravings and etchings on 'Views of Calcutta' in early 19th Century; local artists added various details, reinforced etched lines with pen and introduced borders with titles inscribed in Bengali.

Printmaking graduated into an autonomous art form in the 20th century. Prominent Bengal School followers worked in etching and woodcut, using the same theme as their paintings

Until 1940s, printmaking was practiced only by the Bengal school followers Kanwal Krishna etchings in mid 1950s liberated printmaking from landscape and figure compositions.

In the 1960s, printmaking was picked up at Fine Arts Faculty in MS University, Baroda

By the end of 1960s, Baroda Fine Arts produced fine etchers like Laxma Gaud and DervakDakoji. By the 1970s, printmaking became well-known and even painters like MF Husain, Akbar Padamsee, Ram Kumar and Tyeb Mehta did some lithographs. In the early 1990s, the Lalit Kala Academy set up many printmaking studios in Delhi, Chennai, Lucknow, Bhuvneshwar, Jaipur and Bharat Bhavan at Bhopal (Courtesy: Mohile Parikh Center)

The practice of printmaking as a fine art medium gained immense popularity with the establishment of Kala Bhavan founded by the Tagores in 1919. An earlier organization, also established by the Tagores, was the Bichitra Club - where new styles of painting and printmaking were explored. The three Tagore brothers, Abanindranath, Gagendranath and Samarendranath (nephews of Rabindranath Tagore), transformed the veranda of their Jorasanko residence into a meeting ground for the club and frequently hosted art salons there. Of the three brothers who spearheaded the Bichitra Club, artist Gagendranath Tagore took a special interest in lithography, and set up his own lithographic press in 1917. He later published an album of his prints.

Another prominent member of the Bichitra Club was artist Mukul Chandra Dey, who went to America in 1916 to learn the technique of etching from James Blinding Slone. He travelled again, in 1920, to England where he studied etching and engraving under Murohead Bone before returning in 1926. Dey was the first Indian artist who went abroad to learn graphic art.

Nandalal Bose was another artist closely associated with the Bichitra Club. He left Calcutta to take charge of Kala Bhavan, which was newly established at that time. Initially, only a few artists demonstrated and taught the various processes of printmaking at Kala Bhavan. However, with time, more and more artists grew familiar with printmaking as an art form and pursued it frequently. RamendranathChakravorty, Binode Behari Mukherjee, RamkinkerBaij, ManindraBhusan Gupta and Biswarup Bose are some of the Indian artists who generated and sustained the great interest in printmaking during the 1930s and 40s. They experimented freely with its various techniques and created several intaglio and relief prints. This was the turning point for printmaking in India, as artists no longer associated the techniques with their reproductive value, but instead, concentrated on using them to make fine art.

Kanwal Krishna is another important Indian printmaker who deserves a mention here. Krishna initially received his training in painting from the Government College of Art in Calcutta. In 1951, he went to Europe to further his education. While in Paris, he learnt the newly developed printing technique of multi-coloured intaglio, under the guidance of renowned printmaker William Hayter. When he came

back to India in 1955, Krishna set up his own printing press where he practiced the processes of multicoloured intaglio and collagraphy. Krishna's prints were vivid in colour and had highly textured surfaces, qualities that made his work tremendously popular amongst his contemporaries.

Somnath Hore is another artist who contributed greatly to the development of printmaking in India. During his time as a student at the Government College of Art in Calcutta, Hore printed just a few wood engravings. After his graduation, however, the artist continued to research and experiment with various processes in the field of practical printmaking, mastering many of them including relief, multi-coloured intaglio and lithography.

K.G. Subramanyan is an extraordinary artist who effortlessly incorporated several printmaking processes and materials into his already diverse oeuvre. A large range of lithographic prints make up the portfolio he produced during his time at Santiniketan. Besides lithography, Subramanyan is also fluent in serigraphy and single sheet display prints. He has also printed illustrations for several children's books, which were published during his stint as a teacher at the M.S. University in Baroda.

Another artist who has made an outstanding contribution to Indian printmaking is K. Laxma Goud. Originally from Hyderabad, Goud spent his student days at the M.S. University in Baroda, studying under masters like K.G. Subramanyan. He excelled in printmaking and went on to play an important role in the evolution of the field, especially in etching and aquatints. Other prominent printmakers of period immediately following Indian independence include Sanat Kar, Lalu Prasad Shaw and Amitava Banerjee.

The 1960s and 70s brought to the fore printmakers like Jyoti Bhatt, who also received his training in Baroda. Jyoti Bhatt went on to study at the Pratt Graphic Centre in New York, where he mastered the various techniques of intaglio printing. On his return in 1966, he created a studio for himself in Baroda and dedicated himself entirely to printmaking.

In 1990, the Indian Printmakers Guild was established. Over the years, it has been successful in building awareness about the medium and creating appreciation for it. The members of the group include Ananda Moy Banerji, DattatrayaApte, Jayant Gajera, K.R. Subbanna, Bula Bhattacharya, Jayant Gajera, Kavita Nayar, Kanchan Chander, Moti Zharotia, Sushanta Guha, Sukhvinder Singh, Subba Ghosh, and Shukla Sawant. They are all devoted printmakers, and apart from being practicing artists, they run several programs and workshops for aspiring printmakers.

Chhaap, literally meaning stamp or impression, is a printmaking workshop in Baroda established on a cooperative basis in 1999. Chhaap is promoted by the artists and printmakers Gulammohammed Sheikh, Vijay Bagodi and Kavita Shah. The organization aspires to promote printmaking and continually offers new work opportunities to artists, enabling them to investigate and experiment with the different techniques. The infrastructure of Chhaap is well equipped for all mediums of printmaking and is often visited by many senior and international artists. The facilities are also open to art students and other printmaking enthusiasts.

Other such printmaking collectives and spaces include the Garhi and Lalit Kala studios in New Delhi; the Rashtriya Lalit Kala Studio in Lucknow; Bharat Bhavan in Bhopal; the Print Studio and Academy of Fine Arts in Mumbai; and the Kanoria Centre for Arts in Ahmedabad, among several others.

In recent years, with the advent of computer graphics, different software programs, scanners and printers, the notion of printmaking has changed dramatically. The classic hands-on approaches have now been replaced by entirely automated ones. Prints of images created or manipulated on a computer can now be created at the push of a button. This technology has led to some interesting variations on traditional prints, as can be seen in the works of artists like Bharti Kher, Jyoti Bhatt, Nataraj Sharma,

Ravi Kashi, Gulammohammed Sheikh and Shukla Sawant amongst many others. Whether such works can be classified as fine art prints, however, is a never-ending debate.

21st Century: Expansion of printmaking

By the end of 20th century Contemporary Indian art prints came up as an independent medium of artistic expression. Bengal artist SomenathHore is acknowledged as the father of modern Indian prints. He worked and experimented widely with the medium after receiving preliminary training from Krishna Reddy; another reputed artist, who involved himself in the intaglio process while working in the studio of master print-maker William Hayter. Today India's famous painters are also eminently creative printmakers who are responsible for the propagation of printmaking into various techniques mediums and technologies, and the growing importance and demand for prints in the market. These include artists like: Amitava Banerjee, Lalu Prasad Shaw, K.G. Subramanyam, K. Laxma Gaud, Paramjit Singh, Sanat Kar, Jyoti Bhatt, Swapan Kr. Das, Anupam Sud, Shukla Sen Poddar, Anita Chakravarty, etc. Sanat Kar pioneered wood intaglio, cardboard intaglio and sun mica engravings and Swapan Das in the multiplicity of color gradations that can be introduced into a single linocut. The development and spread of Printmaking increased during late 20th century with the setting up of the graphic workshop at Garhi – Lalit Kala Studio, New Delhi; Lalit Kala Akademi Studios at Lucknow, Calcutta, Madras; Bharat Bhawan Bhopal; Printstudio and Academy of Fine Arts, Mumbai; Kanoria Centre for Arts, Ahmedabad; Chaap – Baroda Printmaking Studio; Jawahar Kala Kendra, Jaipur; etc. (Shah) These workshops made an effort to create and promote wider appreciation of original prints and different printmaking techniques. They all have well established infrastructure and facilities for various techniques, providing opportunities to artists and students to work in different printmaking media and are frequently visited by many senior and international artists. Rajasthan also witnesses a major change in the creative activities and artists started taking interest in Graphic art. The decade of 1970s can be assumed as the beginning of artistic printing in Rajasthan and printmaking emerged as a new medium with immense possibilities for experimentation and artists started accepting it as a new mode of expression. However, this development of artistic printing was quite late as compared to other parts of the country. But within few years of time, various printmaking materials, machines and other accessories were imported and studios and workshops were set-up in the state at BanasthaliVidhyapeeth, Udaipur university, Rajasthan School of Arts, Jawahar Kala Kendra, Takhman 28, etc. to promote printmaking in Rajasthan. Now prints enjoy an elevated status, over those of the 19th century. Now they are being drawn, cut and in most cases printed by the individual artist in very limited editions. These artists created prints are regarded as belonging to the Fine Art's family, each being viewed nearly equal in importance as a painting or sculpture for artistic expression.

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