

Partha Dutta is currently pursuing doctoral research at (HSS) Indian Institute of Technology Kanpur, under the supervision of Dr. Ritwij Bhowmik. He has completed BVA from University of Burdwan and MFA from SN School, University of Hyderabad. He awarded a Gold medal in printmaking from University of Hyderabad. He is deeply engaged with printmaking and its innovative execution. He is very keen to explore bridging new technology in the printmaking process.

He has worked as a designer in an advertising agency in a private organisation and also served as a lecturer in a media college named ICAT Design and Media College, Hyderabad. He has participated in several exhibitions and workshops such as Academy of Fine arts, Kolkata; Kala Academy, Goa; Srishti art gallery, Hyderabad; Lalitkala National exhibition, Delhi; Emami chisel, Kolkata; Hyderabad literary festival and many others. He also attended 'Vice-Versa' international woodcut workshop at Goa; lithography and Tribal workshop, university of Hyderabad; zero waste Khadi workshop, IIT Kanpur. Apart from this, he has in *ICIDR* Social Sciences Conferences-2021: participated International Paris Conference on Social Sciences – VI, AVID; XIV International Conference AVID-ARC, Male 2020.

AN ACADEMIC LITERATURE REVIEW OF THE NEW PRINTMAKING METHODS IN THE CONTEXT OF CONTEMPORARY INDIAN ART

Partha Dutta

Abstract:

In the field of visual arts practices, printmaking for centuries reveres as a significant position as a medium of expression. Moreover, it is considered part of the modern cultural milieu. Any change in the culture would affect one's artistic expression. Printmaking has reflected this phenomenon more than any other form of art. Paul Revere's work Boston Massacre, Kathe Kollwitz's revolutionary print, and Chittoprasad's Bengal famine prints successfully depicted the vile effect of protest, war, and poverty on society.

In the contemporary academic and professional scenario, the whole notion of printmaking carries a distinct meaning. Specifically, in the Indian context, the academic practice of printmaking is based on traditional techniques. Students produce extraordinary artworks through manual printmaking methods such as woodcut, etching, lithography. However, these age-old techniques are not popularly applicable in the twentieth-century professional/commercial platform. Furthermore, due to the limitation of new techniques, most Indian students and professional printmakers are often unable to get the chance to vividly explore the possibilities of this medium. On the other hand, at the end of the twentieth-century invention of the modern computer made a massive change in the industrial print world.

Now, printing is not limited to the two-dimensional form. It also shifted into a three-dimensional output. However, all those techniques have been used in the commercial field till recently. Therefore, it is high time to innovate and introduce new technology and conceive a user-friendly attitude in printmaking practice. Yet, the ambiguity among art practitioners on using computer-aided technology is prevalent.

Within its small fold, this study aspires to - 1) review the current printmaking practice at Indian art colleges and individual studios, and 2) study the possibilities of new printmaking methods (Hybrid print) in India. In addition, it will also attempt to discuss the traditional and technological imperatives that could encourage the practitioners to diffuse more comprehensive art activity and industry involvement.

Keywords: *Printmaking, Industrial practice, Digital technology*

1. Introduction

Print media has been inextricably interwoven with our lives. It is the source of information, communication media, and a way of expression. The impact of printmaking on the daily lives of all people is immense; morning newspapers, books, outside advertisements, and many others. P.H. Muir once famously quoted, "There are few inventions that have more radically affected the outlook and lives of every one of us and almost every invention since owes a great deal to printing" (Muir, 1945). In the world of art, printing was not considered an art medium until the seventeenth century. Before that, print media was only considered a commercial reproduction tool rather than creating original art. At present, in the field of visual arts, printmaking holds a

significant position as a medium of expression. Printmaking refers to artwork by various printing methods like woodcut, intaglio, and lithography, even with modern printing technology, such as inject printing, 3D printing, and laser printing.

In the current academic and professional scenario concept of printmaking carries different meanings. Specifically, in the Indian context, the academic practice of printmaking is based on traditional techniques such as woodcut, linocut, lithography, and many others. On the other hand, a drastic technological change in society has come up in this twenty-first century digital era, and the invention of the computer made a massive change in the print world. "Passport Size photograph within two minutes" is a famous slogan of a printing shop at this time. Therefore, the expansion of computer training, learning, practice, and evaluation of a work is the current state of the contemporary practice of printmaking. This research explores the possibilities of coalescence between the traditional method and industry procedure to investigate technology-aided pedagogy for tertiary art education. In this case, the study needs careful observation of certain points related to artistic practice: To review the current status of printmaking practice at art colleges and individual studios, find out the cases of new printmaking methods (Hybrid print) in Indian art scenarios. Furthermore, to look towards the new possibilities in the digital printmaking medium in the Indian market.

2. Attempt of the study

The demand for printing elements has been increasing day by day. Human beings are trying to modify the existed printing press or invent new technologies. Johann Gutenberg, a blacksmith, goldsmith, printmaker, and publisher of Strasbourg, Germany,

developed the first known printing press in the fifteenth century. In the modern digitalised era, print is more affordable and fast. Computer made a drastic change in the commercial print market. However, Indian academic printmaking practices stick to old traditional methods that do not follow the commercial printing sector. However, It could be beneficial for students to learn simultaneously new technology and traditional techniques together. Students will get more paths to explore their work vividly, and technological knowledge helps build more job opportunities. In education, starting a new curriculum requires a pedagogy. So, this research attempt to investigate technologyaided pedagogy concerning tertiary art education and the professional practice of printmaking. This study aims to establish a good understanding of modern technology and traditional methods among the students and need a modified studio that could facilitate aesthetic and industry-oriented professional practice.

3. The Literature reviews are as follows

The traditional print process is long, time taking, cost-effective, laborious. On the other hand, computer-based digital print is easy, less time-consuming, and many processes are less cost-effective. In the modern era, traditional print value is decreasing in a commercial area. Today, colleges have removed printmaking because of financial restraints and other extraneous factors, especially lithography. Digital printmaking can establish the importance of printmaking Studios. Graphic Designer and printmaker Paul Hamilton explained in his one paper how American artist Myra Chan had redefined the term 'print'- 'The artist creates the master image that is either in a metal plate or computer' (Hamilton, 2003). Renowned designer, illustrator,

author John Foster describes various printing techniques by using various methods and materials. He shows that low-tech to modern technology enables the printing development process. Stencils and woodblock printing are used extensively to create print, sometimes in conjunction(Foster, 2014). A San commercial artist John Pilsworth developed a multicolour method for screen printing, referred to as the Selectasine method, which proved wildly popular in the commercial sign market. Robin M Snyder Describes new age printing technology, 3D printing. He distinctively describes the past, present, future of printing technology development and cost reduction. 3D printing machines are two types: additive devices that build up layer upon layer of material to create a 3D object and subtractive devices that cut the material layer by layer from the block so that the artefact produced remains (Snyder, 2013). A professor of computer science, Erik Brunvand describes Micro-Scale Printmaking on Silicon. According to him,_Printmaking is an artistic activity that includes many different mediums, such as lithography, relief, intaglio and screen printing. Silicon photolithography print is the modern technique used to produce micro-scale chips for the technical device. He also says that as an artist, some innumerable concepts and ideas can provide a fruitful outcome in this technology, with the collaboration of computer science-based technical knowledge, artistic skill and thought (Brunvand & Denyer, 2011).

Many other artists allied traditional, modern printmaking techniques and information technology as hybrid practices to establish their idea. Paul Hamilton is an educator and graphic designer, nicely collaborated linocut and digital print methods and computer software. A laser print image was transferred on a Lino sheet with applied cellulose thinners and cut traditionally. Rather

than traditionally applying ink, the block was scanned into the computer and applied software effect to traditional print. Finally, he took digital print on Fabiano paper. It was distinguished as a traditional print by a majority (Hamilton, 2003). As technology develops, traditional print is being challenged. Whereas Johanna Love works on photographic print with graphite pencil drawing. She used landscape and architectural subjects to create unstable and changing material surfaces as well As visually complex images (Love, 2015). Christiane Baumgartner used images from different sources such as still photographs or video footage, and after computer manipulation, an image can be traced down to large blocks of wood, and finally, he took to print on Japanese manually (Coldwell, 2015). Jeremy Gardiner is paper contemporary British landscape painter who also shows interest in computer-based technology. He has spent several years on the Jurassic coast to explore ancient history through his art practice, using a combined techniques like drawing, printmaking, painting, and even 3D printing technology. ("Virtual Landscapes Made Tangible," 2012).

History validates that righteous image plays a significant role to create a revolution in society and printmaking does that more in the art field because it cheap mass production. Many printmakers consider it a moral responsibility to support the cause for human rights through their prints. Those prints help unit people and create a revolution for justice. Paul Revere represented the American struggle for freedom through his print. His print of the Boston Massacre remains one of the most enduring symbols of the American Revolution (Tomolillo, 2018). Francisco Goya, one of the famous Spanish artists, was a respected employee of the Spanish monarchy even though he illustrated the horrors of war with his series of prints that were published in eighteen sixty-three

(Feldman, 1992). Garman artist Kathe Kollwitz utilised her bold crayon-drawn lithographs to illustrate people's suffering and harsh conditions in the time of World War I. Now, her works became a revered universal symbol of compassion for the abused working class (Prelinger, 1994).

In India, print is not considered a preferred medium for artistic expression till the early twentieth century. Maximum artists followed the oil on canvas method for their creative artwork in the However, many Indian artists later post-independence era. worked with various mediums, and their experimental printmaking works popularised them. Renowned printmaker Haren Das worked on multi-block woodcut print like Ukiyo-e print. However, Instead of water-based ink, he used oil-based printing ink. According to the director of Delhi art gallery, Ashish Anand stated that honourable artist Haren das refining both his skills and his suited expression in singular quest. This quality has made him one of the most revered names in the history of printmaking in India (Senguta & Karode, 2008). Somnath Hore's paper pulp techniques are most convenient to detect his subject matter. His selection of materials metaphorically helps to generate meaningful conclusion in his artwork ("Somnath Hore," n.d.). Professor Ajit Seal's planography is an amalgamation traditional and industrial print techniques that show a new artistic print method. Eminent artists Anupam Sud and K.Laxma Goud experimented on etching and aquatint processes and worked in their unique way. In some instant, both worked on similar subject matters like a man and woman relation and sexuality. However, concept, line, form, texture are unique; K. Laxma Goud works on the semi-abstract form, and Anupam Sud works in a more realistic way. The researcher observed that the above-mentioned artists belong to the academic field, and some are also continuing the

same. Their artistic style and invented technique practising by pupils, young artists or influenced them.

4. Methodology

This study combined literature reviews and interviews for a more comprehensive understanding of the different facts of this research, such as the process of printmaking, application of new media and point of success. Literature review incorporates a variety of data sources, for example, empirical and research articles. The purpose of the literature review is to provide a comprehensive understanding of the topic of interest (Wallin, Nokelainen, & Mikkonen, 2019). The researcher has interviewed gallery curators, practising artists, professors to figure out the initial label of printmaking practice in the Indian context. The advantage of interviewing different people working in various domains of print technology and printmaking as an art practice provides insight into economic, experimental and developing academic structural perspectives.

Literature review entails problem identification, way of possibilities, to formulate the initial research framework and questionaries. In contrast, interviews are helping to understand the contemporary practice, the necessity of this research, requirements for developing studio, additional problems and updating the research framework (Adams, 2015). The researcher also visits the commercial printing industry to observe the different printing procedures and find the possibilities of using modern technology into the academic scenario.

5. The traditional printmaking and commercial printing press

Traditional manual printmaking technique holds a significant part of Indian art collegiate system, and very few art practitioners practise the same after completing a college education. However, many art practitioners continue their practice with other mediums such as painting and installation art. The researcher produced some artwork with woodcut and etching techniques, and that hands-on learning experience is the best way to understand the advantage and disadvantages of those traditional techniques. Computer-generated prints may lose the physical attachments with the artist and sense of physical surface. The bodily attachment with printing process that might develop hands-on learning and expand the scope of immediate experiment. In contrast, manual techniques are laborious and time-consuming. The researcher visited practising artists' studios to understand their working procedures, thinking about contemporary practice and the future of printmaking.



Image 1 - Relief print





Image 2 and 3 - Intaglio print

In the commercial printing sector, ideologies are different compared to artistic practice. It is a general instinct that commercial printmakers ponder profit rather than aesthetic quality. Nevertheless, it is fascinating to know the pre-press to post-press process, operating the printing press, ink management, handle the whole procedure. The commercial printing process acquired some systematic, structured and error solution process which is methodical and constructive. It also provides systematic procedure to make appropriateness in the end product. The technical process might boost up the artistic printing process and enrich them aesthetically. This knowledge expands the researcher's view on the advancement of Indian artistic printmaking studios.





Image 4 - Flex printing

Image 5 - Offset printing

6. The attempt of a new method of printmaking

The researcher is trying to bring out some significant points of the new method of printmaking from the literature review section. However, those techniques are not visible in Indian printmaking practice. Those ideas are below:

- Micro-Scale Printmaking on Silicon.
- Collaboration of lino or woodcut with digital print.
- Works on print, drawing, and photographic languages.

• Computer manipulated still photographs or video footage can be traced down to large woodblocks.

• A combined technique like drawing, printmaking, painting even 3D printing technology.

7. The traditional and technological imperatives

In fine arts, artistic print value is often the lowest because people perceive it as a product rather than an artistic work. In this context, a renowned Indian printmaker says, "In our society, art means beautiful painting on canvas, Sculpture or watercolour on paper." Printmaking workshops for non-artistic field people can help make awareness about artistic print value among mass people. Simultaneously it requires more initiativeness for printmaking exhibitions. On the other hand, printmaking has lost its popularity among art practitioners because the old traditional printmaking technique is laborious and time-consuming. In contrast, Modern technology-oriented prints in the commercial area have vibration, market, sales, value, demand, and faster. However, artistic areas have not used those techniques very well. It requires crate awareness among art practitioners about technological possibilities in artistic printmaking practice.

The educational sector faces many restraining factors to continue the conventional techniques while introducing new. Today, financial constraints and other extraneous factors of art colleges debase facilities and art practices. Students lack their interest in working with conventional methods. Therefore, introducing the computer-based print technique and proper guidance can reinstate the curiosity of printmaking among the students. Even interdisciplinary work is beneficial for printmaking students,

especially design or applied art students, to learn the software. However, controlling the whole student and providing equipment is difficult. Technological knowledge development is beneficial for the student in different ways. Artwork demands a perfect and suitable medium or mixed medium in fine arts because each medium has its own expressive and tactile quality. So, knowing conventional and industrial printing techniques, various kinds of paper, ink, and other material understanding are helping to select the appropriate medium. Students and art practitioners will get the chance to experiment or explore their thought vividly. Nowadays, many industries have good demand for digitally knowledgeable people who has aesthetically sound to develop creative output. However, In fine arts, very few students have the quality to accumulate the various process for print making. Including new technology in academia could increase job opportunities in various sectors. The traditional and technological imperatives could encourage practitioners to diffuse a wider sphere of art activity and industry involvement.

8. Conclusion

Throughout this study, the researcher attempted to find a parallel line to connect new media technology into academic and artistic printmaking practices. In India, most printmaking practices follow an old school of methods. Artists may not be very confident regarding industry-academic synergy. Although the literature shows that many worldwide renowned artists are experimenting with industrial technology to develop their print, it has succeeded at a certain point. Therefore, industry-academia technological synergy has the potentiality to develop hybrid practice in the Indian contemporary art practice. In this study, the literature survey and inference of expert review indicate that both traditional and modern print technology are equally essential for

printmaking education. This study established an understanding and importance of modern technology-based printmaking studio. Simonteniously, it required to develop a methodology, evaluation criteria, and pointed out the significance of learning computeraided technology in association with contemporary printmaking practice.

References

Adams, W. C. (2015). Conducting Semi-Structured Interviews. In K. N. J. Wholey, H.Hatry (Ed.), Handbook of Practical Program Evaluation (Fourth, pp. 492-505).

https://doi.org/10.1002/9781119171386.ch19

Brunvand, E., & Denyer, A. (2011). Micro-Scale Printmaking on Silicon. Leonardo, 44(5), 392-400.

https://doi.org/10.1162/LEON_a_00238

Coldwell, P. (2015). Hybrid practices within printmaking. Journal of Visual Art Practice, 14(3), 175–178. https://doi.org/10.1080/14702029.2015.1094241

Feldman, E. B. (1992). Varieties of Visual experience. (Fourth Edi; J. Greenspun, ed.). New York: PRENTICE HALL, INC., and HARRY N. ABRAMS. INC.

Foster, J. (2014). Paper and Ink Workshop: Printmaking Techniques Using a Variety of Methods and Materials. United States of America: Rockport Publishers Inc.

Hamilton, P. (2003). Research in progress: the printmaking studio of the future in higher education? Art, Design & Communication in Higher Education, 2(1), 67–81. https://doi.org/10.1386/adch.2.1.67/0

Love, J. (2015). Somewhere between printmaking, photography and drawing: viewing contradictions within the printed image.

Journal of Visual Art Practice, 14(3), 214–223. https://doi.org/10.1080/14702029.2015.1094239

Muir, P. H. (1945). Book-collecting as a hobby, in a series of letters to Everyman. United Kingdom: Gramol Publications.

Prelinger, E. (1994). Kathe Kollwitz. In J. Sweeney (Ed.), National Gallery Of Art ,Yale University Press. Retrieved from https://www.nga.gov/content/dam/ngaweb/research/publications/pdfs/kathe-kollwitz.pdf

Senguta, P. ., & Karode, R. (2008). Haren Das The end of toil. In Karode Roobina (Ed.), Delhi Art Gallery Pvt.Ltd. New Delhi.

Snyder, R. M. (2013). An overview of the past, present, and future of 3D printing technology with an emphasis on the present. ASCUE Proceedings, 93-99.

Somnath Hore. (n.d.). Gallery 7. Retrieved from https://www.gallery7.com/Somnath_Hore.pdf

Tomolillo, B. (2018). Print as Righteous Image. The International Journal of Arts Theory and History, 13(3), 45-52. https://doi.org/10.18848/2326-9952/CGP/v13i03/45-52

Virtual Landscapes Made Tangible. (2012). ITNOW, 54(3), 58-59. https://doi.org/10.1093/itnow/bws087

Wallin, A., Nokelainen, P., & Mikkonen, S. (2019). How experienced professionals develop their expertise in work-based higher education: a literature review. Higher Education, 77(2), 359–378. https://doi.org/10.1007/s10734-018-0279-5