THE PERSPECTIVE OF METAL PLATE LITHOGRAPHY

Dr. Prashant Phirangi 1 🖾 🗓

¹ Assistant Professor, Department of Graphic Art (Printmaking), Kala Bhavana Visva Bharati, Central University, Santiniketan, West Bengal, India





Received 29 June 2023 Accepted 08 October 2023 Published 13 October 2023

Corresponding Author

Dr. Prashant Phirangi, phirangi.007@gmail.com

DOI

10.29121/shodhkosh.v4.i2CDSDAD.2 023.588

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2023 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License.

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

Printmaking is a technical medium that embraces many physical engagements in stages and processes. Various mediums like lithography, etching, wood-cut, serigraphy, and materials such as chemicals, inks, tools, accessories, and printing presses are involved. Printmakers were interested and found scope to work with the medium from their perspective, and gradually printmaking became one of the effective practices. Reintervention metal Plate Lithography needs a basic concept, with standard plate-making techniques and principles of printmaking to develop. This method requires a practical demonstration and introduction to the new generation to understand and implement it. Yet, for those who are relatively new to plate-lithography techniques. The themes emphasize experimental projects and research on the same side. As a technique, metal plate lithography offers a wide range of possibilities in contemporary practice. It establishes the methodology depends upon the concept/idea applied to it. It marks a considerable/acceptable medium for reinventing individual pasts and anticipating the future. However, understanding the technique has potential and would impact the making. The ultimate goal to re-introduce the medium as an alternative medium of practice could be to develop practical guidance for any student interested in the medium. The experiments should be considered a challenge to produce and a new approach to the medium in a contemporary printmaking manner.

Keywords: Alternative, Challenge, Perspective, Printmaking, Re-Intervention

1. INTRODUCTION

1.1. THE HISTORICAL CONTEXTUAL

Since "Litho" (etymologically "Litho" the word has derived from the Greek word "Lithos," meaning stone, and "Graph" is derived from the Greek word "Graphic," meaning writing, drawing, etc.) implies stone and plate refer to the metal plate surface. The 'Planographic Printing' process can be done with stone or metal plates. Stone (Lime-stone) Surfaces are extremely popular and commonly used to create an impression. Previously in the early 19th century Plate Litho was used for newspaper printing or advertisement printing Later phase it was replaced with digital print.

But the same process has been adopted for artistic approach by printmakers because of the possibilities of the edition making just like Stone-lithography. The acceptance is perhaps because, historically, metal plate lithography precedes the printing process from metal surfaces. Freelancers and other stream practitioners gradually accepted the medium/process that has gained importance.

Hand-done art print folios are a common phenomenon in today's art practice. The beginning of such activities, especially in Planography print, despite its somewhat transferred status in the contemporary art practice of India. Printmaking continues vividly, keeping its legacy alive. That was what exactly felt by the printmakers; and artists. They had enormous interaction and expositions of technical skill and conceptual range where many artists were hailing across the country. Das (1994)

Later In the 70's, institutions were introduced by Graphic Art techniques in the teaching programme—earlier particular interest in wood engraving, wood-cut, and Lithography. Apart from the art colleges, graphic art was already in vogue in India as illustrations for printed books, journals, and magazines from wood-cuts, wood engravings, metal plate engravings, and Lithographs. The Indian art scene brought a new approach to the visual element and an immense amount of physical engagement focused on the medium. Relating to this, continuous printmaking experiments have taken place in different institutes and studios. Later in the late '90s, metal plate lithography was incorporated to find and practice an alternative to Lithography. This genre creates a distinct expression by appropriating elements, motifs, metaphors, symbols, and ideas from the visual tradition. Interacting and learning the technical aspects of the 'Plate-Litho' has been practiced and demonstrated. Experimented in different media of Metal Plate Lithography print such as using transferring the images, digital print, etc., the final output is almost replaced or alternative to the Stone-Lithography. The basic idea of expression has been promoted, and specific exploration of the medium has been conceptually accepted widely. Das (1994), Phirangi (2018)

Apart from this specific objective, The Plate-Lithography technique addresses the newer challenges, like the availability of materials, and understanding the technique/method applied to it. And resolving acceptance of possibilities in print. Especially replacing the Lithography press with an intaglio press. Replace all possible visual perspectives drawn images on the stone-litho with Metal plate lithography.

2. LITERATURE REVIEW

The genre of printmaking and its processes includes a wide aspect of intense experimentation, research, and observations. The analytical skills/concepts about the process, rely on empirical evidence to support the processes. The comprehensive interpretation also incorporates based on the concept, it relies on experience and interventions, in which the viewer is generally involved. Basically, a philosophical argument has been raised and several possible clarifications have been investigated to pursue the core notion behind this hypothetical connotation. Besides historical references. it demands philosophical arguments and fundamentals, where I have to rely mostly on secondary data - that refers to the collected journals, books, articles, and web links that analyze the research topic either directly or from the heterogenic perspectives. These include the historical chronology, the development of interactive art within a versatile medium selection, and definitions of several mass-used terms, like - form, shape, space, time, and other components, while major importance is given to the analysis of various art practice of different artists who directly or indirectly satisfy this hypothesis.

1) Antreasian et al. (1970) 'The Tamarind Book of Lithography: Art & Techniques' New York: Harry N Abrams, Inc., Pub.

While referring to secondary data the textual resources play a dominant role in understanding the foundation of Lithography and the process of re-intervention of metal Plate Lithography. The future of lithography into a tradition. This book reveals lithography in many new dimensions, clarifying variables that plagued printmakers and prints of a previous generation. Had an influence, but its implicit attitudes are perhaps more important than its data. An active expression of a desire for creative freedom and excellence.

2) Kashi (2012), ಕನ್ನೆಲೆ [Kannele], akshara Prakashana Pub.

I personally found the above-mentioned book quite useful because it was published in my mother tongue -*Kannada* Language has a very powerful impact on the formation of the article/paper. in philosophical aspects and in demonstrating the concept of interaction in the spectrum of different mediums of visual arts. Has developed creative fields and moreover, the arguments that were evoked - serve tremendous possibilities to work within the field of fine arts. The Culmination of these primary and secondary data, along with their elaborate manifestation will create a more elaborate review of the literature section in the article. The paper/article will move forward based on these original sources where the primary data will provide the raw materials and the secondary data will provide the context and backbone of the whole structure.

3) Phirangi (2018) 'New ways of Indian printmaking: Documentation and critical analysis, [PhD-Visva Bharati University], http://hdl.handle.net/10603/216439

Deals with the beginnings and the development of printmaking in different parts of India, It also deals with the development of printmaking with an attitude, giving priority to search, to exploring will be an attempt to point out the unique characteristics of printmaking to provide a base for further study.

The thesis documented that One of the greatest challenges of the 21st century is environmental sustainability. Documented several experiments to develop safer alternatives to traditional toxic printmaking processes. The motivations for the "non-toxic" printmaking. to create a healthier environment in which to make art, and to make less of a toxic impact on the environment.

The research documentation, mentions the establishment of new methods into practice across the institutions in India and artists are supportive of it. It also furnishes the importance of such printmaking practices that play a very major role in productive outcomes in the field of contemporary printmaking Art.

Iournals:

1) Coldwell (2015) 'Hybrid practices within printmaking' art journal, Journal of visual art practice, vol-14, (issue-3).

I have found the above-mentioned paper quite useful because of research on the Application of hybrid practices in printmaking. Deals with the Aspects of Traditional mediums as well as alternative mediums. The possibility of Printmaking Language in contemporary printmaking on the evolution of information has had an important impact on artists' creations. This paper explores a process that effectively incorporates the language of printmaking while looking at future trends in this field.

2) Das (1994) "The Early Indian Printmakers: An approach to Social science, Ethical and Technical Study", *The Lalit Kala Contemporary-39*, *Pub:Lalit kala Academy, New Delhi*, pg.no-4-7

This article provided information on the evolution of Indian printmaking history, achievements of printmaking in human society, and the inventions that affected the outlook of the daily life of the Indian public.

E-content:http://www.ravikashi.com/Work-Pdf/Art-Education-FIAE-Seminar-Kochi.pdf

The e-content has a survey on art education in India. Has the perspective of an outsider on the art institution. trying to discuss the skills and learning processes in different stages. Practical importance and implementation of art in educational institutions.

There are certain articles/books that have been quite useful in giving an intense view of alternative mediums of printmaking and Metal Plate lithography processes. The literature review for the research study finds the above-mentioned article/book quite useful in demonstrating the concept of metal plate Lithography processes in the context of new approaches and implementation. it provides numerous possibilities to work within the field of Planography processes.

The culmination of these primary and secondary data and their elaborate manifestation will create a more elaborate review of the literature section in the paper/article. The writing has moved forward based on these original sources where the primary data will provide the raw materials and the secondary data will provide the context and backbone of the whole structure.

3. THE MEDIUM: PRINTMAKING

Printmaking is a technical medium that embraces many physical engagements in stages and processes. Various mediums like lithography, etching, wood-cut, serigraphy, and materials such as chemicals, inks, tools, accessories, and printing presses are involved. Printmakers were interested and found scope to work with the medium from their perspective, and gradually printmaking became one of the effective practices. Since the early 19th century, the lithography process has had a visual impact on the viewer, it has a direct application of drawing on stone like handdone drawings on paper; for this reason, artists/printmakers wish to apply their ideas/concepts directly to stone rather than making zinc plate etching. The technique used to achieve stone Lithography is exceptionally different in approach to intaglio medium. Gradually the printmakers refined old processes and developed new ones, substituted up-to-date materials, and uncovered new supply sources because of widespread interest in these advances. Lithography would greatly benefit other artists and researchers for fine prints. However, in the early 20th century, printmakers began to revive many of these processes because Aluminium plates provide a practical alternative for the stone-Litho; metal plates are lightweight, easy to handle, and require minimum storage space. Metal plates are less expensive than stone, with the possibility of re-doing, reusing, and recycling old They added variations, and modifications, improvements based on contemporary visual aspects. Phirangi (2018)

An early technique plate-making has steadily developed and grown, gaining significant momentum in the last few years. Besides the traditional process, it has a rich resource for creative artistic work and has become popular among young printmakers, it has immense possibilities for mediums and materials known as 'alternative' and less toxic. Metal plates are nonporous and hold the image on the

grains of metal; unlike grains of stone, which hold the greasy substance of drawing material in the pores of stone, plate depends on an adsorbed thin coating of Arabic gum that adheres to the grain of metal to stabilize image as well. Medium Although materialistic and convenient compared to stone-litho, less toxic chemicals have been used in metal plate lithography. The P.S. Plate-litho (Photo-sensitive Plate) process offers a pre-coated photo-sensitive substance on the plate, exposing the photo/photographic images directly. The possible way of making color separation RGB/CMYK using computer-generated negatives will enable us to print colored photographic images. Hence, Metal plate lithography has the potential to be part of the modern photographic process with a wide range of possibilities for contemporary expression. These photo-generated techniques exploring the chemical and physical expanded the language of creative options and added rich layers to image making. Coldwell (2015), Phirangi (2018)

Re-intervention metal Plate Lithography needs a basic concept, with standard plate-making techniques and principles of printmaking to develop. This method requires a practical demonstration and introduction to the new generation to understand and implement it. Yet, for those who are relatively new to plate-lithography techniques. The themes emphasize experimental projects and research on the same side.

Fundamentals of Metal Plate Lithography based on the concept/idea which applied directly or indirectly, not critically or self-consciously, but as integrated into the printmaker's thinking.

Each practical output will address the main focus and alternative practices within the Planography medium.

Planography Process -Lithography and offset printing are two prominent examples; the medium has a Hydrophilic nature of gum and keeps the surface moist. When the printing ink is rolled with a roller, the drawn area, which retained traces of greasy ink attracts additional ink from the roller while the damped area sealed with gum repels ink from the roller. Then, the print is pulled through with a scraping motion.

4. PROLUSION: THE METAL PLATE LITHOGRAPHY

in 1891 Europe introduced Metal plate Lithography for commercial purposes. Later in the late 19th century revolution began in the printing industry, and the use of stone was replaced by aluminum plate. The Tamarind Institute developed dependable techniques for processing and printing from the aluminum plate. Artists started using the same as used by commercial methodology, materials, and methods to achieve their artwork on a metal plate. Using the aluminum plate, we can combine material and aesthetical aspects using limestone/stone Litho techniques. The technique itself a unique but individual. The aluminum plate can be reworked after the completion first by graining it. One which we can grain for direct drawing using the greasy substance, and the second one is the pre-coated plate. Antreasian et al. (1970)

Retracing the Methodology of Alternative Practices in recent experience within printmaking by the artists, other than being experienced and developed by own itself. The skill is practiced with ideas and pursues the most suitable expression. The medium should not be restricted to any specific medium of expression; instead, it can be achieved by a printmaker who always gets inspiration by searching for the best suitable medium for his/her expression of the idea or concept. As a common studio practice, it aims to facilitate the implementation of the print room and the

possibilities of the traditional way of practice with a new approach. The shared studio has gathered and been brought together by the artists using the equipment. In re-introducing the alternative method for stone lithography, in some areas, there are some misguides and, somewhere lack of understanding. The non-conventional approach, like photosensitive plates, was being treated exclusively for commercial purposes. However, the alternative techniques' main aspects differed from the previous ones. Kashi (2015)

In the Photosensitive metal plate lithography practice, Once something is digitally encrypted, it has an immateriality about it. It's not linked to the physical world regarding substance, materiality, size, texture, and dimensions. If we look at the relevance, technicality, and texture quality, it was often associated with the outcome of the machine. The print process's physical appearance has wholly engaged with the language of the printmaking medium, especially in terms of visual sensibilities and perspective. Shifting of image-making has a mark from one surface to another. It is about the anticipation an artist comes with this process. The transformation process has always produced a kind of impression with the expression. Some methods are easy to handle and sure to encourage further exploration; the proofs or prints might not reach the expectations of the printmaker but will give a practitioner pleasure. Coldwell (2015), Phirangi (2018)

Exploration of the new medium has significance and a role in each artistic expression. It discovers inherent qualities of alternative and new printmaking processes. For many, it is enriching one more language to the visual art practice. The documented procedures provide a foundation from which you can build your knowledge and skills relating to your creative urge in each method, yet at the same time, the adoption is merely a starting point.

New materials and methods constantly come into image-making, and procedures undergo refinement, Printmakers like *Ajit Seal, Nirmaledu Das, and Kashinath Salve* working on the same side. But that is the nature of what we call adaptation of upgrading. This process of making metal plate lithography connects well with research-based practice and the process of documentation in the specific field related to various disciplines and subject matters. For the same instead of random selection it has been subject-specific in terms of visual language (color, line, shape, texture, light, and space) or discipline-specific (like specific thinking, styles, skills, creative sources, and aesthetical approach,) for the documentation. One of the most problematic was the necessity for constant revision and understanding of the medium in visual perception. Several equally dependable procedures or materials would have developed, which require consideration and incorporation into the regular practice. Phirangi (2018)

5. OBJECTIVES OF THE MEDIUM

The medium proposes that metal plate Lithography is at its most significant in contemporary practice. The process argues this through examples /works of art/expressions in the fine art field, representing itself beyond the limitation. The involvement revolves around the practice particular medium that has been taken out for creative training in institutions and studios nationwide. The methodology entirely depends upon the concept/idea applied to it. Building upon thematic and artistic interventions to the process no doubt had an impact on creating new meanings for their creative urge. The arguments do not necessarily portray the relation between contemporary printmaking practice and the traditional way either. Furthermore, the practice of plate litho printmaking in studios shows the acceptance and experimentation of conventional processes with alternative

methods and involvements that influence postmodern concerns. Meanwhile, some of the printmakers continued to expand their expressions using both traditional methods as well as newly applied techniques. The possibilities of metal plate lithography whether printed on paper or other than paper unparalleled scale or simply produced by working in a such way that explains the definitions of the prints. The printmaking field shifted into a heterogeneous and hybrid realm within the printmaking periphery. Eventually, new methodologies have swiftly co-opted for printmaking with new methods and materials. Contemporary artists are attracted to printmaking because of its time-honored process and unique visual qualities. The collaborative engagements with the mediums in workshops and camps enrich the traditions of their artistic approach. Metal plate litho has the potential to be a part of mainstream practice printmaking; the development of a philosophical and aesthetical sense of medium in image-making can lead to incorporating the traditional practice into the contemporary approach. Coldwell (2015), Phirangi (2018)

6. TECHNICAL BACKGROUND

The formal innovations and conceptual ideas in printmaking gave the method a vital role and new meanings. As a technique, metal plate lithography offers a wide range of possibilities in contemporary practice. It establishes the methodology depends upon the concept/idea applied to it. It marks a considerable/acceptable medium for reinventing individual pasts and anticipating the future. The acceptance and opinion revolve around practicing the technique for creative training in institutions and studios nationwide.

7. EXECUTION: AS AN ALTERNATIVE

What we call 'alternative' other than regular traditional processes have become a rich resource for creative artistic plate making. Rigorous changes took place then by the introduction of the practice of metal plate lithography which pursued low-toxic and economical plate-making.

Metal-plate Lithography is impressive and will be in a position to establish unique visual aspects. The medium will make its role of importance as an expressive medium itself and provide a space where the artist can practice crossovers between implementations of ideas. The technique has the potential to achieve one layer after another is established, and therefore, the process remains in the possible position of handling methodology and techniques. retracing the process as an alternative to the stone Lithography practice where the printmaker begins with ideas rather than being guided. Apart from isolating the artist to personal studio practice, it has opened up new demands to be gathered, and brought together by the shared studio. Use of common equipment Community studio printmakers understands the new methods/ process from each other. The shared studio gave possibilities for the mutual exchange of ideas, debates, etc.

8. ACADEMIC INTERVENTION

Lithography was developed as a commercial process to print musical notes by Alois Senefelder in 1798. The Being one of the old and professional disciplines, and has engaged with limited sources of technology and old machines in the departments. Letterpress printing machines have been used for lithography and later for offset printing. Later phase commercially popular offset printing plate has

been practiced and incorporated in institutions for the artistic approach. 1971 Tamarind Institute USA, extended the experiment and started the practice of Metal plate lithography as a studio-based practicing medium as an alternative to stone Litho. It has established the principle of the printmaking process and its theory of discourse. Antreasian et al. (1970), Coldwell (2015)

It has various segments in the printmaking discipline. The ideas or concept has engaged with different types of execution. When we through back at the history of printmaking, it has a constant process of making prints.

The notion of printmaking has gone through several stages in India. Something like Murshidabad Botanical prints. It has various; avatars' in printmaking ideas, was linked with book-making ideas to book-art etc. If you look at the history of printmaking it seems that the constant thought, but we need to define what is Constance in art school in India particularly in metal plate Lithography, the present institution of schooling systems has printing machines either Letter press, or intaglio press in the institutions. If we consider art colleges/institutes like Visa-Bharati Santiniketan, M.S. University Baroda, and CAVA-Mysore have the facility and expanded stone lithography to plate litho. Similarly, institutions like Ken School and Chitrakala Parishath Bengaluru have been equipped with the immersion of animations and photo-generated images and have more intense darkroom facilities that are connected with the printmaking department. Different art schools have different facilities in printmaking is an evolution from traditional techniques to alternative methods as a second choice. In the present institution of the teaching system, we have printing machines but not the idea of a method of metal plate lithography. We need to adopt the philosophy of metal plate litho into a practicebased medium rather than a skilled laborious process. Academicians should sit together and debate the issue; otherwise, new methods will remain unexposed. Phirangi (2018)

9. CONCLUSION

The procedure of an alternative methodology is to discover the practicalities of adopting the medium. It is necessary for long-term possibilities to the alternative approach to the stone Lithography medium. The methods with limited equipment and processes to discuss and demonstrate. The procedure is referred to as sustainability to promote the method/process.

This process attempts to determine the possibility of developing an alternative to traditional lithography as a feasible method in academic institutions as well as studio practitioners. The process itself has a feeling of enough confidence in perception and ability to establish according to artistic perspective. It is important to understand the printmaking medium in the hands of professionals. The variety of results available to the printmakers has only been specified. The process is primarily limited to black and white; subsequently, multi-colored in the next phase has been found. the scope exploration of adequate space and the use of a limited source of materials have to be incorporated.

In a given time and space, clinical trials could gradually overcome the difficulties encountered in the process. Kashi (2012).

it can develop an innovative interpretation of alternative mediums of expression and will activate as a new platform of representational and artistic dialogue. Even the curriculum can adopt and generate multiple Seminars/ webinars and introduce the students to newer ideas from experts/printmakers. Institutes should regularly arrange visiting fellows/experts to conduct workshops on the Plate

Lithography process and introduce alternative methodologies. Traditional and contemporary practices to explore art pedagogy an active interface of digital and physical dialogue of process and practice concerning the changing lifestyle of modern times.

However, understanding the technique has potential and would impact the making. The ultimate goal to re-introduce the medium as an alternative medium of practice could be to develop practical guidance for any student interested in the medium. The experiments should be considered a challenge to produce and a new approach to the medium in a contemporary manner.

This will set an example to hold in our manner or treating the medium will engage in different perspectives. A straightforward conversation in the object or subject manner talks about new and pre-existing facts that can establish a new meaning or language to printmaking practice.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

Antreasian, G. Z., Antreasian, C., & Adams, C. (1970). The Tamarind Book of Lithography: Art & Techniques. New York: Harry N Abrams, Inc., Pub.

Coldwell, P. (2015). Hybrid Practices Within Printmaking. Journal of Visual Art Practice, 14(3). https://doi.org/10.1080/14702029.2015.1094241.

Das, N. (1994). The Early Indian Printmakers: An Approach to Social Science, Ethical and Technical Study. The Lalit Kala Contemporary-39. Pub:Lalit Kala Academy, New Delhi, 4-7.

Kashi, R. (2015, November 23). Exploring New Directions in Indian Art Education. Phirangi, P. (2018). 'New Ways of Indian Printmaking: Documentation and Critical Analysis. [PhD-Visva Bharati University].