

Indian Textile Dyeing and Printing Famous All Over the World

Dr. Gagan B Khanna

BND Govt. College, Chimanpura, Shahpura, Jaipur, Rajasthan, India

ABSTRACT: The art of dyeing and printing has been part of Indian culture for centuries. Earlier, colours were derived from plants and animals which were the only source of natural colour. Application of these colours was also used to give texture, increase the durability of the fabric and add an element of interest. Dyeing and printing are one of the most popular and unique forms of fabric colouring and decoration. Every state in India is known for its distinct dyeing and printing style. Though this form of art is passed through generations, many fashion design institutes have included this in their curriculum under the subject of textile design.

KEYWORDS: textile, dyeing, printing, Indian, fashion, famous, world, colours, state, generations

I. INTRODUCTION

Textile dyeing and printing is the process of applying color to fabric in definite patterns or designs. In properly printed fabrics the colour is bonded with the fibre, so as to resist washing and friction. Textile printing is related to dyeing but in dyeing properly the whole fabric is uniformly covered with one colour, whereas in printing one or more colours are applied to it in certain parts only, and in sharply defined patterns. In printing, wooden blocks, stencils, engraved plates, rollers, or silkscreens can be used to place colours on the fabric. Colourants used in printing contain dyes thickened to prevent the colour from spreading by capillary attraction beyond the limits of a pattern or design.¹

Different dyeing and printing techniques practised in India are:-

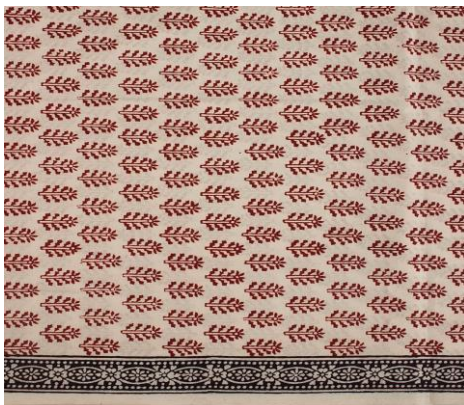
Kalamkari originates from the state of Andhra Pradesh. The most significant feature of this dyeing and printing technique is that craftsmen use only natural colours extracted from fruits and plants to dye the cloth. Earlier, stories and poems from Hindu mythology were presented on fabrics with paintings on them. In Kalamkari, the cloth is first stiffened and dried and then printing is carried out in different phases. Here, the use of wax helps to keep some areas free of colour while dyeing and the rest are done by hand. A bamboo stick is used for fine detailing. Ramayana and Mahabharata form the main sources of inspiration.²



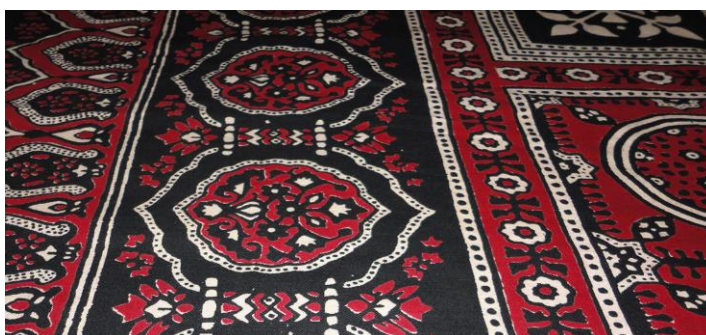
Bagh originated from the Bagh district of Madhya Pradesh. It is a technique of block printing with the use of natural colours. Also, the chemical properties of the Bagh River are used to get unique shades. The Khatri population who migrated from Sindh were the first to introduce this art of printing. The Bagh art of dyeing and printing takes its inspiration from popular monuments such as the Taj Mahal and from nature. Geometric designs in vibrant colours are



often seen in the main motif. Bagh is done on a variety of fabrics such as cotton, chiffon, silk, etc. Before the printing process, the starch from the fabric is removed by boiling and drying. Students from a fashion design course have better knowledge of this process as textile designing involves many practical sessions of dyeing and printing.³



Ajrak is a type of block printing from the ancient Mohenjo-Daro civilization. This art of block printing is applied on shawls using stamps. Wooden blocks engraved in geometric shapes and patterns are dipped in natural dyes and used in this process. In fashion design classes, students are also taught motif designing which is later carved on to wooden blocks for printing.⁴



Bandhani is a tie and dye technique that can be traced back to the Indus Valley Civilization. This art of dyeing originated in Gujarat. In this process, the fabric is tied into tiny knots and then dyed. Mostly the background colours chosen are bright such as green, red, pink, yellow, etc. Of late, many fashion design schools have started encouraging Bandhani technique as a way to revive the age old tradition of dyeing and printing.⁵



Batik is a very interesting tie and dye technique using bee wax. This technique first originated in Egypt and since then has been practiced in many countries. In this process, wax is applied on the motif and then it is soaked in a dye solution. The wax acts as a resistant and thus gives a unique texture.⁶



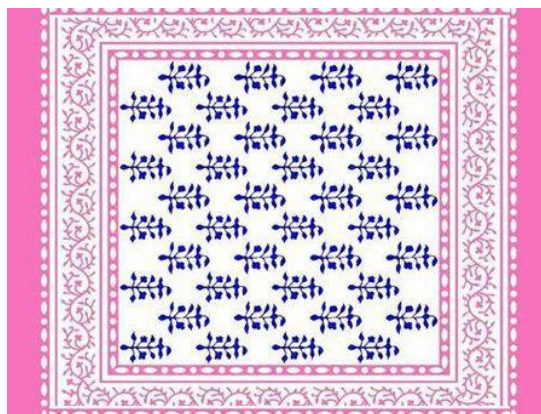
II. DISCUSSION

Dabu or daboo originates in Rajasthan and is a beautiful mud resist hand block printing technique. It survived the test of time with some difficulty and is a time-consuming printing technique involving many phases and a great amount of labour.

Background: Supposedly, dabu printing originated in China and eventually, Rajasthan became the most popular centre of it. The designs are similar to the “batik” style of printing, but the techniques used for the two are vastly different.⁷

Technique : A very complicated process, it involves phases of washing, hand printing, use of mud resist and drying.

Plants, flowers and different motifs are core components of this kind of block printing, and the technique is practised in various villages in Rajasthan.



Gold and silver dust - Dust of precious metals like gold and silver is used in this age-old technique to give textiles a feel of exquisite zardosi and the sparkle of gold. Over the ages, the technique has adopted the use of more affordable metals like mica and chamki.⁸

Background : Rajasthan specialises in this kind of block printing. What is notable about this technique is the use of already printed, dyed, and finished textiles as it only involves work on the surface without much permeability.

Technique : A roghan gum paste with castor oil is used. Two different blocks are used, and through perforations, the gum paste is squeezed in a pattern on the textile. Then the metal dust is sprinkled on top of this to add the necessary amount of shine and glitter. Small dots and dashes comprise most designs



Sanganeri, a kind of block printing that originated in Rajasthan, adorns home decor materials as well as apparel.⁹

Background: This handicraft developed over the ages and saw contributions when people from neighbouring states like Gujarat migrated due to wars.

Technique : A hand printing technique which involves laying out of the material on tables and then printing using blocks with intricate designs. The fabric is marked before, so that symmetry of design is maintained. Beautiful floral designs with buds, flowers, leaves, mangoes and even jhumkas sometimes are part of the detailed designs on the blocks.¹⁰



Leheriya is a simple dyeing technique popular in Rajasthan, it results in striped textiles in a huge variety of bright colours. Cotton or silk cloth is subjected to resist dyeing.¹¹

Background : In earlier times, five different colours were used, and natural dyes were the chosen form of colours. The technique is named after the pattern it forms, that is, waves, which is called Leheriya in Rajasthan.

Technique : The cloth is tied and folded in a manner that the colour is applied only in a particular pattern on the textile.



Bagru Being popular Jaipur in Rajasthan, the printing technique is laborious but produces exquisite results.

Background : Over 100 years old, this technique has been developed by families and handed down traditionally in Rajasthan.¹²

Technique : Washing, hard dyeing, drying and other parts form the core of the printing process. Blocks are placed from left to right and slammed hard on the fabric. The fabric is dried afterwards. They are then washed and boiled and finally rinsed to get the final product.



III. RESULTS AND CONCLUSIONS

Combinations of cold water-soluble carboxymethylated starch, guar gum and tamarind derivatives are most commonly used today in disperse screen printing on polyester.¹³ Alginates are used for cotton printing with reactive dyes, sodium polyacrylates for pigment printing, and in the case of vat dyes on cotton only carboxymethylated starch is used. Formerly, colours were always prepared for printing by boiling the thickening agent, the colouring matter and solvents, together, then cooling and adding various fixing agents. At the present time, however, concentrated solutions of the colouring matters and other adjuncts are often simply added to the cold thickenings,¹⁴ of which large quantities are kept in stock. Colours are reduced in shade by simply adding more stock (printing) paste. For example, a dark blue containing 4 oz. of methylene blue per gallon may readily be made into a pale shade by adding to it thirty times its bulk of starch paste or gum, as the case may be. The procedure is similar for other colours. Before printing it is essential to strain or sieve all colours in order to free them from lumps, fine sand, and other impurities, which would inevitably damage the highly polished surface of the engraved rollers and result in bad printing.¹⁵ Every scratch on the surface of a roller prints a fine line on the cloth, and too much care, therefore, cannot be taken to remove, as far as possible, all grit and other hard particles from every colour. Straining is usually done by squeezing the colour through filter cloths like artisanal fine cotton, silk or industrial woven



nylon. Fine sieves can also be employed for colours that are used hot or are very strongly alkaline or acid.¹⁶

All the block printing techniques and tie and dye prints that are practised in India boast of the rich culture and heritage of the country. Creativity, craftsmanship and a whole lot of effort go into keeping these printing techniques alive and trending around the globe. Different designs and techniques contribute to the popular saying of “unity in diversity”. The variety of different colours coupled with intricate designs is a rich source of culture that has been handed down and delicately preserved in the country. They deserve all the patronage and love that they can get.¹⁷

REFERENCES

1. Knecht & Cole 1911, p. 695.
2. ^ An Introduction to a History of Woodcut, Arthur M. Hind, p, Houghton Mifflin Co. 1935 (in USA), reprinted Dover Publications, 1963 ISBN 0-486-20952-0
3. ^ Knecht & Cole 1911, p. 694.
4. ^ Knecht & Cole 1911, pp. 694–695.
5. ^ Tozer & Levitt 1983.
6. ^ Knecht & Cole 1911, p. 698.
7. ^ Knecht & Cole 1911, p. 699.
8. ^ Knecht & Cole 1911, p. 696.
9. ^ Knecht & Cole 1911, p. 697.
10. ^ Knecht & Cole 1911, p. 707.
11. This article incorporates text from a publication now in the public domain: Knecht, Edmund; Cole, Alan Summerly (1911). "Textile-printing". In Chisholm, Hugh (ed.). *Encyclopædia Britannica*. Vol. 26 (11th ed.). Cambridge University Press. pp. 694–708. The article has a detailed description of the history and contemporaneous technologies of textile printing.
12. Collier, Ann M. (1970), *A Handbook of Textiles*, Pergamon Press, p. 258, ISBN 0-08-018057-4, 0 08 018056 6
13. Kadelph, Sara J. (2007), *Textiles* (10th ed.), Pearson/Prentice-Hall, ISBN 978-0-13-118769-6
14. Tozer, Jane; Levitt, Sarah (1983). *Fabric of Society: A Century of People and Their Clothes 1770-1870*. Carno: Laura Ashley Press. ISBN 0-9508913-0-4.
15. Floud, Peter (1960) *English Printed Textiles*. London: H. M. S. O. for Victoria & Albert Museum
16. Montgomery, Florence (1970) *Printed Textiles: English and American Cottons and Linens 1700-1800*. Winterthur, Del. Henry Francis DuPont Winterthur Museum
17. Turnbull, John G., ed. (1951) *A History of the Calico Printing Industry of Great Britain*. Altrincham: John Sherratt