



UNIT - 3

Printed Textiles

Objectives

- To introduce the technique of hand block printing for value-addition.
- To create awareness about the different printed textiles of India.
- To initiate differentiation between direct and resist style of printing.
- To understand the origin of technique and design with reference to block printed textiles.
- To learn about the evolution of block printing over a period of time.

Learning Outcomes

After completing the unit, the students shall be able to –

- Understand the finer nuances of block printed textiles.
- Classify the regional block printed textiles of India.
- Identify specific block printed textiles of India on the basis of technique, colours, motifs and layout.
- Identify the influencing factors for development and evolution of a specific block printed textile.

Unit overview

This unit will introduce the traditional block printing techniques of India. In this chapter, the Indian block prints are classified on the basis of the region where they are produced. Each style of printing is described in terms of region, motifs, colours and end use.



Chapter 4 : Printed Textiles

An early sample of block printed fabric from India was unearthed in Fostat in Egypt. Many similar fragments were found in South East Asia and other early civilizations. It was found that there was a flourishing trade of brightly printed fabrics from India. The British East India Company set foot first on the Coromandal coast and were fascinated by inexpensive, intricately hand printed brightly coloured fabrics. The popularity and subsequent demand of brightly coloured Kalamkari, better known as 'Chintz' in Europe, actually resulted in decline in the demand for machine printed fabrics, produced locally.

The traditional method of printing textiles was by using hand carved wooden blocks. The designs were printed using vegetable dyes to obtain bright terracotta red, indigo blue, turmeric yellow and deep green. The colouring was a tedious process using vegetable dyes. As vegetable dyes do not have affinity for fabric, the cotton fabric is firstly impregnated with metallic salts called mordants. These mordants help in bonding of dyes to the fabrics. The Indian printer's skills were admired the world over to create intricate patterns using indigenous knowledge of mixing and overlapping to achieve varied tones of colours.

Printing Equipment

Block printing requires equipment in terms of wooden blocks, printing tables, colour trays etc. The blocks are made out of good quality seasoned '*saagwan*'. Block carving is done mainly in Pethapur in Gujarat; Agra and Farrukhabad in Uttar Pradesh and Delhi. For making a print motif with three colours, four blocks are required; one for the outline and three coordinates for the rest of three colours. The outline block known as 'rekh' is printed first (Pic. 4.1). It is followed by printing of other filling blocks known as 'gad'. In case of mud resist printing, mud paste is applied on the fabric with blocks known as 'data'.

Wooden tables used for block printing are of two types. Tables are padded with layers of felt/ blanket material and covered with fine muslin, which absorbs extra dye. The muslin is changed as and when the fabric is soiled. Traditionally, tables were of low height to enable the printer to sit cross legged on the floor while printing. These tables were narrow width and hence the printer used to keep moving the fabric once the fabric in front of him was printed. At present similar tables are used by printers in some of the remote villages in Rajasthan. The most commonly used tables are the ones with normal height so that the printing is done while standing. The width of the table is approximately 55 inches, as the fabric is laid on the table in full width. The printer moves around the table to complete the printing on both the ends of open width fabric.



The printing trays are square wooden receptacle in which thick layers of absorbent felt material is spread. The printing paste is evenly spread over the felt material. These trays are put on wooden trolleys provided with wheels to facilitate easy movement of printer from one place to another.

Pigment is mixed with gum obtained from the trees such as *babool* or *Arabica*, in order to provide thick consistency to the printing paste.

Printing Process

Desizing: The fabric to be printed is first of all washed for desizing, to remove starch or any other impurity from it. This will ensure evenly printed fabrics.

Mordanting: In case of natural dyes, fabrics are mordanted with metal salts to ensure better absorption and colour fastness.

Stretching on tables: The fabric is then stretched on the table with the help of pins, which are inserted diagonally on the edges. This is to avoid the shifting of fabric when printing is taking place.

Preparation of Colour Tray: The wooden tray with felt fabric layers is placed on the table trolley. The printing paste with pigment of thick flowing consistency is poured over it to spread evenly (Pic. 4.2).

Printing: The block for outline 'rekha' is pressed on the colour saturated printing pad and then pressed on the fabric stretched on the table. The block is then carefully lifted to avoid any smudging or staining of fabric. The printing is similarly continued according to the layout. Equal amount of pressure is applied on each block to obtain consistency of colour. Once the first colour printing is finished, second colour is used with fill in blocks and subsequently all blocks are printed.

Dyeing: In case of natural dyes, printing is done with mordants and then taken for dyeing.

Washing: The fabrics are then washed thoroughly after completely drying in strong sunlight. It is spread for few hours in sun and sprinkled with water frequently to ensure colour fastness.





Pic. 4.1: Carved out wooden block



Pic. 4.2: Preparation of colour tray



Block Printed Textiles of Rajasthan

Rajasthan is known for its colourful block printed fabrics. The arid desert land devoid of colourful natural surroundings is compensated by the love and use of bright colours in apparel by both men and women and for their homes too.

Block printing is a style of printing which is labour intensive and versatile. The printer community has been using the same wooden carved out blocks for many generations and are still able to sustain the craft. Two villages known for two different styles of printing are Bagru and Sanganer near Jaipur. Both have similar motifs but the technique of production and the look is very different.

4.1 Bagru prints from Rajasthan

Region: Bagru is a small village in Rajasthan, which is known for its mud-resist block prints.

Technique: In Bagru, the printer first processes the raw material which is mainly cotton. Other natural fabrics are silk, cotton and silk blends etc. The fabric is then printed with mordants in paste form. The printing is done by using outline and filling blocks. The prints are then covered with a resisting paste 'dabu' made of clay and gum. It is then dried and dyed in vegetable dye. The mud resist paste is used to resist the penetration of dyes, mainly vegetable dyes on cotton fabric as per the design. After dyeing the fabric is thoroughly washed at the river. The mud resist paste is washed off exposing printed motifs on white background surrounded by the base colour. Hence, the resulting effect of dark and deep background with light coloured prints is achieved by resisting and mordanting.

Motifs: The motifs are inspired by the 17th century Persian motifs and are classified into the following five categories:

- Single motifs like flowers, leaves and buds. Some examples are *suraj ka phool*, *chakri*, *anguthi*, *gende ka phool*.
- Entwined tendrils that include all over *jaal* of leaves, flowers and buds.
- Trellis patterns include *jaalis* from the Mughul period.
- Figurative designs that include animal and human figures such as elephant, deer, lion, peacock, dancing women, warrior men etc.
- Geometric designs include waves (*lehariya*), chess (*chaupad*), Fortress wall projections (*kangura*), lines (*dhariya*), dots (*bindi*) etc. (Pic. 4.3)





Pic. 4.3: Geometric design on block printed fabric

End Use: The brightly coloured block printed fabrics from Bagru are used for apparel as well as home furnishings such as quilts, bedspreads, cushions and curtains.

4.2 Sanganer prints from Rajasthan

Region: Sanganer on the outskirts of Jaipur is a large centre for printing on fabrics. Many block printing and screen printing units are located here.

Technique: The technique used by the printers in Sanganer is much simpler than Bagru. The bright vibrant colours are printed on white, off white or light colour background. Firstly the outlines are printed with fine blocks and then varied colours are filled in with a set of blocks. For each colour, a separate block is required.

Motifs: The motifs seen in Sanganer prints are same as the ones used in Bagru.

End Use: The block printing is done mainly for products such as saris, *dupattas*, *salwar kameez* sets, bedcover, curtains, scarves, and yardage for apparel and home.

4.3 Kalamkari from Andhra Pradesh

Andhra Pradesh is famous for many of its textile crafts, one of which is Kalamkari, which means 'pen-craft'. This style of printing was practiced in coastal Deccan and many other places.



Kalamkari, the dye painted and printed exquisite textile symbolically named after the technique of its making, 'kalam/qualam' meaning pen and 'kari' meaning art, has been prevalent in several parts of southern India since ancient times. Referred to as 'Chintz' by the English and 'Pintadoes' by the Portuguese, Kalamkari was patronized by both Mughals and later by the Europeans in India.

Kalamkari fabrics were believed to brighten up with each subsequent wash. The specially prepared cotton fabric was hand drawn with a special pen using mordants as ink. These fabrics were then dyed in natural dyes.

The fabrics printed at Masulipatnam were used as furnishings such as bedspreads, curtains, table cloths etc apart from apparel. In fact these fabrics were so popular in the West, that these were banned by France and England, as it was a threat to their domestic printed fabric industry. These fabrics were also referred to as 'Palampores'.

Region

Srikalahasti, Masulipatnam, Polavaram and Pedana in Andhra Pradesh have been the major centres of this craft.

Tools

The main tool used in Kalamkari is an improvised brush known as 'kalam'. It is made of bamboo stick which has a pointed edge like a pen. Near the tip, a ball of wool or felt is tied. Whenever the kalam is dipped in dye, the ball of wool absorbs the dye which is pressed while drawing. This maintains constant flow of the dye to the tip for continuous drawing.

Dyes: Natural dyes used in Kalamkari are colours extracted from plants, roots, leaves and similar vegetable matter, combined with minerals like iron, and mordants like alum which help in fixing the colour on to the fabric. For e.g. Yellow colour is derived from myrobalan flowers and pomegranate rind, blue colour is derived from indigo and black from rusted iron fragments.

Technique: The first step involves preparation of grey cloth which is achieved by soaking the cotton fabric in water for an hour and consequent washing so as to remove the starch which is followed by drying. Next, the fabric is treated with myrobalan solution which gives the cloth a light yellow tone.

The outlining of the main theme and figures are then drawn by using ferrous acetate solution prepared by fermenting iron scrap with jaggery. This solution gives black colour. Alum solution is prepared by dissolving alum in water. This is applied wherever red is desired. Combination of blocks and hand painting using 'kalam', makes Kalamkari fabrics desirable for consumers. The fabric is then dyed with alizarine. The areas painted with ferrous solution turn jet black and the ones painted with alum become bright rust red.



Blue colour is applied by mixing indigo solution in an alkaline solution of lime and fuller's earth. To get green color, indigo or ultramarine blue is applied on portions which are already painted in yellow color.

Style and Motifs: The art of Kalamkari under the patronage of Mughals in Coromandal and Golconda provinces branched out into two schools.

Masulipatnam under the Golconda province catered to the Mughal tastes with its Persian influence according to Islamic aesthetics. The prints from this region were characterized by intricate motifs and forms including the tree of life, 'mehrab' pattern, 'jaals', creeper and stylized peacocks. Decorative borders were depicted in stylised natural forms with



Pic. 4.4: Ganesha in Srikalahasti style of Kalamkari painting

wooden blocks instead of pen. Sometimes pen work was combined with block printing to design elaborate wall hanging and panels with motifs such as Tree of Life. Otherwise the blocks patterns were influenced by Persian/Mughal motifs of exotic fruits and flowers, birds and animals, creepers and stylized peacocks etc.



Srikalahasti, ruled by Hindu rulers who gave patronage to the painters, was known for depicting scenes from Ramayana and Mahabharata on large pieces of fabrics which were used as hangings and canopies in the temples. The scenes were narrative and were depicted in boxes. Underneath each one, a line in Telugu script was painted to describe it. The forms are folk and more imaginative with restricted usage of repeats. Characteristics of this style are usage of solid colors without any shading. Gods like Krishna, Shiva, Parvathi, Brahma, Ganesha, Durga, Lakshmi, Rama are depicted with rounded faces, long and big expressive eyes and stout figures (Pic. 4.4). Women are shown with heavy chins and men are depicted with long moustaches mostly in side profile.

Colours: Blue, ochre yellow, red and black are the main colours used in Kalamkari.

- Blue is associated with Lord Krishna and also other Gods.
- Yellow is used to show female bodies and also gold ornaments in deeper ochre shade.
- Green colour is used to depict Lord Hanuman
- Red colour depicts demons and bad characters.

End Use: The fabrics printed at Masulipatnam are used as furnishings such as bedspreads, curtains, table cloths etc apart from apparel like *kurtas*, saris and *dupattas*.

Contemporary Scenario: The craft gained huge popularity between 16th and 19th centuries. Printed version of Kalamkari became more famous but painted form lost its demand due to changing market preferences, modern techniques, ready availability of chemical dyes and tedious nature of dyeing and painting.

Efforts are made to orient the craftspeople to understand the market demands. Apart from cotton, base material like raw silks, chiffon and georgettes etc are also being used now. Motifs have also been contemporised with addition of new natural forms and stylised figures. New colour schemes of pastels, neutrals like brown, beige, maroon etc have been added to the traditional colour story.



Exercises

1. Find the odd one out.
 - a) Pomegranate, Indigo, Turmeric, Alum
 - b) Srikalahasti, Sanganer, Masulipatnam, Polavaram
 - c) Pedana, Palampores, Pintadoes, Chintz
 - d) Lehariya, Jaali, Chaupad, Mehrab
 - e) Gad, Rekh, Data, Dabu
2. Write short notes (75 – 100 words) on the following:
 - a) Block prints from Bagru
 - b) Difference between Srikalahasti and Masulipatnam style of Kalamkari

