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## Tailoring and Dress Designing



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Unit 6 Principles of Design and Ornamentation
6.0 Objectives

After going through this unit you shall be able to understand the-

- Concept of design.
- Colour wheel.
- Concept of ornamentation and embellishment.
- Various types of embroideries.


### 6.1 Introduction

Designers are the prime trend setters and working as a designer usually implies being creative in a perticular domain of expertise. The work area of a designer spreads from interior of a house to retail environment.

Textile and apparel design is highly competitive, but rewarding field for the creative individual. Textile design involves study of fibre characteristics, spining, weaving, knitting, dyeing, printing and finishing techniques of fabrics apart from design concepts i.e. knowledge of colour, pattern, texture etc. Textiles need to fulfill the requirements of function, comfort and aesthatics simultaneously. Designer has to predict consumer reaction and to work within the financial budgets of the production and manufacturing process to design apparel that is both fashioable and functional.

### 6.2 What is Design?

According to Encyclopedia Britannica, Design is the arrangement of lines or forms which make up the plan of a work of art with special regard to the proportions, structure, movement and beauty of line on the whole. A design may be naturalistic or wholly the abstract conception of an artist. The basic objective of creating a design is that it has to meet its goals being economical user friendly attractive and appealing, convincing, technologically advanced than the previous. Design is a subtle blend of creativity with practical adaptibility having an aesthatic flavour. Design has a more universal meaning than the commercial applications that might first came to mind. In other words when creativity entered the industry it becomes design and when it was pursued by an individual as a means of self expression it became Fine Art.

### 6.3 Elements of Design

The elements and principles of design are basis to all forms of art. The five essential and inherent elements that go into the composition of all subjects of art and design are : line, shape or form, space, texture and colour.

Line : A line is the recorded movement of a dot on its journey from one point to another. This length of a line is much greater than its width, but beyond that, the qualities of lines vary greatly. Theoratically line consists only the dimension of its length, but interms of art and design it can have varying width as well.

Line can be short or long, straight or curved, round or angular, heavy or thin (Fig. 1). Lines can also relate to one another in a number of ways, they can run parallel to one another or in a convergent pattern ; they can intersect or overlap (Fig. 2).


Fig. 1


Fig. 2
Actual lines may vary greatly in weight, character and other qualities. It can function in a variety of ways in a design :
(a) as shape maker, (b) representing edge, (c) as direction or movement, (d) for empahsis, (e) as rhythm, (f) as symbol, (g) to create depth, (h) as value-builder, (i) to establish mood, (j) Line as subject.

Two other types of line i.e. implied line and psychic line are also very much important in pictorial composition. An implied line is created by positioning a series of points so that the line is created automatically by connect them. In case of psychic line, there is no real line, but a mental connection between two elements.

Another important characteristics of line is its direction. A horizontal line implies quiet and repose since we associate a horizontal body posture with rest or sleep. A vertical line represents potential of activity. Diagonal line most strongly suggests motion and represents speed, action and diversity.

In case of garment the term line refers to the direction of visual interest created by construction details such as seams, pleats, gathers, tucks etc. Line direction flows from are part of the garment to another. Straight line suggests crispiness whereas curved lines imply buoyancy. Lines have the power to create moods and feelings. Vertical lines remind upright, majestic figures and suggest stability. Whereas horizontal lines denotes rest, quiet and calm. Soft curving lines express grace and diagonal lines imply powerful movement and vitality.

### 6.3.1Shape

A shape can also be termed as form is a visually perceived area created by an enclosing line or colour. The term shape and forms are synonymous. "Shape" is more precise term because "Form" has other meaning in art. Form may be used in a broader sense to describe the total visual organisation of a work, including colour, texture and compositions. Shape is a two-dimensional area with identifiable boundaries. Its dimensions are height and width. There are three primary shapes : circles, squares and triangle (Fig. 3). All other shapes are alterations and combinations of these three i.e. a rectangle is a square that is extended in one direction, an oval is a circle pulled or stretched in two directions (Fig. 4)

Form is a three dimensional area with identifiable boundaries and in addition to dimensions of height and width, form exhibits depth. There are five primary forms: cubes, cones, pyramides, cylinders and spheres. All other forms are alterations, modifications and combinations of these five.


Fig. 3


Fig. 4

Shapes also fall into two general categories i.e. geometric and organic. Geometric shapes belong to the square-circle-triangle family. They are characterised by edges that are straight or perfectly curved. Organic shapes are the opposite based on those found in nature and are most often rounded and irregular. In contrast to geometrics, organic shapes are each one of a kind. Shapes can either be positive or negative. This distinction involves the relationship of a shape to others and to the space it occupies.

In case of garment, shape describes the outline of the whole garment and is responsible for one of our first impression. It relates to body structure.

### 6.3.2 Factors of Design

Colour : In case of textile products colour is the first elements to which consumers respond, while selecting or rejecting a garment because of its colour appeal.

Warm Colours : Red, yellow, orange are classified as warm colours, because of their association with fire and the sun. Warm colours are stimulating, aggressive and lively. Red is associated with matters of the heart, valantines, love and romance. It is also exciting, fiery and dangerous. Yellow is bright, sunny, chearful, friendly and optimistic but it is difficult colour to wear because in conflicts with many skin tones. Orange combines the sunny feelings of yellow and the warmth of red. It is also often a difficult colour to wear as intense orange can be irritating and over powering.

Cool Colours : Cool colours are refreshing i.e. blue, green and purple. Blue is quiet, restful and reserve whereas green is a refreshing colour suggesting peace, rest, calm and quiet. Purple associated with royalty and it represents wealth, dignity and drama.

Neutrals : Neutral colours such as beige, tan, brown, white, grey and black are more popular in case of sophisticated fashion than those colours as mentioned earlier. White is associated with purity and cleanliness, where as in western culture black is connected with death. However, both black and white have become classics and therefore tend to stay in fashion longer.

Colours must be selected for individuals garments. The selection of colour must reflect seasons, climate and type of garments. Usually designers select some trend colours and combine them with their own colour choices.

Fabric : Fabrics are the desingers artistic medium. Suitability of fabric is determined by fibre, weave, texture, performance, hand, pattern and colour. Texture is the sensuous element of design. It is the surface created by the weave and by light reflection. Performance of a fibre refers to wearing and clearing properties of fibre content, weave and finish. Weight and hand dictate the sithoutte of a garment. Weight refers to heaviness or lightness and thickness or thinness of a fabric. Soft fabrics such as crepe, chiffon etc. are ideal for draped design and additional fluidity can be achieved by cutting the fabric on bias grain. Fabric weight varries with the type of garment to be produced and must be appropriate for a particular season. The weight is determined by the square meter for woven and by linear meter for knits. Heavier and warmer fabrics are needed for winter, whereas light and cooler ones for summer. In general wool is used for fall and winter season, whereas linen and cotton is used in summer. However, there are now seasonless fabrics and fashion.

### 6.4 Colour

Colour is probably the most complex visual element and is an extremely complex science. Colour has a basic, instinctive, visual appeal. Our experience of colour is entirely depend on light. What we perceive as colour is actually rays of light reflected from the object's surface. Sir Isaac Newton, the father of modern science, in advertently stumbled into the subject of colour and its related theories. Colour is the primary element to which consumers respond, accepting or rejecting a garment because of its colour appeal. People relate personally to colour as it evokes emotional responses based on their culture and events in their lives. Colur evoke emotional associations rooted deep in our cultural psyche. Similarly different seasons, holidays are traditionally identified with different colours. Red and greens are associated with winter holidays, pastels of flowers with spring, refreshing white with summer etc.

A colour wheel begins with the most basic colours, called primary colours. Red, Yellow, and Blue are considered as primary colours because they cannot be created by mixing other colours together. Primary colours are located one-third of the way around the wheel from each other. Secondary colours are made by mixing equal portions of two primary colours. Secondaries come about in the following
combinations: red and yellow make orange, yellow and blue create green, blue and red produce purple. To fill the remaining spaces in the colour wheel, tertiary colour can be created by mixing a primary and an adjacent secondary colours.

The complete colour wheel represents the sequences of colours found in a rainbow. They are the raw colour materials one has to work when designing. Colours located opposite one another as the wheel are referred to as complements. Complementary colour is important for the two reasons : (i) to reduce the intensity of colour add a touch of its complements and (ii) to make a colour look more intense without actually adding another hue. Colours located next to one another on the colour wheel are referred to as adjacents.

## Cool and Warm Colour

A colour's temperature has to do with how warm or cold it makes you feel. Warm colours are generally agreed to those in the red-orange-yellow family. They are the colours associated with fire, sun and heat. Warm colours are vibrant, exuberant and aggressive. At the opposite end of the spectrum are the cool colours. The cool colours blue, green and purple are reminscent of the sky and the sea. Warm colours generally have a 'coming forword'’ feeling, whereas cool colour recede in our vision. Designers often take advantages of this advancing-receding aspect of the warm-cool. relationship to create the illusion of depth an a two-dimensional surface or to create a feeling of vibration.

## Psychology and Symbolism of colour

Colours carry different emotional connotations, rooted in our cultural part. They also dictate the decorum for events in our lives. The origin of colour symbols may perhaps be attributed to the religious needs of people. Enlisted below are some of the colours and the common symbols attached to them.

The essential fact of colour theory is that colour is a property of light, not an object itself. Objects have no colour of their own but merely the ability to reflect certain rays of white light, which contain all the colours. Blue object absorb all the rays except the blue one and these are reflected to our eyes. Black objects absorb all the rays ; white objects reflects all of them.

### 6.4.1 Properties of colour

Hue : Hue i.e. the typical characteristics of the visual element by which one can distinguish one colour from another, viz. blue from red, yellow from orange etc. The words "hue" and "colour" are used as synonyms, but there is a distinction between the two. Hue describes the visual sensation in the different parts of the colur spectrum. The three primary colours are red, yellow and blue. All other colours can be created from these three primary colours.

Value : The second property of colour is value, which refers to the lightness and darkness of the hue. In case of pigment, value can be altered by adding white and black to the particular colour. Adding white lightens the colour and produces a tint or high-value colour. Whereas adding black darkens the colour and produces a shade of low-value. A design that contains little or no contrast of hue is referred to as monochromatic. Each colour has a range of values from light to dark and the value of a colour depends on its relative capacity to absorb and reflect light. A colour is light and dark in value when it approaches towards white and black respectively. The lighter values are called tints and the darker are shades.

Chroma : Chroma is the term used to describe the depth of colour i.e. dullness, brightness, saturation, intensity, vividness or purity of the colour. A bright intense colour is said to have high chroma.The brightness or paleness of a hue is called its intensity. The addition of gray to the colours results in varying degree of intensity. Bright colours are considered high intensity and pale ones are low intensity. Saturation is the relative degree of purity a colour exhibits.

### 6.4.2 Colour Wheel

A colour wheel (also referred to as a colour circle) is a visual representation of colours arranged according to their chromatic relationship. Begin a colour wheel by positioning primary hues equidistant from one another, then create a bridge between primaries using secondary and tertiary colours.

Primary Colours : Colours at their basic essence; those colours that cannot be created by mixing others.

Secondary Colours : Those colours achieved by a mixture of two primaries

Tertiary Colours : Those colours achieved by a mixture of primary and secondary hues.

Complementary Colours : Those colours located opposite each other on a colour wheel.


Yellow symbolizes envy or cowardice
Red symbolizes danger or courage
Blue symbolizes authority and people in uniform
White symbolizes purity and innocence
Black symbolizes death and sorrow.
Purple symbolizes royalty, clergy and wealth.
Orange symbolizes sun and joy.

### 6.4.3 Colour Mixing

Sunlight is generally considered as the source of white light and consists of seven colours of the rainbow i.e. violet, blue, blue-green, green, yellow, orange and red. Sunlight is composed of light of different wave lengths. The wave lengths in the region of 400-700 nm are visible to human eye. Sun is the main and most important source of energy in our solar system. It emits energy in the form of light. Light is
an electromagnetic radiation. The distribution of the wave lengths of the radiation in the visible region of sunlight and their corresponding colours are given in table-

| Colour : | Violet | Blue | Blue-green | Green | Yellow | Orange | Red |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| Wave length <br> (nm) : | $390-430$ | $430-460$ | $460-500$ | $500-570$ | $570-590$ | $590-610$ | $610-700$ |

### 6.5 Fashion

Fashion is the style or styles most popular at a given time. The term implies three components i.e. style, acceptance and timeliness. Style is any particular characteristics or look in apparel or accessories. Style may come and go in fashion but a specific style always remains the same, whether it is in fashion or not. Acceptance implies that consumers must buy and wear a style to make it a fashion. There is no fashion if nobody buys it. Acceptance by a large number of people makes a fashion important. Timeliness indicates change in fashion after a certain period of time.

### 6.5.1 Fashion Evaluation

Fashion does not change overnight. It is important for designers to understand fashion cycles because it explains the acceptance of fashion and are directly related to buying and selling cycles. Generally fashion cycles evolve gradually, giving consumers time to become accustomed to new combinations and looks. New fashion looks can be created by changing the design elements such as line, shape, colour, fabric and their relationship to one another. Consumers are exposed each season to new styles created by designers and some of them are rejected immidiately by the buyer on the retail level, but others are accepted for a time. The way in which fashion changes is usually described as a fashion cycle (Fig.5).


## fashion cycle (Fig.5)

### 6.6 Principles of Design

The principles of design are the basic guidelines concerning the use of design elements, their appropriate combination and inter relationship in a composition. These principles are based on human psychology; perception and evaluation of our aesthetic sorrounding. These principles are flexible and always relate to the current fashion.

The three basic principles of design are (i) Proportion, (ii) Balance, (iii) Rhythm.
(i) Proportion : "Scale" and "Proportion" are related terms refer to size. Big and small scales are relative terms. The word "Big" is meaningless unless one standard reference. Proportion refers to relative size, and is linked to ratio (Proportion). Proportion is basically the inter relationship of the size of all parts of the garment. Generally, unequal proportions are more visually stimulating the equal ones. Individual sections of a garment, such as sleeves, pockets and collar must relate in size to each other and to the total silhouette as well. Similarly, stitching and design details like trimming, pleats and tuck must be meaningfully spaced in relation to total design. Trimming must not be too heavy or too light, too large or too small but porportionate to the space around them and compatible with the feel of the garment. There are two distinct ways of describing an object as a proportion- (i) by comparison with other similar objects and (ii) by comparison with space they occupy.
(ii) Balance : Balance can be best defined as equilibrium of the elements of design. It refers to visual weight in design. A garment must be balanced to be usually pleasing. The principle of balance can be subdivided in three categories- (a) symmetrical balance, (b) Assynmetrical balance and (c) radial balance.
(a) Symmetrical Balance : It is the simplest type of balance, both to create and to recognize, and also relatively easy to achieve. In symmetrical balance, like shapes are repeated in the same position on either side of a vertical axis, whereas in the metaphor of balance, design elements like colour, texture and line are visual weights and must be equally distributed.
(b) Asymmetrical Balance : Asymmetrical balance is based on equal eye attraction. Black against white gives a stronger contrast them grey against white, therefore a smaller amount of black is needed to visually balance a larger amount of grey.

To achieve a more exciting dramatic effect asymmetrical or informal balance can be used. Asymmetrical design composition is achieved by a balance of visual impact. Technically asymmetrical designs make pattern layout more difficult and therefore more expensive.
(c) Radial Balance : A third variety of balance is called radial balance. Here all the elements radiate or circle out from a common central point. The sun with its emanating rays is a familiar symbol that express the basic idea. Radial balance is not entirely distinct from symmetrical or or asymmetrical balance. Radial patterns are abundant in the natural world. Circular forms abound in craft areas, where the round shapes of ceramics, basuetry and jewellry often make radial balance a natural choice in decorating such objects. Radial balance has been used frequently in architecture.

Repetition or a sense of movement can be achieved by the repetition of lines, shapes and colours. In is necessary to create interest in a design and to carryout the central theme. The use of repetition is one of the most helpful guidelines in designing.
(iii) Rhythm : Rhythm as a design principle in based on repitition. Rhythm is the movement or natural eye flew caused by the regular reoccurance of related elements. Elements are related when they share similarity in colour, texture, line, shape or space. In music rhythm is associated with sence of sound, but in design it appeals to our visual sense. Visual rhythm is created when elements repeat in a sequence in a design.The repeated elements are often shape and colour motif. The usual rhythm is created through three arrangements (a) continuous rhythm, (b) repetitive rhythm, (c) progressive rhythm.
(a) Continuous rhythm : Continuous rhythms are uninterrupted. A composition in which all objects or shapes are uniformly coloured constitutes a continuous rhythm. Continuous vertical lines give the illusion of height, whereas continuous horizontal lines create an illusion of width. A Jacket and skirt having matching vertical stripes would be considered as having continuous rhythm even though they are structurally separate pieces.
(b) Repetitive rhythm : It is a group of like objects or elements in an arrangement set at irregular or random intervals. Despite the unequal spacing of elements, unity is created because the elements are identical or highly similar.

Alternating rhythm : This rhythm consists of successive patterns in which the same elements reappear in a regular order. In a design, this is termed as alternating rhythm, as motifs alternate consistently with one another to produce a regular sequence.
(c) Progressive Rhythm : Another type of rhythm is called progression or progressive rhythm. A composition is said to have progressive rhythm when it employs similar elements that gradually change. A value scale from white to black is a progressive rhythm. Progressive rhythm is not dependent on orderly placement of elements, infact arbitary placement is often more attractive because of its contrast.
(f) Focal Emphasis : Another traditional way of arranging a design is to organise elements in relation to a focal point. A focal point is the place of primary emphasis in a design i.e. the place that exerts the most pressure. A focal point provides the starting point for eye flow.

Emphasis or a centre of interest draws attention to the focal point of a garment. This point is the central theme and the rest of the garment is of secondary importance. A centre of interest must create more visual attraction than any other design element in the garment.

### 6.7 Ornamentation and Embellishment

Embroidery, that is the embellishment of cloth with design made by needle and thread, is an art that stretches back to hoary antiquity. The word embroidery is a Middle English word derived from the old French bonder meaning edge or border.

Egyptian mummies were wrapped in garments embroidered in gold and robes of king and noblemen were embellished with embroidered designs. The design was made with threads of linen and wool, the hair of goals and camel and exceedingly fine shrikes of gold and silver.

Over the centuries, embroidery has been used to adom everything from the smallest personal possession like handkerchiefs and underwear to the most sumptuous state regalia. Curtains, cushions, wall hangings, state robes, ordinary everyday clothes, bed and table linen have all provided gist to the embroiderer's mill. The adornment is done on all kinds of pliable material which can be pierced with a needle - linen, cotton, wool . silk and leather. Gold, silver, silk, cotton and wool ahead, animal hair, precious stones, pearls, shells, insects wings, seeds and enamel are all used to produce effects of ravishing simplicity or awesome grandeur.

For centuries India has been renowned for the richness and diversity of its embroidered textiles. Embroidery is part of the Indian way of life, and is evidence everywhere on clothes adorning animals, in temples, homes and other buildings. Gujarat was renowned for the silk embroidery on cotton. This was done in very fine stitch.

### 6.8 Embroidery Techniques

Indian embroidery is usually worked on a single layer of fabric, but often the amount of stitching on the fabric necessitates another fabric being placed behind the first, this backing fabric is usually of an inferior quality to the one on the surface. Embroidery can be worked on a woven plain fabric, a woven patterned fabric or on pieces of different types of fabric which have first been sewn together.

The stitches used have been determined largely by the fabric available, and have also been dictated by the quality of the woven fabric. Interrelated with this has been the type of design to be worked, whether it is to be geometric and counted or curved and free flowing. The designs themselves are sometimes worked directly on to the fabric form memory or by hooking at another piece of work.

The design is often put on to the fabric, prior to embroidering, by a variety of methods sometimes an outline design is produced by block printed. The pattern can also be created by tracing with a wooden pen or pencil. Stenciling on to cloth with coal dust (the prick-and pounce method) is also used, in which powdered clay or charcoal is rubbed through perforated strong paper or copper foil.

Most embroideries are worked in the hand. With the worker sitting in a comfortable position on the floor. Some embroidery has to be worked on a tight fabric and if, , this is the case the fabric is stretched on a frame. Which is held off the ground at either end. This enables the embroiderer to sit close to the frame so that oth hands can work above and below the frame with ease.

A wide variety of implements are used to enable these various techniques to be came out. Naturally, there is also a wide variety in the sizes of needles, and some needles are specially made for certain processes .art example of this involves the needles for pulled thread Chikan work, where the needle is fairly wide along its whole length. For some embroidery techniques involving metal threads extra-long needles are used.

The ari is a hooked ari and has been adapted over time is stitch embroidery designs on to leather. Using different sized of stitches and types of thread.

The most commonly used background fabric is woven cotton. Though some silks and wool are also used. Cotton fabric have been woven in India since prehistoric times and occasionally, the weaving has been so fine that it is called woven air. The embroidery on this fabric is of highest quality.

Embroidery threads of cotton, silk, wool, silver and gold are often identical to those used in weaving. In fact, they are sometimes obtained by extricating the threads from an existing woven fabric. The colors used for the fabrics and embroidery are varied. The brightest and most dominant are seen in the arid and desert regions, particularly in the states of Gujarat and Rajasthan.

Traditional and similar patterns, motifs and images are used in many art and craft forms. And similar patterns and imagery are often seen in the textile arts of wearing printing and embroidery.

Sometimes a block printer may print a design on to a cloth for the embroiderer to use as a guide. With typical ingenuity, the same block can be used to produce a printed pattern on its own.

The approach to embroidery stitches in India is rather different from that in other countries. Many different stitches are worked with the back, or reverse. Of the work facing the embroiderer, as the back is often important too, and the embroidery therefore becomes reversible. The embroiderer does not merely think of embellishing the existing fabric, but works more like a weaver, for whom the decorative element is intrinsic to the construction of the piece.

Some of the techniques involve the use of one stitch only for example, the running stitch in kantha work. It is the incentive way in which $t$ he stitch, thread and fabric are used which makes it into such a distinctive technique.

It would therefore seem appropriate that not only are the stitches used in Indian embroidery recognized but also that the following points are observed.

The shapes made by the stitches
The negatives shapes achieved in the un-worked areas of the fabric
The size and spacing of the stitches
The types of fabrics and threads used
The combination of stitches used together in a particular piece
It is the imaginative use and combination of embroidery stitches, which often makes Indian embroideries so remarkable and so worthy of study over a period of
time new stitches and designs have been added to those traditionally used and these have also been adapted and changed. Often, old designs have been augmented and changed and have evolved to a point where they are barely recognizable from the original.

In the past, and in India today, stitches and designs are often passed on from mother to daughter. In this way some of the techniques and designs have remained largely the same, with gradual changes occurring with an embroiderer improvising or adding an individual touch, in recent years, the people of the villages have been encouraged to use their embroidery skills.

Embroidery is still produced by professional embroiderers and, in general. It is the men who are involved in this kind of work. A very rigid method of working and training has evolved. Often a master embroiderer trains others by passing on the process and the manipulative skills for a particular form of work, and this is frequently in a father and son relationship. That controlled quality work is only produced by these professional embroiderers.

### 6.8.1 Embroidery Stitch

As a result of the differing historical developments in various regions of India, the embroidery stitches used differ between district communities. Stitches introduced from other countries by invaders and settlers have been absorbed into local work and have changed or developed over a period of time. For example, Chain stitch was probably introduced to west Gujarat ((Kutch) from Baluchistan (now in Pakistan) and is thought originally to have come from further west. Chain stitch and Satin stitch may well have come to other parts of India from China.

The stitches are all made by hand with a needle or ari. Chain stitch can also be produced on a Cornely machine and one has to look carefully to see the method of each embroidery.

## The stitches fail into the following groups :

Herring bone (and interfaced stitches), Feather stitches, Fly stitches, Cretan, buttonhole chain, straight (including unrelated line) stitches, Couching stem stitches, Running and back stitches, Cross stitches, Single unit stitches, Edging and filling stitches.

With a closely woven fabric, sharp pointed needles are used, with an open weave fabric the needle is usually a blunted one.

It is difficult to isolate embroidery stitches, as they are often used in combination with other techniques.

The square and oblong rumals are embroidered covers and decorative pieces. And are thought to have originated during the 18th century in Chamba (Himachal Pradesh) . they are influenced by the painted miniatures of the Moghal courts. They are often described as paintings translated into embroidery. The rumals vary technically, and some are influenced by phulkari technique. The main stitches are cross stitch, double running stitch, buttonhole stitch, long and short stitch, pattern darning, and herringbone stitch. The designs will have been drawn on to the fabric with fine charcoal by the arts/designer, who probably also decided the colors, with the embroiderer working to the given guidelines.

In Gujarati embroidery work, some pieces of cotton fabric may be sewn together to produce a background fabric of different colours. Another piece of fabric may be placed behind, so that the embroidery is stitched through two layers. The stitches used are mirror work, reverse chain, open chain, double chain, double tied certain, laid work with a couched line or sometimes with a line of reverse chain stitch and Romanian stitch (also known as Indian filling stitch)

In Punjab's one type of phulkari work, stitches are used on both sides. The darning stitch is worked in squares to form a diamond and half diamond border with the reverse side facing the worker. This method makes it much easier for the embroiders to count the warp and weft threads of the base fabric.

In Kashmiri embroidery work, the stitches make motifs, borders and fabrics of solid stitching. The designs were put on to the cloth through perforated parchment (later, thick paper), coal dust was rubbed through the holes and then the outline was heightened with a pen, ready for the embroidery to be worked.

The woven and embroidered shawl technique developed at the end of the 19th century. the embroidery could be stitched so that the shawl was double sided, or stitched through just half of the fabric so that the design was seen only on one side with nothing showing on the reverse. The fabric and thread were usually fine wool, with the stitch making a soft addition to the fabric. The main stitches are split stitch, forms of Romanian stitch buttonhole and stem stitch. Satin stitch, single fly stitch, outline stitch and running stitch.

In Gujarat and Rajasthan embroidery work, herring bone stitches are frequently used.

The finest embroidery was brought to northern Kutch by the Jats of the Banni who had immigrated from Baluchistan generations ago their work still retains the Baluchi techniques and the same preference for small, intricate patterns, which are fundamentally geometric in conception. Mirror discs are cut in the shape of petals and leaves, and blended in designs of shimmering delicacy.

Bhuj, the capital of a small prosperous kingdom in the central provinces of Kutch, was inhabited by mochis-cobblers or leather workers, by trade. It is not known when they began practicing silk, embroidery, but their work shows a maturity of style and technique, indicating a well established craft.

Their designs comprised the traditional floral motils and were executed in wto alternating patterns on the hem of the ghaghrapat (skirt cloth). Though the craft centered primarily around Bhuj some mochis moved to Kathiawar (Saurashtra), in the 14th century and were employed by the Kathis, a land owning class.

## Kathi Embroidery

Kathi embroidery, however, shows an entirely separate style from that of Bhuj. While the floral patterns remained, the fillings were often in herringbone stitch (being quicker that the chain stitch). The designs were figures and animal motils adopted from kathi at Dominant motifs of flowers or peacocks were used and the intervening spaces were filled with leaves and buds . mirrors were used for emphasizing the centre of flowers, eyes of the birds and animals.

## The Art of Chikankari

Chikankari is a fine and intricate shadow work type of embroidery done by white yam on colourless muslins called tanzeb (tan meaning body and zeb meaning decoration) . the work chikan according to one school of thought appears to have its origin in Persia, being derivative of chakin or chakeen. If may also be a distorled from of the work chikeen or siquin, a coin valued at Rs. 4 for which the embroidery was sold. another explanation ascribes the origin to East Bengal where the word chikan meant fine.

The earliest reference in literature to chikan dates back to the 3rd century B.C. in his records Megesthenes a Greek traveler, had mentioned the use of flowered muslins by the Indians.

Folklore attributes the origin of chikankari to various sources. It is believed by many craftsmen that a traveler while passing through a village near Lucknow asked for water from a poor peasant. Pleased with his hospitality , the traveler taught him the art of chikankari that would never allow him to go hungry . the craftsmen believe a that the traveler was a prophet. Another story imputes its origin to Queen Noor Jehan. Who inspired by Turkish embroidery, introduced this needlework. The origin of this craft is also ascribed to the harem's of Avadh's Nawab where a seamstress from Murshidabad embroidered a cap for the Nawab to please him . jealous of the attention she received from the king, other inmates of the harem followed her and thus the art of chikankari was evolved.

## Stitches

Stitches employed in chikankari are unique and can be divided into three categories. Flat stitches, which ar e delicate and subtle and lie close to the surface of the fabric giving it a distinctive textural appearance. Embossed stitches which are highlighted from the fabric surface lending it a characteristic grainy texture and jail work which is the most striking feature of chikan embroidery and which creates a delicate net effect. The fabric is broken into holes by teasing the warp and weft yarns and holding them in position by small stitches.

## Process

The chikan industry has five main processes namely cutting, stitching printing, embroidery washing, and finishing Cutting is carried out in the lots of 20-50 garments. The layouts are done to minimize wastage of materials. Stitching, often done by the same person, may be civil, done exclusively for higher priced export orders or commercial, which is done for cheaper goods. Printing is carried out by the use of wooden blocks dipped in dyes like neel and safeda. After this, the fabric is embroidered by women. the last process which is washing and finishing, takes about 10-12 days. This includes bleaching, acid treatment, stiffening and ironing.

The most common motif used is that of a creeper . individual floral motils may embellish the entire garment or just one corner. Among the floral motils embroidered . the jasmine, rose, flowering stems, lotus and the paisley motif are the most popular.

In recent years, the beautiful and wide variety of stitches and designs that were on the decline, have been revived Concerted efforts by government and various
private organizations have paid off and today the art of chikankari is flourishing enriching both the domestic and export market.

Phulkari - Flowering on Cloth
Phulkari is the floral tribute by women of Punjab
Phulkari - The art of growing flowers on fabric
Sitting on the charpoys beds woven with jute strings) pulled into the protective shade of a tree, or ensconced against a wall, women in villages and small towns all over Punjab are often busy creating spectacular flower embroidery on dupattas, shawls or other garments. Called phulkari in local parlance, the origin of this beautiful art can be traced back to the 15th century AD.

The word phulkani literally means flowering . it is a form of craft in which embroidery is done in a simple and sparse design over shawls and dupattas. In some cases where the design is worked over very closely, covering the material entirely, it is called bagh (a garden of flowers).

The embroidery of phulkari and bagh is done in long and short dam stitch which is created into innumerable designs and patterns. It is the skilful manipulation of this single stitch that lends an interesting and characteristic dimension to this needlework. While the stitch itself is uncomplicated. The quality of the phulkari depends upon the size of the stitch. The smaller the stitch, the finer the embroidery.

The threads used were of a silk yam called pat. In the past, the silk threads were brought in from different parts of India. Like Kashmir and Bengal and also from Afghanistan and China.

Bright colors were always preferred and among these, golden yellow red, crimson, orange, green, blue, pink etc. where the popular ones.

For the embroidery only a single strand was used at a time, each part worked in one color, Shading and variation were not done by sing various colours of thread, instead, the effect was obtained by the dexterous use of horizontal, vertical or diagonal stitches. This resulted in giving an illusion of more than one shade when light fell on it and when it was viewed from different angles.

To keep the embroidered part clean while working on the cloth, the finished portion wa s rolled and covered with a muslim cloth. Specially created designs varied from village to village or region to region in Punjab and were given suitable names descriptive of their from. While phulkari was used to ornament cloth, the bagh ensured that not even a square inch of the base cloth was visible.

### 6.8.2 Appliqué

Appliqué - the art of clothe decoration, is practiced in Orissa and Rajasthan. Appliqué is the collage of fabrics and colors. Appliqué is decorative work in which one piece of cloth is sewn or fixed onto another, or the activity of decorating a cloth using glass pieces. Metals, wood or metal wires. Appliqué work these days can be seen on utilization items such as bags, lampshades, tablemats etc. appliqué embroidery can also be seen on blouses. Petticoats, gowns and other garments.


## Base Cloth

The cloth primarily used and preferred by the women, was the home spun, locally woven and dyed khadi. It was strong long lasting and cheep and served the purpose of keeping the wearer warm during within. Another reason was that the embroidery involved the counting of threads while doing the straight dam stitch. The coarse weave made this task easier. In addition, the thick cloth did not pucker and pull and could be worked upon without a frame. Usually, pieces of small width about 45 to 60 centimeters, were, worked on separately and the two or three strips were joined together to form the required size.

Beginning with geometrical patters, flowers and leaves, the repertoire of motifs was constantly enlarged . birds, animals and human figures and objects of everyday use were inducted, along with vegetables, pots, buildings, rivers, the sun and the moon, scenes of village life, and other imagery. Phulkaris and baghs came to be embroidered in a stunning range of exquisite designs. In dhoop chaon, which literally means sun and shade an amasing interactive display of light and shade was created. The designs remained earthy and true to life . there was dhaniya bagh (coriander garden), motia bagh (jasmine garden) satrange bagh (garden of rainbow), leheria bagh (garden of waves) and many other depictions. Today the most intricate and sought after phulkaris are the sainchi phulkaris, which bring scenes from rural Punjab to life. An incredible wealth of detail is embroidered onto cloth.

## Reflecting Emotions

With time, the phulkaris became closely interwoven with the lives of the women of Punjab. The joys, sorrows, hopes, dreams and yearnings of the young girls and women who embroidered the phulkaris were often transferred onto cloth. Many folk songs grew out of this expressive combination of skills and intense feelings. So, it is that one hears a young woman, whose betrothed has not sent a promised message to her, murmuring sadly softly, as she embroiders peacocks on a phulkari. It was not long before phulkari folk songs became a part of the famous, pulsating folk dances of Punjab - the gidda and the bhangra .

## Kimkhab a Febric of Dreams

One of the beautiful examples of the Indian tradition of weaving gold with fabrics is kimkhab. Meaning the fabric of dreams, kimkhab is a heavy brocade woven with silk and gold threads mostily in the only of Banaras. The pattern in kimkhab looks as though embroidered on top of an already rich silk. The silk fabrics have coloured silk or gold threads interwoven to from the most attractive designs. The gold thread is called kalabattu, it is a specially prepared thread of silk with a metallic mounting of gilded silver. A thin bar of silver is beaten and drawn through a succession of holes in an iron plate. Each hole is smaller than the preceding one. This process is followed until a very fine wire is obtained. This wire is slightly flattened and twisted spirally around the silk thread.

Kimkhabs were earlier made entirely from fine gold or silver threads. During the 17th , 16th and 19th centuries. Some were set with precious stones, and were used in making canopies and trappings as seen in the late Mughal paintings.

## Gradings

There are various grades for kimkhabs, which are determined by the humber of kalabattu threads repeated in a given space. For example ekpara represents ten kalabattu threads in a running inch, Similarly , there is dopara, tinpara, chaupara and even chhapra.

## Other styles

The commercial communities, of the southern and western districts of kathiawar, known as Mahajans also produced a unique style of austere geometric embroidery. It was worked in a monochrome of red or violet, in long darning stitches, which covered the entire cloth. The sheen of silk was enhanced by mirrors at the intersection of the motils and on the main borders. While and cream threads emphasized the velvet like surface that created a double tone effect, Because of the reflection of light by the mirrors, the effect was enriching . bright yellow and orange decoration of the Kanbi community is another well known style. The difference lay in the size of minors. They used large mirrors, almost one inch in diameter, framed in metal, for a bold effect. The work of Ahirs, though not so popular , is finer and more elaborate. The motils are edged with running stitch tanka in white thread. This not only highlights the motil, but also gives it a sense of movement. The flowers surrounded in a circular fashion, by mirrors, are reminiscent of many styles in Kutch incredibly miniscule mirror embroidery was done on heavily encrusted yoke with while thread, miniscule mirror embroidery was done on heavily encrusted yoke with white thread, mingled with red, orange, blue and green by the Garari Jat community. The Tharparkar district was renowned for its bold style. The entire pattern was worked in open chain stitch and richly encrusted with discs of mirror glass, on coarse cotton. It was also worked on printed and tie-dye cloth, forming patterned field. Mirror work, however, was not just confined to Gujarat but also seeped into the neighboring state of Rajasthan. in Rajasthan, the Harijans, originally weavers, use a combination of cross stitch, satin stitch and buttonhole stitch, along with mirrors the cut and placing of cross stitch. Satin stitch and buttonhole stitch, along with mirrors. the out and placing of embroidery and mirrors in a kanjri (a backless upper garment), significantly identities the wearer as married, betrothed or widowed. It is not only popular in the local market, but also forms a bulk of the export to European counties. An interesting school of belief maintains that earlier mica was used instead of mirror . later ornamental mirror shapes were cut out of an urn, blown out by a mouth pipe. with the advent of modern machines, this ancient technique was soon replaced by the manufacture of mirror sheets. Which facilitated the craft to a great extent. Most of
the workers have now resorted to machine embroidery. Though handwork is still done it is increasingly difficult to produce commodities at prices compatible with work done in modern conditions;

## Mirror Work

One of the well - known crafts associated with embroidery is Sheeshedar or mirror work, it is a highly intricate form of sewing mirror discs onto the fabric. The art supposed to have originated in Persia, dates back to the early 13th century. But not much is known about it, Marco Polo, who came to India in the same century, commented that the gold and silver embroidery in this region was more skillfully done than anywhere else in the world.

The art of putting mirrors into the garments is usually combined with other forms of embroidery. The communities who were already familiar with art of embroidery incorporated this craft so as to add more effects to their designs.

### 6.8.3 Zardozi

ZARDOZI is an imperial embellishment. From the medieval times the art of Zardozi has flourished, reaching its zenith under the patronage of Emperor Akbar. this gorgeous embroidery reveals artistic use of laid stitch with golden thread. It can be seen in wail hangings, chain stitch on saris, caps and other articles with heavy embroidery . as the embroidery is densely performed, designs done are extremely intricate.

The gold wire known as zari is the thread used for zardozi embroidery. The making of zari thread is a very tedious job involving winding, twisting, wire drawing and gold plating of thread . the embroidery of zari zardozi is performed in a very interesting manner. Gold wire is carefully revolved around a silver bar tapered at one end. Then they are heated in furnace till gold and silver alloy is formed. The gift wire, when drawn through a series of holes made on steel plates, comes out glittering as gold. The gold coated silver wire is then flattened and twisted around silk thread to obtain zari.

Zardozi has remained as an appliqué method of embroidery. With one hand the craftsman holds a retaining thread below the fabric. In the other he holds a hook or a needle with which he picks up the appliqué materials. Then he passes the needle or hook through the fabric. After hours of painstaking labor. The result is an exquisite gold veined work of art.

## The Decline

During the rule of Aurangzeb, the royal patronage extended to craftsmen was stopped many craftsmen left Delhi to seek work in the courts or Rajasthan and Punjab. The onset of industrialization in the 18th and 19th centuries was another setback most of the craftsmen turned to other occupations.

## Renaissance of Zardozi

The art of zardozi was revived along with many traditional methods of embroidery in the middle of this century. Zari work was mainly done in Madras and zardozi in Hyderabad until a few decades ago. Today Uttar Pradesh is home to this finest work of gold and silver embroidery . this craft has caught on to a larger region of Bareilly such as Allampur, Faridpur, Biharkala, Nawabgaanj and Chandpur.

The non availability of gold on a large scale became a hurdle in the making of zari threads. The problem was overcome by combining copper wire with a golden sheen and gold colored silk thread.

Another major problems the availability of skilled zardozi crafts men. as the craft was on decline, the number of craftsmen decreased, as they had taken on other jobs. But with the revival of the craft, their number began to increase.

### 6.9 Innovations and Success

New designs and products have been introduced apart from the traditional ones. Some of the products are cushion and pillow covers, bedspreads, handbags, sandals and buttons. Zardozi on kurta pajamas and chooridar achkans (tight trousers and men's coat) have gained popularity among the men. zardozi embroidered garments have become quite popular with Indians abroad . zardozi is also beginning to attracts the attention of top fashion designers the world over.

### 6.9.1 Kashmiri Shawls

Kashmiri shawl is an embellishment work, in the 19th century, a change was brought in the weaving of the traditional kani shawls of Kashmir, the demand for which was ever increasing instead of being woven as one piece, now the shawl was woven in long strips on small looms. Due to the large areas of design to be woven, the pattern was broken down into fragmented parts, each woven separately, at times on separate looms, and then all these pieces were put together, and stitched by a rafoogar.

This period also witnessed another far reaching development in Kashmir. It was advent of the amli or embroidered shawl. The kani shawl was further embellished, or in some cases, the plain ones beautifully decorated by a kind of parallel darning stitch.

### 6.10 Summary

India is very rich in art and craft work and almost all the states of India traditional textiles and various techniques of ornamenting those textiles exists for a long period. Especially, West Bengal is very rich in various traditional art and craft work of textiles and other handicrafts items.

Various textile products will be ornamented by embroidery like Kantha Stitch, Applique, Phulkari, Zari work etc.

### 6.11 Reference

a) Embroidery design for fashion and furnishing by Moira Thunder
b) White work : Techniques and 188 designs by Carter Houck

### 6.12 Assessment

1. What do you mean by Embroidery ? Give five examples of Embroidery Stitches, which are very common in Indian Tradition Textiles.
2. What are appliqués? Discuss various types of Appliques techniques.
3. Name and define the three components of fashion.
4. Describe the phases of a typical fashion cycle.
5. Name the elements of design. Discuss briefly why it is important for these elements to be represented in a design.
6. What are the principles of design. How do they help a designer analyse the effectiveness of a designs.
