



# UNIT-5

## Colour & Dress Designing

### Learning Outcomes

**By the end of this unit the learner will be able to:**

- ✓ Understand the main areas of fashion production, including the key terms, concepts, facts, principles, rules and theories of the field.
- ✓ Discuss the importance of colour in designing.
- ✓ Explain the relationship between colour in a garment and choosing the appropriate colour for a garment.

## Unit 5

### Colour & Dress Designing

Colour is all around us. It has been used for thousands of years in art and clothing alike. Throughout history, civilisations have experimented with and explored colour and colour blends. Today, there is a lot of knowledge/evidence and more studies than ever before are being carried out, regarding the effects of colour on moods, feelings and people's lives in general - especially with regard to colour as a visual language. Colour is made from light in different wavelengths and different frequencies. Light is made up of photons.

Colour is one of the most fundamental elements of fashion, along with texture, details and silhouettes. All these elements are inter-connected.

Colour study and the understanding thereof can be viewed in five different ways:

- **Physiological:** The physiological aspect is concerned with the way the eye receives the sensation of colour.
- **Chemical:** The chemical properties of natural and artificially-coloured materials used in the manufacture of dyes and prints.
- **Physics:** To the physicist studying the significance of colour, its wavelength and intensities are important.
- **Psychological:** The psychological aspect deals with the effect colours have on individual moods, feelings, emotions etc.
- **Artistic:** The artistic aspect involves playing with colours and mixing paints/dyes to produce specific and often unique hues.

The physiological and chemical views are not necessarily vital, as they do not affect the ordinary, everyday issues in the use/application of colours. The psychological and artistic aspect are very important, as their use in fashion and art is absolutely essential.

### The Prang Colour System

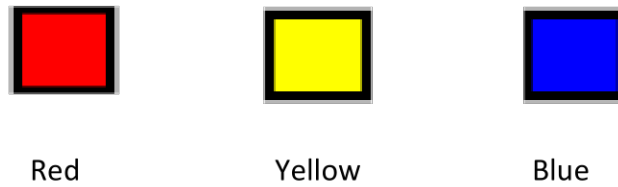
There are three basic groups of colours, these being:

1. Primary colours
2. Secondary colours
3. Tertiary Colours

#### Primary Colours

Light is contained in the colour spectrum - this spectrum is what we see in a rainbow. It is quite amazing to

think that these beautiful colours are built upon only three fundamental colours, which are the **primary colours**. These exist alone and are not created through mixing any other colours. The primary colours are: red, blue and yellow. These colours are situated an equal distance apart on the colourwheel.



**Fig 5.1**

Colours can be divided into two subgroups - subtractive and additive. Subtractive colours are colours that are used in conjunction with reflected light. Mixing colours through the printing process or when using paint it is called subtractive colour. It begins with white and, as more colours are added, the colour will eventually end up darker and darker, usually ending up black. Using additive colours is usually done on a computer - the colours on the screen are created by using light and adding colour. Additive colour mixing starts with black, and as more colour is added, the result is lighter tending towards white.

### Subtractive Colours

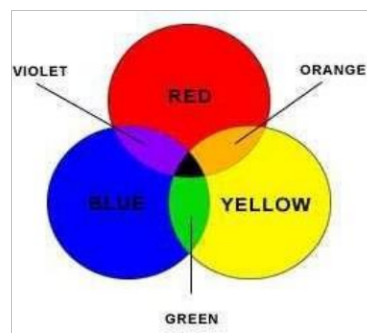
These are the colours that are associated with the subtraction of light and used in pigments for making paints, inks, coloured fabrics, and general coloured coatings (paints etc.) that are seen and are in use every day.

All printing processes use subtractive colours in the form of cyan (blue) magenta (red) yellow and black. This process is known as CMYK (cyan, magenta, yellow, and black). The K stands for black in the printing process. If all three of the subtractive primary colours were combined, they would produce black.

### Additive Colours

Additive colours are those which can be made by emitted light. The additive primary colours are red, green and blue. If all three of the additive colours were merged together in the form of light, the result would be the colour white.

### Secondary Colours



**Fig 5.2**

A secondary colour is one which is made by mixing two primary colours. An example of this would be mixing red and yellow to produce orange. Secondary colours are made by combining true primary colours.

### Tertiary Colours

The mixing process can be taken further to create tertiary colours, also known as intermediate colours. These colours are produced when one primary colour is combined with an equal part of one secondary colour. An example of this is a bluey-purple hue being created when the primary colour blue is merged with the secondary colour purple. The examples below show how the different hues are created.

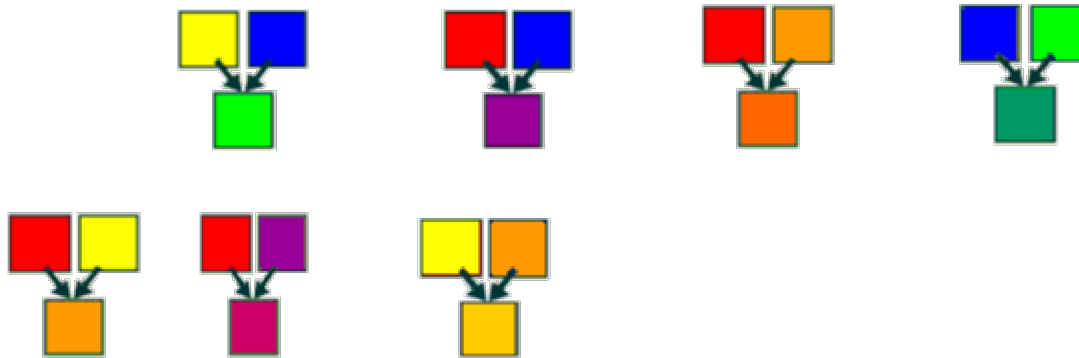


Fig 5.3

## Dimensions of Colour

Dimensions of colour (also called properties or qualities of colour) are very individual and distinct. The colour dimensions which are present in all colours are:

1. The hue or name of colour (its warmth or coolness)
2. The value of colour (its lightness or darkness)
3. The intensity of colour (its brightness or dullness)

### Hue

The *hue* enables us to tell one colour from another, such as red from blue or green, and different shades of the same colours.

### Value

*Value* refers to the use of dark and light, or the variation of light strength in a colour. The value scale moves from white to black. White is pure light and black is the total absence of light. It is clear therefore that adding white will lighten a colour and adding black will darken it.

There are also other aspects to consider when discussing colour, for example:

- a) **tint:** the lighter values are called tints. To create a tint, it is necessary to add only white. For example, pink is a tint of red.
- b) **shade:** the darker values are called shades. To create a shade of a particular colour, add only black.
- c) **tone:** to create a tone of a particular colour, add various degrees of both black and white.

Each garment will have value contrasts, even if they are only sometimes produced by normal gathers and folds. To achieve a very dramatic effect, use strong value contrasts such as black against white. Close value contrasts will create a more conservative, refined effect, which is generally easier for the average person to accept.

## Intensity

When referring to the intensity of colour, this means the brightness, strength, paleness or weakness of that colour. Bright colours are high-intensity colours, whereas pale colours are considered low-intensity colours. If we look at the colour blue, it can be seen that marine blue is a high-intensity colour whereas a soft, pastel blue is of a lower intensity. The intensity of a colour can be lowered by adding water, for example.

In general, very vivid colours should be used with others of the same intensity to create balance. This balance can also be created by using large amounts of pale or dark colours, with a touch of bright colour in a trim, embroidery or top-stitching.

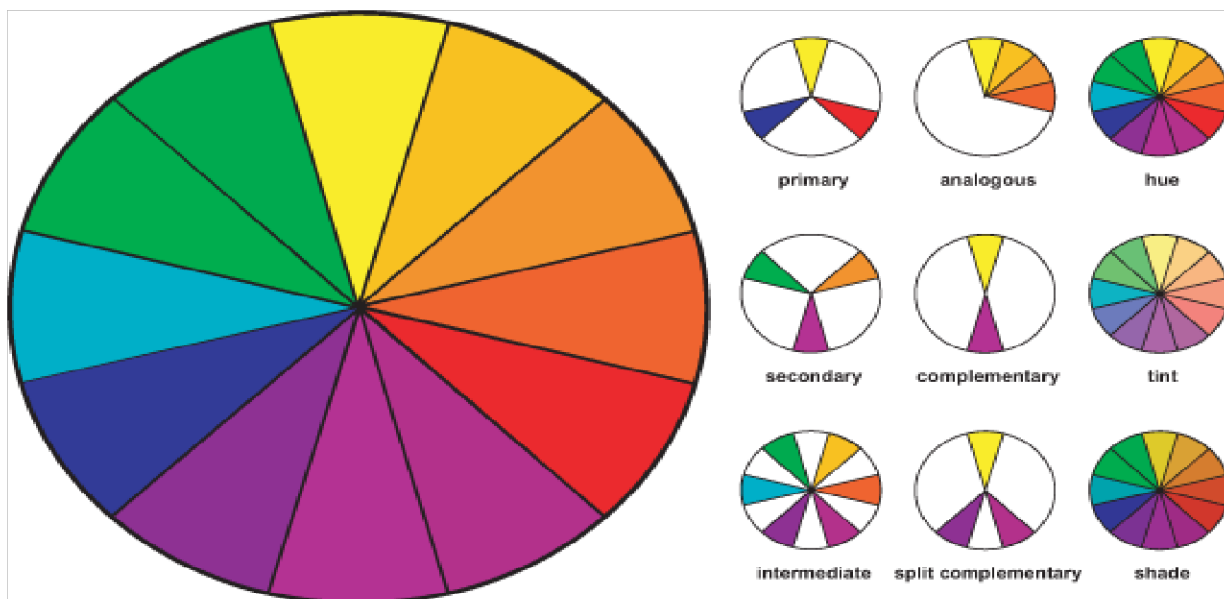


Fig: 5.4

The texture of a fabric is extremely important and must be taken into account when designing. A rougher surface will reflect light in small amounts and cast shadows, which will result in dulling the intensity of the colour. A smoother surface will seem to blend colours which are used together, and give the impression of colours vibrating on a shiny surface.

## Colour Harmonies

Colour harmony can be created by using a colour wheel. The usual colour harmonies can be divided into two main groups:

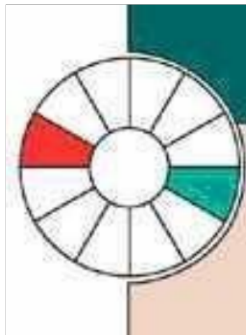
- Harmonies of related colours
- Harmonies of contrasting colours

### Harmony of Related Colours

Related colour harmonies have one hue in common.

### Complementary Harmony:

Complementary Harmony is created by using hues which lie opposite each other on the colour wheel.



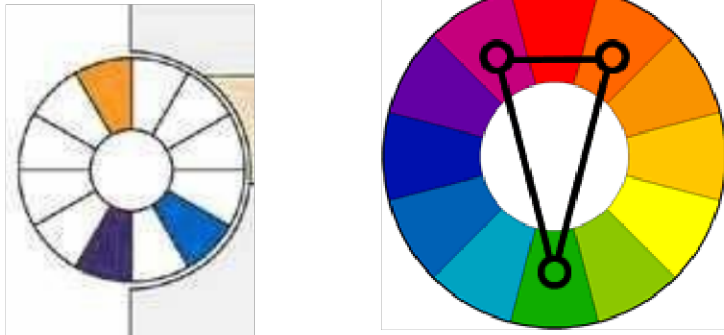
**Fig .5.5**

Blue and orange lie opposite each other on the colour wheel, as do red and green, yellow-orange and blue-violet, and they are all examples of complementary harmony as shown in Fig 5.4. Simple complementary arrangements of two hues can be expanded using tints, tones, or shades of the chosen hues.

When complementary hues are used in equal parts to their full strength, the result will be that they intensify each-other and create sharp contrasts. This will create a vibration that can be painful to the eye. Red will seem even redder when used with its complement, green, than when it is used with yellow. Green appears greener when used with red, than when it's used next to yellow. This occurrence is called simultaneous contrast. The vibrations caused by these combinations create an effect which can be lessened if a smaller amount of intense colour is used, or by swapping a tone or shade of the desired hue.

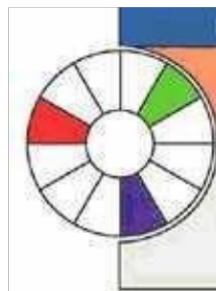
### Split complement harmony

Below is the complementary colour scheme set out in more of a sophisticated way. It is mainly composed of one colour, the dominant one, and two hues that sit directly across from it on the colour wheel.



**Fig 5.6** shows an example of a split complementary colour scheme, such as yellow combined with red-violet and blue-violet

### Triad harmony:



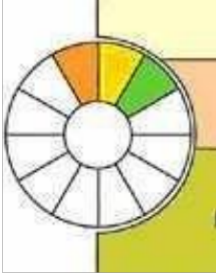
**Fig 5.7** shows a triad harmony, which uses three hues located an equal distance apart on the colour wheel. Here, the sample triad colour schemes are yellow, red and blue or orange, purple and green.

## Contrasting Colour Harmonies

Contrasting colour harmonies do not have any hue(s) in common.

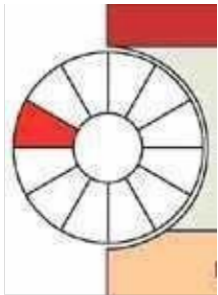
### Analogous Harmony

Analogous harmony is the use of colours that appear next to each other on the colour wheel.



**Fig 5.8 Monochromatic Harmonies**

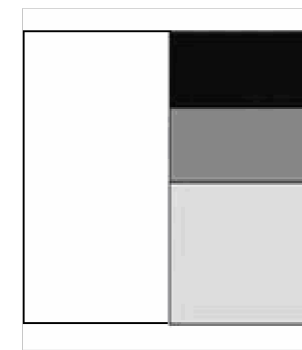
Monochromatic Harmonies consist of only one hue.



**Fig 5.9**

A range of tints, tones and shades of one hue are used in Monochromatic Harmony (Fig 5.9). For example, light pink, rose, maroon and watermelon. If the value and chroma gradations are too close, it can have the effect of being unpleasing to the eye because it can create an ambiguity of colours and the impression of a mismatch. These schemes need noticeable differences, in order to ensure the effect is not tiring or monotonous.

**Achromatic colour scheme:**



**Fig 5.10**

Achromatic means without colour. This scheme consists of black and white at the two extremes, with shades of grey in-between.

## Application of Colour on Fashion Figure

Colour, being so important, is one of the first things that others will notice about any piece of clothing. Using certain colours can achieve the illusion of the size of a figure, the same way as line does. Colours should be chosen based on the wearer's complexion, hair, skin and eyes, and the overall figure size. Colours must always complement a person's complexion. They should bring out the natural pink or red tones of the skin. If someone has redder skin than usual or a florid skin tone (red/blue), then it would be best to avoid any colours that bring more attention to the redness of the skin.

Colours are classed in groups such as warm ie. reds, yellows and oranges, or cool ie. blues and greens. Warm colours tend to create the illusion of greater size. Cool colours tend to create the illusion of lesser size. The illusion can also be achieved through the brightness/lightness or dullness/darkness of colours. Bright or light colours create the illusion of making things appear bigger and dull or dark colours make figures seem smaller.

Contrasting colours when worn as tops and bottoms will produce a horizontal line where they meet. This will make the figure appear shorter. In order to create the opposite effect of height and slimness, it is necessary to use a single colour in the outfit's design.

## Basic Principles of Colour in Design

### Dominant or Controlling Colour

The dominant colour, sometimes referred to as the controlling colour, is the colour that dominates a large area or gives strength of colour in a smaller area. When designing, it is necessary to decide whether the foundation or background colour is to be the dominant colour, or a secondary colour. Plan to use a large amount of quiet background colour and a small amount of bold, strong colour. Use light tones for any large foundation areas.

### Greying

The use of grey tones is subtle and more restful to the eye. Using a mix of bright colours with grey tones is a good combination. For example, red and yellow will appear to clash, but when combined with grey they will become rose and tan, and go very well together. Be careful not to use too much grey however as it will create muddy tones.

### Relief and Contrast Colours

Choose relief and contrast colours, then use them in all parts of the composition. Use white to soften strongly contrasting colours and grey to soften darker contrasts.

## Accent Colours

Use pure, bright and intense colours only in accessories, etc. Distribute them so they will not be spotty. The smaller the area, the brighter the colour may be. The larger the area, the softer the tone should be. Don't use large amounts of pure bright colour.

## Keying

Keying is another way of creating harmony. A key colour is the dominant or controlling colour, and any other colours in the scheme should be "keyed" or harmonised with it. Two colours in which any part of a third colour is present can be linked together.

## Application of Colour in Dress Designing

When designing, it is important to select a combination of colour, texture and line in relation to the figure. Texture will affect how colours appear and the way design lines function.

The effect on an outfit will depend on what colours are used when there is more than one, how much of a particular colour is used, where they are placed and the contrast/s between them. The size and the colours must be carefully considered - especially if they are already printed on the fabric. As a general rule, the size of the print must be considered in relation to the size of the figure. For smaller figures, it is best to use fabrics with small designs, while larger designs/prints are better used for larger figures.

## Beautiful Colours Correctly Used

Just as with any of the other elements of design, it is very important to understand and use the proper application of colour in design.

## Colour Types

Regarding the choice of which colours to use for individual people, there are no set rules because no two people have the exact same complexion, eye/hair colour or general contours of the body. All these aspects must be taken into consideration when deciding upon suitable colours. A small figured, fair haired, fair complexion woman might look attractive wearing a particular colour, but this may look totally different, even displeasing, on a similarly fair-haired, fair-skinned woman with a larger figure.

## Blonde

Greys, blues, greens and violets seem to suit blonde people more than warm brown tones, for example. This, however, changes when deciding on colours for a fair-haired, brown-eyed person whose skin type is more typical of a brunette. This type of blonde will look better in the same warmish browns. Blondes should usually stay away from wearing tweeds or other heavy materials. Jersey, crepes, velveteen or chiffons are more suitable for the fairer-haired woman. Another thing to be avoided is heavy jewellery. Small beads or jade, amethyst, turquoise and topaz are a better choice.

### **Titian Haired Blonde**

The titian haired person is one with a reddish-brown shade or red in the hair. These people should avoid many shades of green, which is the main complement of red, although some darker shades of green may be suitable. Bright blue colours tend to emphasise the redness of these people's hair and as such, should also be avoided. Navy or midnight blues, however, can be suitable, as well as deep browns, black, cream, and ivory hues.

### **The Brunette**

With brunettes who have good skin colouring, any shade can be suitable. If the person is pale, it is best to avoid pastel or duller shades. A person with a more olive complexion should avoid dark colours as they may make her look older. Warmer tones such as reds, oranges and yellows are generally good colours for brunettes.

### **Grey or White-Haired**

Grey-haired people can look good in black, but it would be best to add a touch of white on the collar, for example, to relieve the strength of the black near the face. White, on the other hand, is a very good colour for grey or white haired people. Depending on the colour of the person's eyes and other features, dull, warm colours may also work very well.

### **A Sallow Complexion**

For those with sallow complexions, which would be yellowish or ashen, it is important to select colours very carefully. It is better to select colours that will reflect colour in the cheeks such as shades of red, rose or greys, with tints of pink as well as blue-greens which will help bring out the colour in the cheeks. It is usually best to avoid greens and to definitely steer clear of yellows.

### **Florid Complexion**

Those with florid or ruddy complexions should avoid reds. These will further bring out the redness already in the cheeks and emphasise it even more. Purples, dark blues, browns or black however can suit this type of complexion. Darker shades suit this person more than the lighter shades.

#### **Further Reading:**

- ✓ *Fashion Design Essentials: 100 Principles of Fashion Design (By Jay Calderin )*
- ✓ *Introduction to Fashion Design ( By Patrick John) 2015*
- ✓ *Limitless Fashion: 6x9 120 pages - Sketchbook, Breaking The Rules In Style, Design Clothes, Patterns, Select Materials, Color Schemes, Make Notes and Much More by Ardnmean Publishing | Aug 7, 2021*