

# Principles of Design

# Unit

# 4

## Unit 4

### Principles of Design

#### Learning Outcomes

On successful completion of this Unit the learner will be able to:

- Analyse the principles of design
- Explain how these principles are applied when designing a garment
- Explore the importance of design principles in designing

The Principles of Design are guidelines to help you use the Elements of Design (explored in the previous unit). The Principles of Design are used for creating, discussing & evaluating garment designs that are being worn or on a mannequin. In order to apply the Elements of Design to a design properly, you must remember that balance, proportion, emphasis and unity/harmony are essential. These elements and principals are not abstract art terms only used in the classroom but rather specific guides that help you to create attractive garments.

The Principles of Design help a designer to express their ideas in different and artistic way. The principals also help a designer to express themselves in a way that is visually pleasing and attractive.

The Principles of Design are:

1. Balance
2. Emphasis
3. Harmony
4. Proportion
5. Rhythm

#### Balance

When something is said to have balance it means that the item being described also has pose, equilibrium, stability and security. The average human body is visually symmetrical, which means that the body appears to be exactly the same on each side (the sides are divided by a central line). When important details or decorations are designed for a dress, they should be placed so that they seem to have the same weight (or take up the same amount of space) on each side of an imaginary centre. When the Elements of Design are in balance, a pleasing harmony is established for the whole garment. Balance in garments is produced by the structural build of it and by added decorations.



Fig 4.1

### Formal Balance

Formal balance, also called symmetrical balance, is easier to create but may not be as interesting as informal balance. This occurs when identical objects are the exact same distance from a centre point. It can also be thought of as one half of the garment is the exact mirror image of the other half. In dress design the feeling of dignity or formality is created by formal balance.

The upper and lower portions of a design are also so arranged to appear balanced, this means that it shouldn't look like the bottom of the design (pants, shorts, skirt ect.) is heavier or has more weight then the top (jacket or shirt). For example a dark coloured shirt paired with a lighter shade of pants makes a person look much shorter then they are.



Fig 4.2

Fig 4. 2 is an example of good formal balance. Both sides of the dress are exactly alike, the plaiting on either side is the same width and amount, and is placed the same distance from the centre line running from the head to the feet. The jacket too, has the same ornament on either side so it appears to be perfectly balanced. The dress is equally well balanced on both the top and bottom too because the jacket above balances with the plaiting below.



Fig 4.3

Fig.4.3 is an example of formal balance that isn't actually balanced. The balance can be improved by moving the monogram to the centre of the dress to make both sides the same. Currently the dress appears out of balance.

### Informal balance

Informal balance occurs when objects appear to balance each other, but not through the tactic of placing the same detail in the exact same place to achieve balance. Instead objects of different sizes, shapes and different attraction are arranged, the larger and more attractive designs are kept far away from the centre in order to achieve balance. If used correctly, informal designs can be very attractive and visually pleasing.



Fig 4.4

A good example of informal balance may be seen in Fig 3.4. where both sides of the dress are different. The large sash placed near the centre lines is balanced by the small ornament on the shoulder which is placed as far as possible from the centre line.

On the other hand, Fig 3.5 is a poor example of informal balance, because of all the weight is placed on one side of the dress, thereby making the dress very one-sided.

Fig 4.5



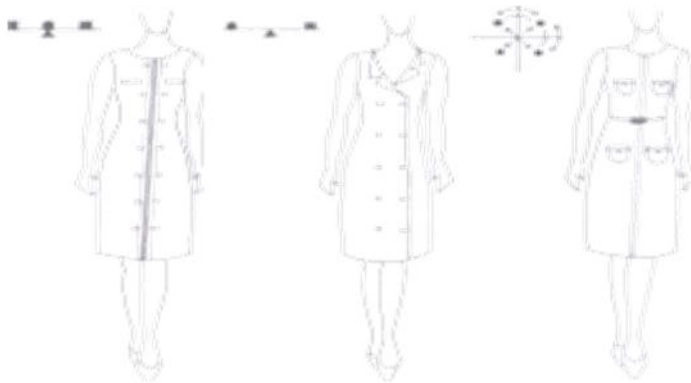
In order for a dress to seem balanced it the weight distribution across it must be equal on all sides of the centre. When using formal balance you are less likely to make mistakes because each line and decoration is repeated on both sides of the centre line, leaving no room for error.

However formal balance should not be used for all dresses, as it tends to be too severe for some occasions. Formal balance works best for street dresses and sport clothes, whereas informal balance is more often found in afternoon and evening gowns.

Informal balance has the ability to correct the appearance of body irregularities, this is because people looking at the garment and wearer will not compares one side of the body with the other since the garment is the same on both sides. Informal balance can also create illusions that will make the body appear symmetrical if the right and left sides of the garment are cut and handled differently (to fit the wearer). Assembling this type of garment is more time consuming, which adds to the cost of manufacturing.

## Radial Balance

Radial balance occurs when the major parts of the design radiate outwards from a central point, pleats, seams, gathers, darts, or motifs flow outwards from the focal point creating a sunburst effect. This type of balance is found often on the necklines of dresses. Because of intricate feature involved in this type of construction, it is found only in expensive clothing (Fig: 3.8 c).



a. Formal Balance    b. Informal Balance    c. Radial Balance

Fig 4.8

## Emphasis

Emphasis is when all the attention is focused on one area, which acts as the centre piece of the design. This area that is being emphasized will draw your eye more than any other part of the garment and is the centre of attention. All areas of a garment can be interesting, however they should not all have the same amount of strength to draw your eye, one area must stand out above the others. Without a centre of interest, an outfit looks unplanned and boring. On the other hand, there should never be more than one place with emphasis on it, the two places would compete and confuse each other. Random use of details (especially those of equal importance such as pockets) is also very distracting to the viewer. In order to create a successful design distractions should be removed and the dominant design feature strengthened and you must be careful not to emphasize awkward parts of the body. The most important thing however, is that the wearer is the centre of attraction, lines leading to and light colours around the face are very effective in placing the attention on the wearer. For example a black dress with white collar and cuffs will direct the eye to the face and hands.



Fig.4.9



Fig.4.10

Fig 4.9 is a good example of emphasis, the bow at the neckline brings attention to this part of the dress and allows the head to be the centre of interest, as it should be.

In comparison Fig. 4.10 is a very bad example of emphasis. The large, curved and meaningless design on the dress does work well with the V-shaped neck. The designer should eliminate the design or use one that doesn't place emphasis on the centre of the dress instead. A proper design should bring the attention to the wearers' head.

Emphasis should also not be placed in an area the wearer wishes to minimize. The face or personality area of a person is the most important and should be emphasized most often as it is most unique and individualistic area. Emphasis on a personality can be created by colour and texture contrasts, necklines, jewellery, scarves, hats, hairstyles, and makeup. However, as mentioned earlier is it important to only emphasis one area of a garment/person.

Attractive body parts can also be emphasized. Attention can be drawn to hands by using long sleeves, linked cuffs, bracelets and rings and even by well manicured nails. Hands that are dirty or with chewed nails can bring negative emphasis to this area. Similarly, legs and feet can be placed in the spotlight by using unusual hem lengths, design details at the hem, textured or coloured hosiery and even elaborate footwear. Parts of the torso, such as the waist and hips, also can become areas of interest when garments lines or decorations bring attention to these areas.

### Creating Emphasis in Garments

1. Emphasis can be created by grouping rows of stripes, tucks, gathers, ruffles, buttons or trim in one area, or by a concentration of jewellery such as rows of beads, chains or pins (Fig: 4.11d).

2. Unusual lines and shapes naturally draw your eye because of the uniqueness. This means that uniquely shaped collars, sleeves, pockets, jewellery, buttons, belts and trims can be used to create emphasis.
3. Different fabric designs and textures that are different also attract attention, these elaborate or complex fabric designs are best displayed when used in a simple garment design, so that the fabric is the centre piece of attention. When decoration is placed on a plain, contrast background, the decoration is emphasized (Fig: 4.11b). Trims, embroidery appliqué, jewellery, buttons and belt buckles all can be the centre piece of a garment if placed on a contrasting background.
4. Contrasting colours, lines, shapes, and textures will create emphasis when placed next to each other (Fig: 4.11 c). However, some related factor must be used to connect the contrasting elements or it will result in chaos, using contrasts too many times will also make them lose their impact in the design.
5. When different shapes are used in a design they are emphasized when their intensity, value or hue is different from the background. Yokes, collars, cuffs and shapes are also more noticeable when their edges are outlined in a contrasting trim.
6. A contrast between two textures is also a way to create emphasis. On the other hand, a boring and dull look is created when only one type of texture is used in a garment.
7. Emphasis can also be created by a constant progression in ruffles, contrasting bands, buttons and other trims (Fig: 4.11a).



Fig 4.11

a. Repetition of Shapes   b. Placement of decoration   c. unusual texture   d. Grouping Tucks

## Harmony / Unity

Harmony can also be called unity, as harmony is a sort of visual unity in clothing. Harmony is created when all parts of the design are related and come together to create a whole. When a design has unity, it has an overall feel that is attractive and mesmerizing to look at. Harmony is usually created when the Elements of Design are used effectively according to the Design Principles.

### Unity in Clothing Design

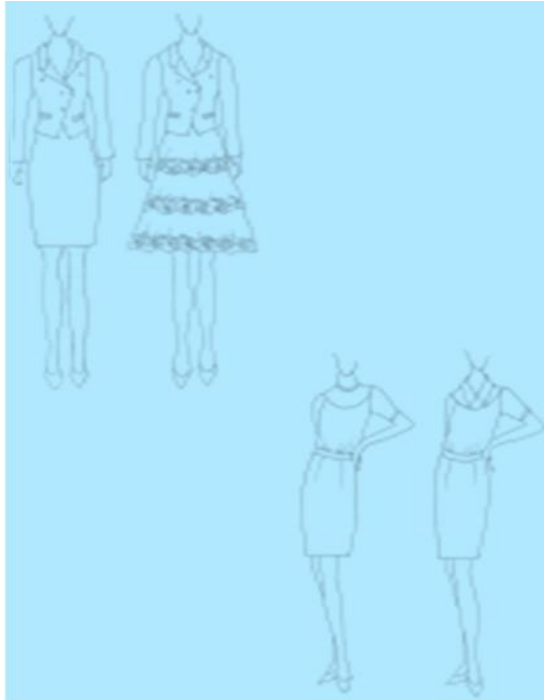
Creating a harmony between the shape and form of a garment is essential in order to have a good design. When attempting to achieve harmony in a garment, the functionality of it is also very important, harmony implies that a garment is comfortable, moves easily and breathes with body, is able to perform the way it's meant to and fits well.

Harmony is also achieved in a physical way, this is done when each of the garment parts are in scale and each of their proportions seem to belong with each other and the figure. Details that come forward and attract the viewer's eye will harmonize well with details that recede and act as a background. Every part of the garment should flow together to make the garment look like it is one continuous flow of fabric and details. The term "total look" has been created to describe this unity/harmony in a dress. A total look is achieved when each part of the design, including garments accessories, jewellery, hairstyle and facial ornamentation, expresses a single theme that is appropriate for the wearer and the event it is being worn to.

Shapes and spaces created by pockets, collars, cuffs, sleeves etc will harmonize with the rest of the garment if they have similar lines to those found in the garment (soft and curved or straight and angular). Harmony can also be achieved through colour schemes such as monochromatic and analogous colours. Texture is also another way to create unity in a garment, textures which gently move from clinging to fluid folds, introduce harmony in the garment.

In order to achieve harmony in any garment, the three Aspects of Design (function, structure and decoration) must compliment each other and flow together. This means that the occasion, climate, size, gender, age, personal colouring, life style and personality of the wearer should be considered when designing the garments.

However, despite all these different aspects of harmony, creating a garment with no variation in colour, texture, shape or space can also be boring, you must find a balance. To avoid being boring a small area of contrast colour or a piece of contrasting texture can often add interesting element in the design.



Harmonious and disharmonious design  
Fig 4.12

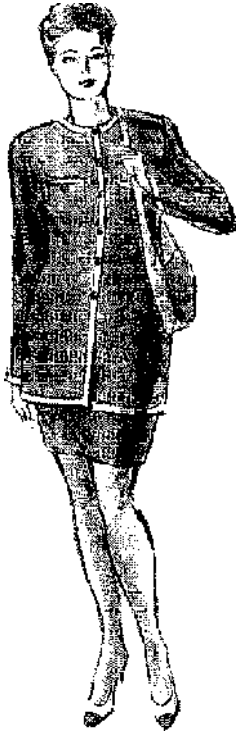
## Proportion or Scale

When something is in proportion all parts of the garment are related and made to the right size. Generally, unequal proportion is more interesting to the viewer than equal proportion. When we see an outfit (in the mirror, on someone else, or in a pattern catalogue) our eye automatically compares the smaller part of the outfit with the larger one, this comparison is called *proportion*. When the parts of an garment are divided equally (equal proportion), the garment seems shorter and wider. A good example of equal proportions is a Chanel-style suit, with a hip-length jacket and knee-length skirt. Uneven proportions on the other hand, keep the viewer's eye moving and gives it interesting things to look at.

The height and width of all parts of a design must all be related to each other, as individual sections of a garment, such as sleeves, pockets, and collar, must be comparable in size to each other as well as to the total silhouette.

Certain proportion ratios have a certain effect on the way the garment looks on a person. Proportions of two-thirds on top to one-third on the bottom make a person look taller and slimmer, for example, a fingertip-length jacket over a short skirt or a knee-length tunic over pants. Proportions of one-third on top to two-thirds on the bottom are also pleasing, such as an

Empire-waisted dress or a waist-length jacket with a long flared skirt. Having width on one part of the torso (either the top or the bottom) makes that area seem smaller, for example, a flared skirt can make hips look less wide or shoulder pads with extended shoulders make the lower torso look narrower by comparison.



#### 4.13

This long jacket and short skirt combination (uneven proportion) makes the person look taller and slimmer

The way trimmings, pleats, and tucks are spaced must also have meaningful relation to the total design. You must ensure that the trimmings must harmonize with the space around them as well as with the feeling of the garment, they can't be too heavy or too light, too large or too small.

### Proportion and Body Conformation

The size of the human body can be divided into three generalized categories, small, medium and large. A person should know which category their body fits into in order to select the right garment size and accessories. A small person should limit themselves to items that are small or medium in size, the middle or medium sized person may select from the small, medium or large sizes and the large person should be limited to the large or medium scale. Details on a garment, such as yokes, collars, and pockets must also be the right size in comparison to the overall design and the wearer. A tiny pocket will look out of place on a large, heavy overcoat. Similarly,

details such as buttons and trimmings should also be related to the size of the garments so they don't look too small or get lost.

When a person wears clothing that is too large for their body, the relationship of size becomes out of proportion. The small build individual gets lost in the large scale of the clothing and accessories. In contrast, a larger bodied person who wears clothing that is too small for them will make the clothing look even smaller and more out of proportion due to their body size. A person of medium size has more freedom to select clothing and accessories of different size ranges. So when considering the proportions of an outfit, the person should always use their body as a guide for what clothing size they purchase. A garment looks best when the intended natural body division (chest, waist or hips) of the garment actually sits where it was designed to, thus explaining why proper fit of clothing is so important.

#### VARIOUS PROPORTIONS IN CLOTHING DESIGN



Fig 4.14

## Rhythm (Repetition)

Rhythm is the feeling of organized movement, when the Design Elements are arranged properly the eye moves easily over the apparel, creating rhythm. Rhythm is created by a gradual change which gives the feeling of a flow or continuity throughout the design. The rhythmic feeling will become stronger when a pattern is repeated, but this is not the only way to create rhythm, as rhythm is also used effectively with line, shape and space and by changing the hue, value and intensity of colour.

### Rhythm in Clothing Design

Rhythm can be created in a garment by repetition, gradation, transition, opposition or radial arrangement of various decorations, designs and patterns on a garment. Rhythm is achieved in a garment by a flowing combination of lines, shapes, colours, and textures.

### Rhythm through Repetition

Rhythm is achieved by repetition, repeating motifs, shapes, buttons, tucks, pleats, laces, edgings, colour, textures, fabric designs will create a rhythm. Rhythm can also be created when all parts of the garment have the same shaped edges, they can be squared, rounded, or scalloped. Repetition of colours can also create a good rhythmical effect, especially if the colours are distributed in an interesting way (Fig: 4.15)

A rhythm created by smooth, repeating lines reminds the viewer of gentle waves which creates a peaceful and calming effect. Repeated lines which are sharp and jagged creates an exciting rhythm, which is more suitable for dramatic evening wear, however a designer should be cautious when using a sharp jagged rhythm as it can disturb the garments overall design. On the other hand, pleats, tucks, stitching and folds create an abrupt rhythm and trimmings like beads, buttons and laces create many different rhythmic effects.

### Rhythm through Progression

Rhythm is also created by progression or gradation. Gradation is a gradual increase or decrease of similar design elements over a space, for example there are a few sparkles at the top of a dress and the amount gradually increases until the bottom of the dress is covered in sparkles, colours can also go from light to dark or textures from fine to coarse. Shapes can also change in size, gradually getting smaller or larger, or lines can change from thin to thick. Gradual changes give a sense of continuity and a feeling of movement to the garment. A change of gradually increasing or decreasing allows changes in sizes of motifs, buttons, trims, flowers, ruffles, intensity and fabric design to create rhythm. (Fig: 4.15 d).

### Rhythm through Transition:

Transition is the fluid rhythm that your eye follows when a curved line leads it in a different direction. The use of curved lines in a transition allows the eye to change direction gradually rather than abruptly. Lines and shapes sweep and glide over the figure in a flowing rhythm allowing them to lead the eye gracefully and easily from one area or direction to another. In a transition involving sweeping lines and shapes there is no abruptness like with jagged lines. Transition can also be achieved by using scarves, shawls, ruffles and gathers in an outfit (Fig: 4.15 b).

### Rhythm through Radiation:

Rhythm by radiation creates a feeling of movement outward in different directions. This organized movement starts at a central point of gathers, folds, tucks, darts, pleats and lines and then expands outward. The direction of the radiating lines may be in one direction, opposite direction, several directions or all directions, as shown in Fig: 4.15 c.

### Rhythm by Continuous line Movement

This type of rhythm is created by flowing lines of trims, bands of colour and fabric designs which make the eye move in a continuous line. This type of rhythm also unifies the garment design, creating harmony. The rhythm is broken when lines, trimmings, or fabric designs are not matched at the seams or at other points on the garment. Fabric's designs with randomly placed motifs may lack rhythm, as the fabric design may produce strange effects when worn on the body, so it is very important to be careful when using a randomly placed fabric design.

Fig 4.15



a) Repetition of flares b) Transition of line c) Radiation of shape d) Progression of shape

## Other Uses of Repetition

The use of repetition is one of the most helpful tools in designing. A line, shape, or detail repeated in another area of the garment helps to carry the theme throughout the whole design. In a dress design for example, a V neck style might be repeated upside down in bodice seaming or in an inverted pleat in the skirt. Soft gathers at the neck are repeated at the hip in order to unify the design.

Rhythm can be achieved through the combination of lines, shape, colour and texture by the following certain rules...

1. By regularly repeating trims,(button etc.,) texture, and fabric design/prints.
2. Progression of trims, colours, textures and fabric designs.
3. Radiation or outward movement from a central point that occurs within the structure of gathers, folds, tucks darts etc.
4. Continuous flowing lines such as those in bonds of colours, textures and fabric designs.



Fig. 4.16

Fig. 4.17

Fig. 4.16 shows good rhythm, which is created by a line, as the eye can trace easily over the curved lines of the skirt. The lines allow the viewers attention to be pulled to the upper part of the dress, the lines also don't conflict, allowing the eye to be uncertain of what it should be looking at on the dress. This is not the case in Fig. 4.17, which shows very poor rhythm of line. The curved lines of the upper and lower parts of the dress interfere with the lines running around the dress.

Design Elements are successful or not depending on how they relate to on another within a garment. Principles of Design serve as guidelines for combining these elements in a successful way. Designers may not consciously think of these principles as they work, but when something

is wrong with a design, they are able to analyze the problem by checking proportion, balance, repetition, emphasis, or harmony. if the piece isn't harmonious they ensure the first four elements are in place as they create the harmony. These principles are flexible and should always be interpreted within the context of current fashion trends.

### Suggested Further Reading:

- ✓ *Fashion Design Course: Principles, practice and Techniques (By Caroline Tatham, Julian Seaman, Thames and Hudson)*
- ✓ *Fashion: A Very Short Introduction ( By Rebecca Arnold)*