



# UNIT-3

## Design Principles

### Learning Outcomes

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

- ✓ the principles of interior design such as unity, balance, proportion, scale, rhythm and emphasis and,
- ✓ discover how by applying these principles successful interiors can be created.

## Unit 3

### Design Principles

Interior design is actually a science which is all about understanding the basic design principles- overarching ideas like balance and scale. The first part of any project involves the gathering and analysis of information as a foundation from which the designer can develop ideas. The second stage is the creative one that is guided by certain design principles and guidelines. There have been number of such principles laid out over the centuries but their purpose has always been the same: to create balanced and harmonious spaces appropriate for their function. In order to achieve this, the designer has to understand and consider the following key areas:

Human dimensions, scale and proportion and ordering principles.

#### **Human Dimensions**

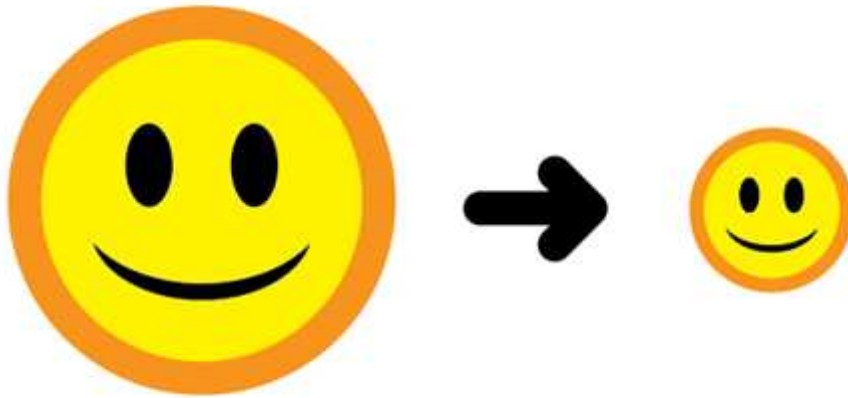
A designer needs to be familiar with the amount of space there would realistically be required for certain activities in order to create spaces that are comfortable for the end-users. The amount of room required for certain activities- putting a baby into a cot, shrugging on a coat, towel drying after shower or making a bed. Also the most convenient height of a working surface or storage access-all has to be considered at initial planning stage of a project.

#### **Scale and Proportion**

Scale is the size of an object compared to other objects in a piece and proportion is the size of a part of an object compared to the rest of the object.

Proportioning systems have been developed through time to try to establish an ideal measure of beauty. They have also allowed designers or architects to establish consistent set of visual relationship that create balance and harmony.

In order to properly keep a room to scale, a designer has to take the sizes of the objects into consideration. The heights and weights of the furniture should be relative to the size of the room. A giant sofa in a tiny living room would not look right; neither the tiny nightstands next to a king size bed. This also relates to the proportion of the objects: the shade of the lamp should be in proportion to the base. Scale also work well with contrast if we put a small circle next to a big circle. We see that the big circle appears to be a lot bigger than the small circle.



### Balance/ Harmony

In China, lines are traditionally believed to affect people psychologically. Horizontal lines create a feeling of tranquillity, and vertical lines are more energising, a combination of the two is said to bring about harmony. Chinese philosophy and way of life are now used throughout the world to create balanced and harmonious interiors. There are different styles of balance: symmetrical, asymmetrical and radial.

Symmetrical balance is usually found in traditional interiors. It is the mirror image; one side is the mirror image of another. It is characterised by the same objects repeated in the same positions on either side of a vertical axis. It also reflects the human form and we feel comfortable in this balanced setting. Asymmetrical balance is achieved with some dissimilar objects that have equal visual weight or eye attraction. Asymmetrical balance is more casual and less contrived in feeling, but difficult to achieve. Asymmetry suggests movements and leads to more lively interiors. Radial symmetry is when the elements of a design are arrayed around a centre point. A spiral stair case is an example of radial balance.

Overall beauty of a design scheme can be achieved if it is well balanced. This balance is established in colours, shapes, sizes, textures and so on. Because different colours, shapes, sizes etc, create different degrees of interest in a scheme. It is the distribution of this interest which you have to control. Balance can also be described as achieving equilibrium.



Symmetrical balance



Asymmetrical balance

## Contrast

We live in the world of contrasts. There are differences between tall and short, black and white, hard and soft, thin and thick so on. Contrasts can be introduced into interiors in many ways: for example, contrast of form, different shapes, heights and sizes, contrast of colours, contrast of textures and contrast of light and shades.



## Colour contrast

## Rhythm

It's the repetition of elements in space and time. There is always a beginning and an end to the pattern: think of columns, or an organized grouping of photos. Symmetry, arranging elements around a centre line like a fireplace, is one way to create rhythm. It is rhythmic to repeat a shape or colour (for example, a circular coffee table is matched with a circular mirror)

Rhythm is defined as continuity, recurrence or organised movement. To achieve these themes in a design one has to think about repetition, progression, and transition. These mechanisms will impart a sense of movement to a space, leading the eye from one design element to another. **Repetition** is the use of same element more than once throughout a space. A pattern, colour, texture, line or any other element can be repeated in a design, even for more than once. **Progression** is taking an element and increasing or decreasing one or more of its qualities. The most common example of this could be one type of item used in different sizes. A cluster of candles of varying sizes on a simple tray creates interest because of the natural progression shown. Progression can also be achieved via colour, such as in a monochromatic colour scheme where each element is a slightly different shade of the same hue. **Transition** is a little harder to define. Unlike repetition or progression, transition tends to be a smoother flow, where the eye naturally glides from one area to another. The common example of this can be curved lines to gently lead the eye, such as arched door way or winding path.

Too many disparate and disjointed elements in a space can be dis-quieting to the minds' eye and a designer can make use of rhythm and repetition of recurring elements or patterns to avoid this.



### **Emphasis/ Focal Point**

Every room needs a focal point- the area that draws our attention. This can be something as obvious as a fire place or an eye catching display. A focal point must be dominant to draw attention and interesting enough to encourage the viewer to look further. A focal point thus must have a lasting impression but must also be an integral part of the decoration, linked through scale, colour or theme. If there is no focal point in the room already, it can be created, by highlighting a particular piece of furniture, an art work or by simply painting a contrasting colour in one area. A balance is also required when making a focal point, so that the focal point does not hog all of the attention. You can also use emphasis to divert the eye from an existing focal point by placing hot colours or small and visually interesting items away from the area.



### **Unity and Variety**

Unity is the togetherness feel that things belong together. It is the hall mark of a good design. It is the final result in a composition when all the design elements work harmoniously together, giving the viewer a satisfying sense of belonging and relationship. Unity in a design scheme is achieved when all the design principles (balance, harmony, rhythm, emphasis, contrast, proportion, scale) have been applied correctly. Variety is change. Too much unity can be boring and too much variety can cause a headache.



## Practical Planning

### Purpose

Although a designer will be aware of the aesthetic and holistic aspects of any space being planned, function and practicality are the obvious priorities. An area must be planned for a particular purpose or set of purposes. Any place being planned must cater the needs and activities of the people occupying that space, with special attention given to any physically challenging users.

### Circulation

Circulation through a space is a crucial aspect of a design. A designer working on a restaurant, for example, might generate a traffic-flow plan to ensure that staff and guests can move about the space in comfort and safety, from entrance to the tables, from tables to the toilets and so on. In all planning sufficient space needs to be allowed around furniture for the opening of drawers, windows and cupboard doors.

### Storage

Storage plays a key role in all our lives and a designer has to plan this with precision to ensure that everything required can be accommodated with minimum efficiency and ease of access.

### Safety

Safety in interiors is also a planning priority and a designer should take particular care where children and elderly people are concerned. The planning regulations for the public areas are laid down even more carefully.

### Structural Considerations

Before taking decisions on the structural side of a project, a designer should consult with the engineer or a surveyor. It is also important for a designer to have a good understanding of how a building is put together in order to assess the constraints and opportunities that present themselves, and to liaise knowledgeably with other professionals in the course of a project.

## Playing with the Rules

### Flexibility

Flexibility in planning is very important in modern interiors. It is now understood that private areas are also sometimes needed within a home for working environment. Sometimes a designer will look to separate an area of a large space without actually isolating it. Spaces can be defined with floor and ceiling treatments and the oriental idea of incorporating moveable screens or sliding partitions has also recently found its way in western interiors.

### Visual Tricks

Designers can employ visual tricks to increase the feeling of space or magnifying small rooms. Removing or scaling down the details such as cornices, which define corners, can expand the perception of a space.

Installing light weight furniture or inserting glass panels in the floor further enhances space and light. A designer can also use light to soften the junction between walls and ceilings or install a false back lit wall that stops short of the ceiling for the same purpose. Height too, can be amplified by opening up rooms, or installing lanterns, roof lights or sky lights. Mirrors provide another tool which the designer can use to optimize the sense of space and light. In addition to hung framed mirrors, large expanses of mirror can be installed between dado and cornice or adjacent windows, or above a chimney piece to reflect images and to maximize space.

For the designer who is well-versed in the principles of design, it is often a case of looking for ways to effectively blur the boundaries between traditional, classical style

Often less is more, simpler the designer, the more timeless and signifying it is likely to prove.

### Integrating the Services

The services though often unseen and perhaps the most appealing part of the planning process, have to be considered at the outset of a project. These services include heating, lighting, plumbing, drainage, electric, air conditioning, security and integrated entertainment or communication systems. A designer cannot be an expert in all these fields at the same time, especially in this era of advanced technology, it would usually be necessary to work with specialist companies. However in order to make design decisions and to communicate with specialists on site, the designer must ensure that they are as well informed in these areas as possible.

### Further Reading:

- ✓ *The Handbook of Interior Design, (2015), By Jo Ann Asher Thompson, Nancy Blossom*
- ✓ *Sustainable Design for Interior Environments Second Edition(2011), By Susan M. Winchip*