

# Module 8

## Lecture-1

Introduction to basic principles of design using the visual elements- point, line, plane and volume. Lines – straight, curved and kinked.

Design- It is mostly a process of purposeful visual creation. A piece of graphic design has to be placed before the eyes of the public, an industrial design product has to meet the customer's requirement, an animation design project needs to convey the right message in an interesting way, an interaction design product has to fit with the user's requirement and ease of usage and information and so the list goes on about any field of design. Unlike painting and sculpture, which are realization of the artist's dreams, design fills practical needs or desires.

A good design is the best possible visual essence of the best possible "something", whether this be a message or a product.

One important thing to understand in design is 'Space', an area where a design task will be performed or carried out or made or built in. The concept of space simply says that anything which is there and can be realized by us as visual or tactile is an element and the rest of the area where the element is placed is called a space.

Another important thing is dimensions and any element's representation in 1, 2 or 3 dimensions.

1-D is those elements which have only one dimension, probably length. These are mostly conceptual.

2-D is those elements which have two dimensions, probably length and breadth. They are mostly visual.

3-D is those elements which have three dimensions such as length, breadth and height (or width). These are visual as well as tactile.

The process to realize and apply the above is to understand few fundamentals of design which are essential to carry out any design task. Design is in a way a visual language and to understand it one must try to understand the elements of visual language.

The basic elements are grouped in three groups:

Conceptual elements

Visual elements

Relational elements

Conceptual elements:

Conceptual elements are mostly those elements which are not visible to us directly as we speak of them and hence do not occupy any space to be defined as one of them. They are mostly merged into other elements and are a part or a section of a bigger structure. They are Point, Line, Planes and Volume. If they are found to be existing as individual entity they are usually not termed as conceptual elements and rather become other elements.

### Point:

It basically indicates position. By definition we can't actually draw a point, since to see one would require it to have dimension. What we can draw is a dot. In fact dots are the building blocks of everything else. It does not occupy any area of space. It is the beginning of any area of space and is where two lines meet or intersect.



Fig.111 points

### Line:

As the point travels from one location to another in space, it becomes the line. The line has length but no breadth or height as it the path of the point from one location to another. It only has a position and direction.



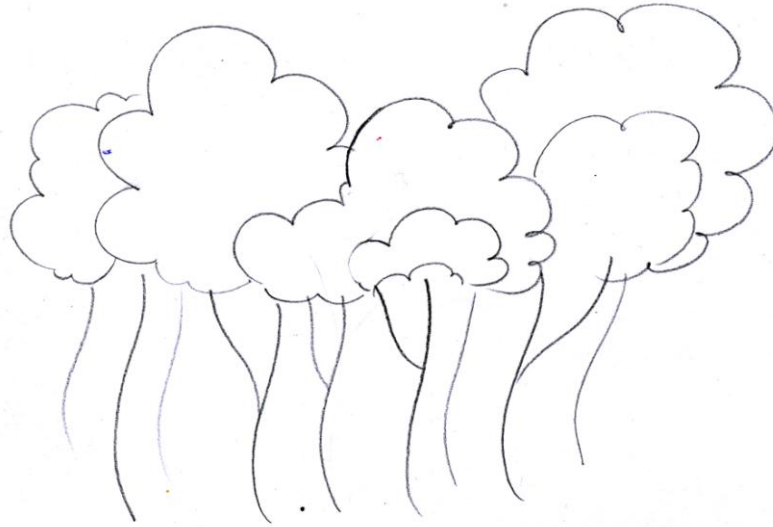
Fig.112: A line as a point that 'travels'

Line is a basic component for making a layout of art that appears in most two-dimensional artworks. Line can be used in many different ways within art. How do lines aid an artist in constructing a visually-effective composition. Followings are some of the examples.

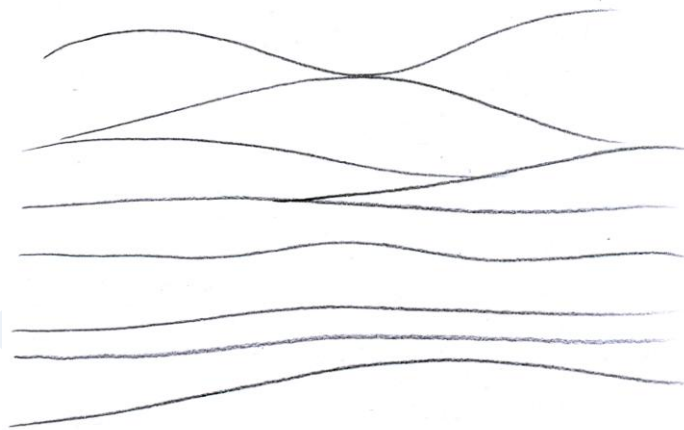
### Curvilinear Lines:

Lines within a work of art can either be curvilinear or rectilinear. Curvilinear lines are often referred to as organic lines and they are curvy and free-flowing. Curvilinear can create a soft natural feel within a work of art. Curvilinear lines are commonly seen in artwork depicting the female form. A dominant use of curvilinear lines is also often evident in art nouveau works that project a sense of warmth and a connection to the natural world. Fig.107 shows

The use of curvilinear lines in artwork.



(a) Mix of curvilinear lines in various shapes.



(b) Simple straight curvilinear lines.

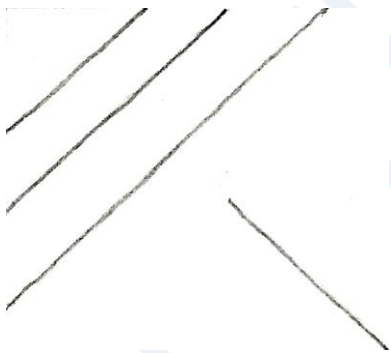


(c) hemi-spherical curvilinear lines conveying subject and motion.

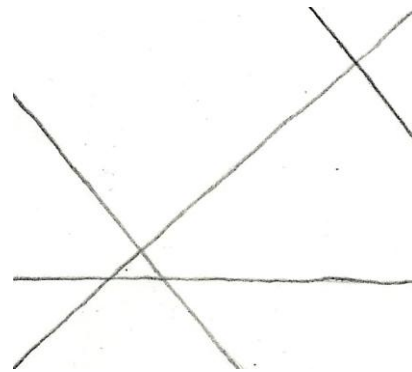
Fig.113: Conveying motion through lines

#### Rectilinear Line:

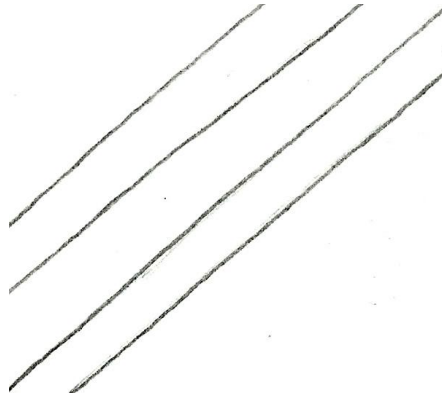
Rectilinear lines are those that are geometric in style. Rectilinear lines are straight and clear with pointed angles. Rectilinear lines can create a harsh and energetic feeling to an artwork. Cubist work such as Picasso's Guernica employs a dominant use of rectilinear lines to express an organized sense of chaos. Fig.108 shows the use of rectilinear lines and their characteristics in artwork.



(a) Angular thin rectilinear lines without cross.



(b) Angular thin rectilinear lines with cross.



(c) Angular thin rectilinear diagonal parallel lines.

Fig. 114: Various characteristics of lines and its orientation.

## Lecture-2

Lines can also be either actual or implied.

### Actual Lines:

An actual line is one that can clearly be seen within an artwork. Actual lines are drawn or painted with the intention that they will be seen by the viewer.

### Implied Lines:

Implied lines are those that are created when the viewer's eye connects other elements within a work of art to make a line. For instance, a series of dots extending along the surface of a work of art could be mentally connected to make an implied line. Implied lines are used to direct the eye to the focal point within an artwork. Many a times, implied lines are created using the subjects within the artwork. For instance, the figure of a girl in a work of art could be holding a violin that forms and implied line pointing to her face.

### Line Quality and Character:

Lines can also be used to express emotion within an artwork based on the line quality and character. Lines can express different moods based on their thickness or thinness, fluidity or rigidness and lightness or darkness. Artists often take line styles into account when trying to depict different emotions or ideas. Thick, dark and rigid lines can be foreboding and express a heavy feeling. Fluid, thin lines would convey a delicate and intimate feeling.

### Line Used as Value:

Lines can also be used to express value, which is the lightness or darkness of an area. Both hatching and crosshatching use lines to express different values. These values are created when the viewer's eyes blend the lines together to make a solid value. Hatching lines are a series of parallel lines that express the idea of shadow in an area. When the lines are drawn closely together, they take on a dark value. When the lines are drawn further apart, they give the appearance of a lighter value. Cross-hatching is achieved by drawing two sets of parallel lines that intersect. Cross-hatching uses the same visual properties that

hatching does to express the idea of darkness or lightness. When the lines are drawn closer together, the value is darker. When they are further apart, the value appears lighter.

### Contour Lines or Outlines:

Contour lines are often referred to as outlines. They form the border around figures and shadows within an artwork. Contour lines are most often used in drawings to define shapes within the composition. These types of drawings are referred to as contour-line drawings. Contour-line drawings are also often used as a basis for paintings because they define shadows and shapes where paint can later be applied.

We start a drawing with line. Lines can tie everything together in a work of art or design. In previous discussion, you all see many examples of the way artists have used different types of line and how expressive line can be. You all also see works of art that reveal the lines in the world all around us, and pattern and texture created by line.

### Plane:

A plane can be thought of as a series of adjacent lines. Simply by adding another dimension called breadth to a line we can define a plane. But planes are abstract objects, in the actual world they do not exist. It is bounded by lines.

### Volume:

It is empty space defined by planes, lines, and points. It has position in space and is bounded by planes. In two-dimensional design, volume is illusory.

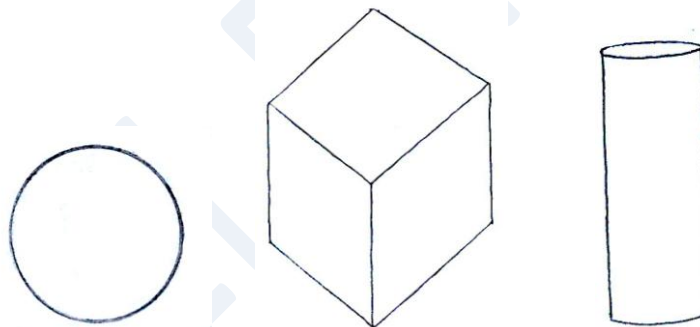


Fig.115 : Volumes

### Visual Elements:

When we draw anything on a paper or any other surface we use a line to represent a line which is conceptual. The visible line not only has length but also has breadth. It tends to have other features too like color and texture which is defined by the materials we use to draw the line. Thus when conceptual elements become visible they have the following properties. These are the visual elements what actually we see.

### Shape:

When we come to see a visual element or a combination of element's outer contour, our brains try to establish some identification of that combination. Anything that can be seen has a shape which gives us a basic understanding of any combination of visual elements.

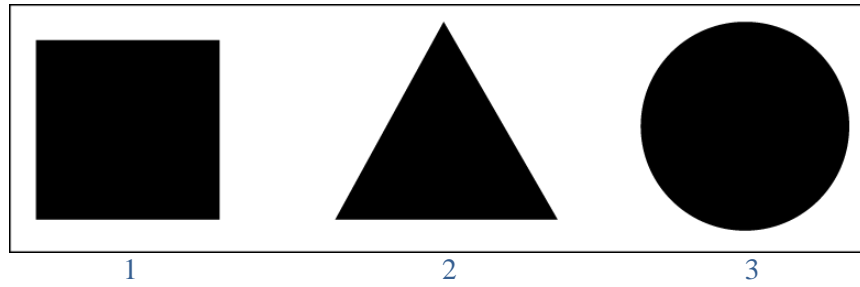


Fig.116: Shapes.

### Size:

It is a relative term of the existence of the shape. All shapes have sizes. It is relative if we describe it in terms of its bigness or smallness. But it is physically measurable.

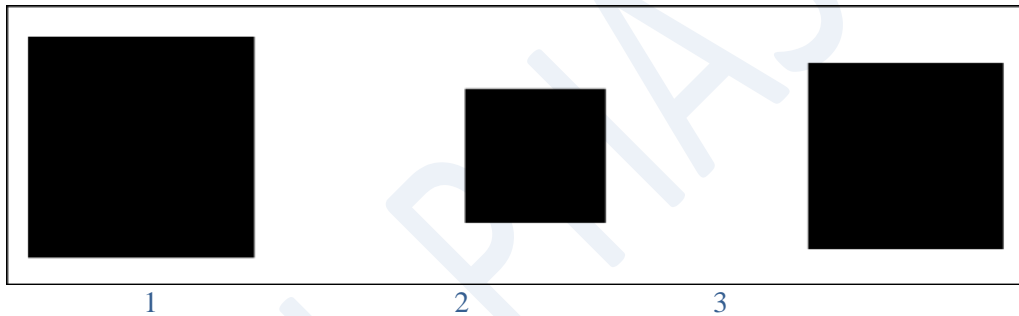


Fig. 117: Sizes.

### Color:

Any shape is distinguished from another or its surroundings because of its colour. Here colour is defined as not any particular type but the whole spectrum and also the neutrals as black, white and the grayscale and all other variations it can have (*This we will discuss in the next module*).

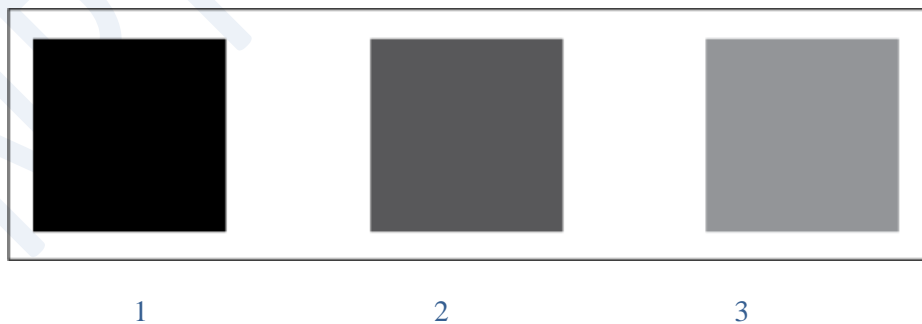


Fig.118: colour/gradient.

### Texture:

It describe the characteristics a of the surface .It may be visual or tactile, plain or decorated, smooth or rough, or may appeal to the sense of tactile more than visual or vice-versa.

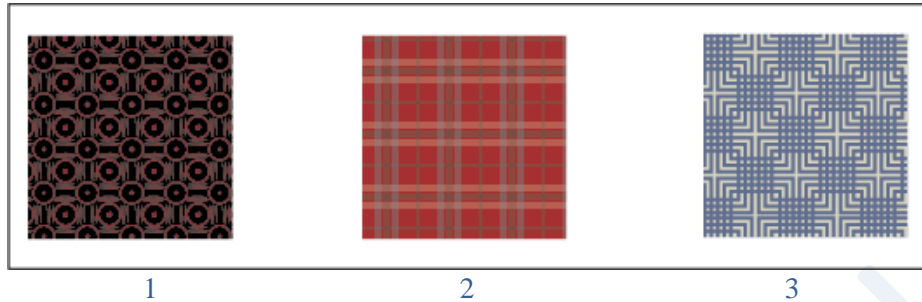


Fig.119: Textures.

### Lecture-3

#### Relational Elements:

It is the placement and inter-relationship of shapes in design. Some are relative to the appearance of elements such as direction and position whereas rest is dependent on the feel of the observer or user such as gravity and space. Here we can understand a little deeper meaning of space which is a very important element.

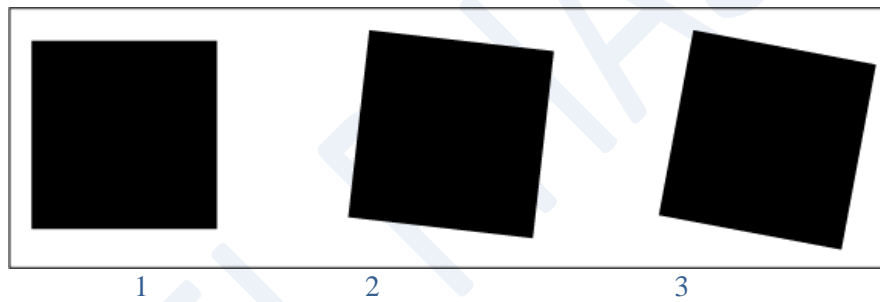


Fig.120:Relation with space around.

#### Direction:

Direction of a shape is totally dependent on the observer, frame or space that contains it or to other shapes placed nearby. It is a relative element.

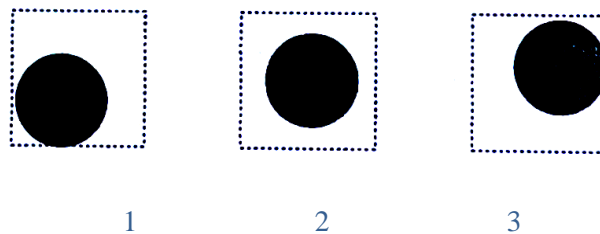


Fig.121: Direction in regard with space around.

#### Position:

The position of a shape is also dependent and is a relative element to the frame or space or the structure of its appearance.

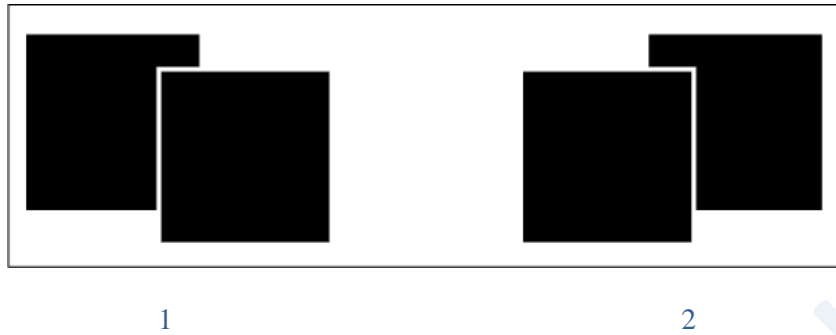


Fig.122:Position with regard to each other.

### Space:

Shapes of any size, however big or small, always occupy space. Space can be occupied or left blank. It can also be flat or illusory to define depth or height. Any space which is occupied is known as positive space and any space which is left blank or has not been occupied by any shape is called negative space.

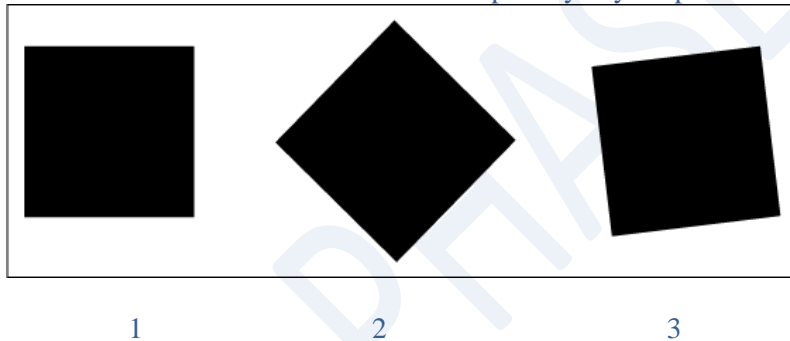


Fig.123:Position with relation ship with space around.

### Gravity:

It is a feeling, which cannot be felt physically unless one is subjected to it which is the natural gravitational pull of the earth .The psychological feeling of this natural phenomenon when observed in any other object other than ourselves; it is this element of gravity. This element gives a feel of heaviness or lightness, stability or instability to individual shapes or groups of shapes.

Pull of gravity of any object in regard to space seems to rest at any position if not interrupted or disturbed by any external element (e.g.force).

## Question & Answer

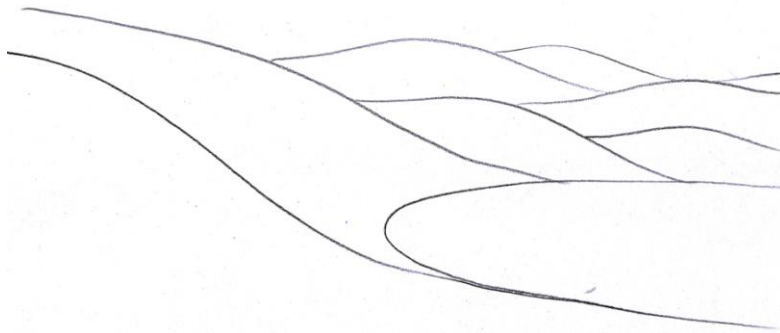
### Module 8

1) What is conceptual design element?

- See lecture2

2) What are rectilinear and curvilinear lines? How we can use them to draw any scene from nature?

- See lecture 2 , and see the illustration given bellow



1



3) What are visual elements? How we utilize them while making a design layout ?

- See lectur2

4) What is Line Quality and Character?

- Lines can also be used to express emotion within an artwork based on the line quality and character. Lines can express different moods based on their thickness or thinness, fluidity or rigidness and lightness or darkness. Artists often take line styles into account when trying to depict different emotions or ideas. Thick, dark and rigid lines can be foreboding and express a heavy feeling. Fluid, thin lines would convey a delicate and intimate feeling.