

## ARCHITECTURAL DESIGN

### 1-Design elements and principles

The elements and principles of design are the building blocks used to create a work of art. The elements of design can be thought of as the things that make up a painting, drawing, design etc. Good or bad - all paintings will contain most of if not all, the seven elements of design.

Design elements are the basic units of a painting, drawing, design or other visual piece and include:

#### **Color**

Color can play a large role in the elements of design with the color wheel being used as a tool, and color theory providing a body of practical guidance to color mixing and the visual impacts of specific color combination.

#### **Shape**

A shape is defined as a two or more dimensional area that stands out from the space next to or around it due to a defined or implied boundary, or because of differences of value, color, or texture. All objects are composed of shapes and all other 'Elements of Design' are shapes in some way.

#### **Categories**

Mechanical Shapes or Geometric Shapes are the shapes that can be drawn using a ruler or compass. Mechanical shapes, whether simple or complex, produce a feeling of control or order.

#### **Space.**

In design, space is concerned with the area deep within the moment of designated design, the design will take place on. For a two-dimensional design, space concerns creating the illusion of a third dimension on a flat surface:

### 2-Principles of design

Principles applied to the elements of design that bring them together into one design. How one applies these principles determines how successful a design may be.

#### **Unity/Harmony**

According to Alex White, author of *The Elements of Graphic Design*, to achieve visual unity is a main goal of graphic design. When all elements are in agreement, a design is considered unified. No individual part is viewed as more important than the whole design. A good balance between unity and variety must be established to avoid a chaotic or a lifeless design.

#### **Methods**

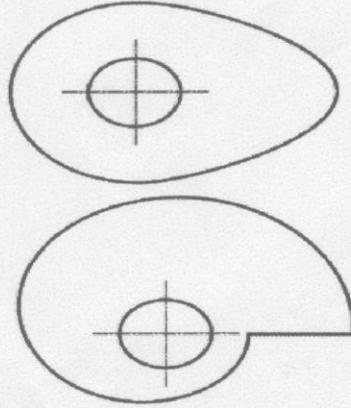
- Perspective: sense of distance between elements.
- Similarity: ability to seem repeatable with other elements.
- Continuation: the sense of having a line or pattern extend.
- Repetition: elements being copied or mimicked numerous times.

- Rhythm: is achieved when recurring position, size, color, and use of a graphic element has a focal point interruption.
- Altering the basic theme achieves unity and helps keep interest.

### Balance[edit]

It is a state of equalized tension and equilibrium, which may not always be calm.

### Types



The top image has symmetrical balance and the bottom image has asymmetrical balance

- Symmetry
- Asymmetrical balance produces an informal balance that is attention attracting and dynamic.
- Radial balance is arranged around a central element. The elements placed in a radial balance seem to 'radiate' out from a central point in a circular fashion.
- Overall is a mosaic form of balance which normally arises from too many elements being put on a page. Due to the lack of hierarchy and contrast, this form of balance can look noisy but sometimes quiet.

### Hierarchy

A good design contains elements that lead the reader through each element in order of its significance. The type and images should be expressed starting from most important to the least important.

### Scale/proportion

Using the relative size of elements against each other can attract attention to a focal point. When elements are designed larger than life, scale is being used to show drama.

### Dominance/emphasis.

Dominance is created by contrasting size, positioning, color, style, or shape. The focal point should dominate the design with scale and contrast without sacrificing the unity of the whole.

### \* Similarity and contrast.

Planning a consistent and similar design is an important aspect of a designer's work to make their focal point visible. Too much similarity is boring but without similarity important elements will not exist and an image without contrast is uneventful so the key is to find the balance between similarity and contrast.

### Similar environment.

### \* There are several ways to develop a similar environment:

- Build a unique internal organization structure.
- Manipulate shapes of images and text to correlate together.
- Express continuity from page to page in publications. Items to watch include headers, themes, borders, and spaces.
- Develop a style manual and adhere to it.

## Contrasts.

- Space
- Filled / Empty
- Near / Far
- 2-D / 3-D
- Position
- Left / Right
- Isolated / Grouped
- Centered / Off-Center
- Top / Bottom
- Form
- Simple / Complex
- Beauty / Ugly
- Whole / Broken
- Direction
- Stability / Movement
- Structure
- Organized / Chaotic
- Mechanical / Hand-Drawn
- Size
- Large / Small
- Deep / Shallow
- Fat / Thin
- Color
- Grey scale / Color
- Black & White / Color
- Light / Dark
- Texture
- Fine / Coarse
- Smooth / Rough
- Sharp / Dull
- Density
- Transparent / Opaque
- Thick / Thin
- Liquid / Solid
- Gravity
- Light / Heavy
- Stable / Unstable

Movement is the path the viewer's eye takes through the artwork, often to focal areas. Such movement can be directed along lines edges, shape and color within the artwork.

### 3- Concept of space in architecture :

Space is a basic subject in architecture, and conception of space in philosophy is major discussion between philosophers but architects do not considered in this subject, because space is`nt visible. Many of architects are considered only in form and are`nt thought about spatial image in architectural designing.

Figure 1

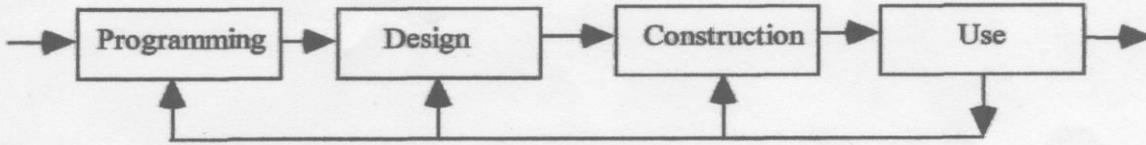


Figure 2

	Programming	Design	Construction	Use
Technics			D	B
Techniques	C			
Technical Knowledge				
Information			E	
HT Knowledge				
Value Systems		A		

### Form, Shape and Space

Form and shape are areas or masses which define objects in space. Form and shape imply space; indeed they cannot exist without space.

There are various ways to categorize form and shape. Form and shape can be thought of as either two dimensional or three dimensional. Two dimensional form has width and height. It can also create the illusion of three dimension objects. Three dimensional shape has depth as well as width and height.

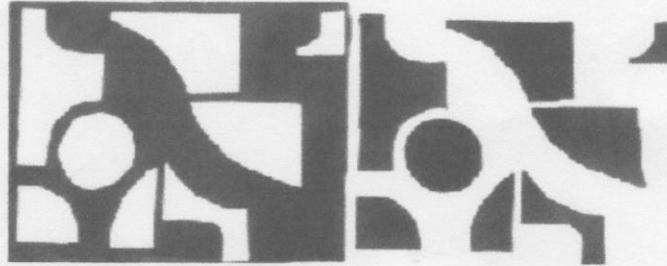
Form and shape can also be described as either organic or geometric. Organic forms such as these snow-covered boulders typically are irregular in outline, and often asymmetrical. Organic forms are most often thought of as naturally occurring.

Geometric forms are those which correspond to named regular shapes, such as squares, rectangles, circles, cubes, spheres, cones, and other regular forms. Architecture, such as this example by Frank Lloyd Wright, is usually composed of geometric forms. These forms are most often thought of as constructed or made.

However, not all made objects are geometric; many designed forms have irregular contours. Although this kimono is geometric in its construction, the surface design is organic in form.

- Our perception of shape and form are affected by several factors. The position or viewpoint from which we see an object will emphasize or obscure certain features, and therefore affect the impression it makes. The character of the space around the object can distract, focus, or alter our impression. A cluttered background tends to diminish the importance of the object, while a plain background draws attention to it.

## Two Dimensional Form



Forms and shapes can be thought of as positive or negative. In a two dimensional composition, the objects constitute the positive forms, while the background is the negative space. For beginning art and design students, effective use of negative space is often an especially important concept to be .

Two dimensional form is the foundation of pictorial organization or composition in painting, photography, and many other media. It is created in a number of ways.

It can be defined by line, in all the ways described above. Line, either explicit or implied, provides the contour of forms.

Value (the relative lightness or darkness of a color) can also define form. Strong contrasts in value within a composition may define the boundaries of forms. Gradations of value, or shading, can also create the illusion of contour and volume.

### Form in relation to positive and negative space

Forms and shapes can be thought of as positive or negative. In a two dimensional composition, the objects constitute the positive forms, while the background is the negative space. For beginning art and design students, effective use of negative space is often an especially important concept to be mastered. This exercise in cut paper required the student to work with the same composition in black on white and white on black simultaneously. This makes it difficult to ignore the background and treat it as merely empty space. The effective placement of objects in relation to the surrounding negative space is essential for success in composition.

Some artists play with the reversal of positive and negative space to create complex illusions. The prints of M. C. Escher (click on Picture Gallery, then Symmetry) often feature interlocking images that play with our perception of what is foreground and what is background. Other artists take these illusions of positive and negative images to even greater lengths, hiding images within images. Perception of form and shape are conditioned by our ingrained "instinct" to impute meaning and order to visual data. When we look at an image and initially form an impression, there is a tendency to latch on to that conclusion about its meaning, and then ignore other possible solutions. This may make it hard to see the other images. Training the eye to keep on looking beyond first impressions is a crucial step in developing true visual literacy.