Principles of Design

Unity and Variety

The Goal of Good Design
• to have interest, yet communicate one message
• this is done through unity and variety
• unity is one message, and variety creates interest
• good design balances unity and variety

Unity
• for a composition, the whole is greater than the sum of its parts
• when all the parts are put together, there is some underlying message or meaning
• everything that is placed in a composition, therefore, is done so purposefully
• everything must relate to the main idea or purpose of the composition
• it must be done visually and conceptually

Unity comes down to this:
• if adds to the composition, you may put is in
• if it takes away from the composition, leave it out

Conceptual Unity
• there should be an underlying idea for a composition
• you can have unrelated items, but you should tie it in somehow
• for example, eating utensils and music are unrelated ideas, however, imagine a silverware ad that says "Silverware that Sings" and you see sheet music with silverware instead of notes
• conceptually there is a tie in between silverware and music

Visual Unity
• The layout artist works to make everything visually unified or cohesive. Some ways of doing this is by choosing an appropriate font; repeating colours, patterns or textures; placing objects or elements closely together; choosing items that relate to each other.

A note about fonts...........
Font choice is very important as it helps set the tone of a composition. They can *feel* formal, informal, conservative, energetic, old, new, nostalgic, etc.

Variety
• if everything is unified in a composition, it can be boring
• variety is what develops interest in a composition
• a piece of paper has unity, but it lacks variety

How can you create variety?
• different sizes
• different shapes
• different colours
• different textures
• different subject matters

Important note:
• When variety is used effectively it doesn't take away from the unity of the composition.
• The skill of the layout artist is not have so much variety that it takes away from the overall message, like adding too much salt to your food.

Balance
• everything has a visual weight; some things have more visual weight than others
• balance is the distribution of visual weight
• one controls balance by controlling the visual weight of elements
• the designer manipulates size, value, shape, contrast, etc. to do this (see Emphasis and Subordination)
• a balance composition suggests order

There are 2 kinds of balance:
• symmetrical (formal)
• asymmetrical (informal)

Symmetrical or Formal Balance
• the visual weight is the same or similar on both sides
• (Remember that design is not an exacting science. If the visual weight is slightly heavier on one side or the other, it is more than likely balanced.)
• ways of describing this kind of balance is static, no movement, conservative, formal...... possibly boring

Asymmetrical or Informal Balance
• this is not to be mistaken with a design that is not balanced
• Asymmetrical balance is balanced! It does not mean it is unbalanced!
• both sides of a composition are evenly weighted, but the content is different
• this kind of design can be described as informal, active, casual.... possibly exciting

When something is not balanced
• the visual weight strongly favours one side of a design
• generally speaking most compositions are balanced
• its seldom that you see a magazine ad or cover that is not balanced
• a designer will make a composition unbalanced if he or she wishes to evoke an uneasy feeling

Analysing Balance.....

When analysing the balance of a design or composition, one can take this approach.

• divide the composition vertically, that is, draw an imaginary vertical line down the centre of a composition
• compare the left and right side
• if the visual weight is evenly distributed and the content is the same or similar, the vertical balance is symmetrical
• if the visual weight is evenly distributed and the content is different, the vertical balance is asymmetrical
• if the visual weight strongly favours either the left or right side, than vertically it is not balanced or unbalanced

• evaluate if the composition is balanced horizontally, that is, draw an imaginary horizontal line down the centre of a composition
• compare the top and bottom
• if the visual weight is evenly distributed and the content is the same or similar, the horizontal balance is

symmetrical
• if the visual weight is evenly distributed and the content is different, the horizontal balance is asymmetrical
• if the visual weight strongly favours either the top or bottom, than horizontally it is not balanced or unbalanced

Emphasis and Subordination

Controlling attention
• the purpose of a composition is communicate a message
• the designer must control what a person sees in a design
• one must control the order in which one notices different elements of design

Dominance or focal point
• some elements are more noticeable than others
• the most noticeable, that is, the most dominant element is sometimes referred to as the focal point

Emphasis and subordination
• if there is dominance, than there must be subordination ie. things which get less attention
• by using the principle of emphasis and subordination, one controls the order in which a person notices each element ie. what a person sees first, second, third, etc.
• some compositions lead a person to the primary focal point, whereas some may lead to a secondary focal point
• this is sometimes the case in advertising: get someone's attention and then lead them to the product

Three methods of controlling emphasis:
• contrast
• placement
• isolation

Contrast
• contrast will alway get your attention
• designer must know how to achieve contrast, and how much is needed
• there are five kinds of contrast: value, colour, size, shape and texture

Value contrast
• this is the strongest kind of contrast: black and white
• the biggest difference visually is between black and white

Colour contrast
• this is strong but not as strong as value contrast
• bright colours attract more attention than dull colours
• note that some colours have the same amount of attractiveness, and when you put them side by side, they get an equal amount of attention

Size contrast
• the larger the object, the more noticeable it becomes

Shape contrast
• not as strong as value, colour, or size contrast
• unusual shapes call attention to themselves

Texture contrast
• one thinks texture in terms of smooth and rough

• for 3D objects this is most noticeable, however, on paper one has to create the illusion of roughness

Placement
• the outside boundary of a composition is known as the format
• a design on a CD has a circular format, the front page of a magazine has a vertical rectangle format, a billboard has a horizontal rectangle format
• placement involves where the elements are placed in relation to the format
• where you place elements on a page can effect how it is viewed

Placement in the centre of the page
• the most noticeable placement of an object is in the centre of a page
• the further away from the centre, the less noticeable it becomes

Placement overlapping the edge of the page
• this is the next most noticeable place to recognize an object
• appears to be coming or leaving the composition
• the object will appear in front of a page

Placement near the edge of the page, but not going off the edge
• the outside boundary of a page (ie. its rectangular shape) is a very noticeable shape in any composition
• a kind of relationship is formed with the boundary of a page, and an object placed close to the edge
• this is not as noticeable as overlapping the edge, but it is the next most noticeable placement

Isolation
• in order to attract attention to an element or object, you have to set it apart from other objects physically
• in other words you must leave some space around the element
• this space around the element is referred to as white space, or negative space, or open space
• it is a common mistake for beginning designers to pack the whole page with pictures and leave out negative space

Controlling Emphasis...
How does one controls which object one sees first?

Give the object the following qualities:
• large
• brightly coloured
• high contrast
• make it sharply focussed
• place it close to the centre of the page

How do you see what you see second?
• make the object large, but not as large as the first
• put the object close to the first
• make it look similar, as in colour, shape
• have the first object look at it or point to it
• use gestalt principles of similarity, continuance, and proximity

How do hide or make something subordinate?
• make it opposite to the primary
• make it small
• low contrast to its surroundings
• make it similar in value, colour, and texture to what's behind it

Gestalt

- Gestalt is how our mind interprets what we see.
- it is a branch of psychology which was developed in the 1920s
- from a design point of view, it is how all the parts relate to the whole of a composition

How your mind works...
Consider this, if you are in a big room and everyone is talking, you are able to tune out all the noise and listen to a person who is speaking to you. Why don't you hear each and every conversation? You probably hear what is loudest and clearest. This may be the person beside you, talking directly to you, or perhaps someone using the microphone and amplifier. Your mind somehow tunes everything out, and focusses on what's easiest to listen to. Likewise, your mind notices what is easiest to see and tunes everything else out. There are different ways in which you see things. Gestalt psychology is how our mind interprets what we see.

There are three kinds of Gestalt:
- similarity
- proximity
- alignment

Similarity

- similarity deals with what items look like
- your mind cannot handle all the information you see all at once.
- The more confusing things look, the more the mind tries to simplify.
- the more things look alike the more they are to find groups
- conversely, the more something looks different, the more it will resist grouping
- the three similarity types are: size, colour or value and shape

Size Similarity
- objects of similar size are grouped together
- there are two kinds of objects in this diagram, circles and squares
- without seeing this diagram, one would assume is more logical to group the circles together and the squares together
- since the size similarity is greater than the shape similarity, objects are grouped together according to size
- consider the principle of emphasis and subordination too
- it is easier to notice large objects first

Value and Colour Similarity
- objects can be grouped together according to colour
- again, there are two kinds of objects here, circles and squares
- the size of the objects are similar
- without seeing this diagram, you notice would think that circles would form one group, and squares, another
- but notice that the similarity of colour is stronger than the similarity of shape
- therefore, you group the coloured objects together and the black objects together
- notice that here, you form a group according to the similarity of colour

Shape Similarity
- when size and colour are the same (or similar), than one forms groups according to similarity
- notice how the circles form a group and a squares form a group
- you may design a composition, such that one thing becomes more noticeable by making it different in shape

Proximity
• proximity deals with where objects are placed in a composition
• generally speaking, proximity relationships are stronger than similarity relationships
• there are four important proximity relationships: close edge, touch, overlap and combine

Close Edge Proximity
• the closer items are, the more likely they are to be seen together
• in order for objects to be grouped together, there must be space where there is nothing
• this is known as negative space, white space, or open space
• the amount of space between objects is relative
• close edge proximity is used in typography
• notice how letters are grouped together, and words are spaced apart

Touch Proximity
• when two item become closer they touch each other
• two touching objects have a strong relationship visually, that is, it has a stronger gestalt
• although objects are different, they appear attached
• touch proximity is stronger than close edge

Overlap Proximity
• overlap proximity is the strongest gestalt
• when items of different colours overlap, they form a strong visual group
• if they are different in colour they will appear as two objects
• if they are the same or similar, they look like they form an new shape

Combine Proximity
• this is combining objects using an external element to group other element, for example, a shaded box is used to set apart a sidebar story (a small story which occupies only one column of a page)
• in type you can use group using an underline, "quotation marks", or (brackets to set words apart)

Alignment
• it produces grouping and organizes visual information to create a sense of order
• there are two kinds of alignment: edge alignment and centre alignment

Edge Alignment
• any object with a flat side can be used
• rectangles can use four sides to line up with other objects
• the closer object are together, the stronger the alignment relationship

Centre Alignment
• any shaped object can be used to align in the centre
• simple shaped object align more easily, since it is easier to find their centre

Inserts
• rectangular images that overlap other rectangular images
• there are two kinds of inserts: images partially overlapped and images completely inside another

Why use an insert?
• inserts are used to form a group ie. to form a relationship between the two images
• conserve space
• hide unwanted areas of an image