Graphic Design

Basic Concepts and Principles

Introduction

esign may be considered as an instrument of organization. It must perform in response to human needs. Design is an urgent requirement, not a cosmetic addition. Graphic design can save time by presenting information more clearly. It enhances communication, it helps people to understand a given message and accelerates learning.

Design is finding the best solution to a problem within the limitations of the problem. Graphic designers communicate and express themselves in four distinct ways. They need to have a working knowledge of typography, illustration, photography/video, and symbolism.

The Graphic Design Process

Each design problem has unique differences and an infinite number of possible visual solutions. The process to generate alternate visual solutions to a problem can be described as follows: Definition of needs, criteria and limits of the design problem (problem identification), Production of many preliminary sketches (thumbnails), Refinement of selected sketches (roughs), Analysis of roughs, Selection/decision, Implementation (and preparation for print). After problem identification, the process follows a cyclic pattern from preliminaries through refinement, analysis, and selection to implementation. The process grows by constantly checking backwards. In the design process, the establishment of priorities is essential.

Designers must be able to judge and gauge the relative importance of factors as they relate to one another. Priorities set the functional and visual criteria in communications.

Spacing

Letters and words need to be spaced in a logical, consistent manner to appear optically correct, and achieve optimum readability. In letter-spacing there are three standards. Minimum space is used between cursive (oo) letters, or between inclined (xy) letters. Medium space is used between vertical and cursive letters (lo). Between vertical letters (ll) maximum space is used. Good word-spacing is achieved by making all space intervals between words "look" the same. Words must not appear to run together or be spaced so widely as to appear to be separate units. One system is to imagine a lower case "n" between words. This gives a moderate word-spacing.

The Grid

The grid is an underlying structure organizing data. It articulates space according to a pattern of oppositions: vertical and horizontal, top and bottom, rectangular and diagonal, and left and right. If used well it provides perceptual organization, coherence and consistency.

A well-conceived grid alone will not ensure effective design. It is an organizational tool, and must be used creatively to maximize communications potential.

Grids can help answer compositional questions such as balance, proportion, sequence, unity/harmony, and contrast.

Typography

Typography is designing with type, not the designing of type. It involves 1) choosing and using type, and 2) the application of design principles to the setting of type: the arrangement, style, and general appearance of matter printed with type.

"To design is much more than simply to assemble, to order, or even to edit; it is to add value and meaning, to illuminate, to simplify, to clarify, to modify, to dignify, to dramatize, to persuade, and perhaps even to amuse. To design is to transform prose into poetry. Design broadens perception, magnifies experience, and enhances vision. Design is the product of feeling and awareness, of ideas that originate in the mind of the designer and culminate, one hopes, in the mind of the spectator." (Paul Rand, Form + Content)

Perception and Composition

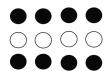
Visual perception involves a complex interplay of both inborn and learned responses to visual stimuli. The Gestalt laws of perception summarize tendencies that appear to be innate or inherent in our biological heritage and which undoubtedly serve as the basis for our concept of composition in visual art.

Similarity

Similarity facilitates grouping: Objects which resemble one another tend to be seen as belonging together.

Continuity

Tendency toward continuity: An interrupted linear figure is similarly filled in by the brain.



Proximity

Tendency toward figure-ground: There is a tendency to interpret visual data as objects against a background, or more precisely, figures against a ground.

Figure-Ground





Continuity



Proximity

Proximity facilitates grouping: Objects placed close together tend to form a figure.

Closure

Tendency toward closure: Missing visual information is filled in by the brain. The eye closes the open parts of a figure because it wants to see a whole

Layout: Composition with Type and Images

Balance

Balance is created by moving around "optical weights", big and small items, dark and light items, varieties of shapes.

Unity/Harmony

Unity and harmony are achieved by "fitting" all visual elements, type, illustrations, and photos into the style/mood of the layout.

Contrast

Layout involves the following set of interrelated basic design principles:

Contrast is achieved through differentiation in size, color, and shape. Giving the same graphic emphasis to several elements will make them compete for attention.

Symbolism

A symbol is a representation, verbal or visual, of a concept, object, idea, etc., the meaning of which is mutually agreed upon. In graphic design, the effective use of symbolism, combining and relating symbols, enhances the expression of ideas. It creates recognition, association and meaning.

Proportion

Good proportion is achieved by deciding on space between image and type, between type and the edge of the paper, between columns of type, between type-size, line-length and leading, between different visual elements, etc.

Sequence

Sequence is created by directing the viewer, for example, through the use of lines, real or implied; by arranging images in such a way that an edge or a force from one flows into an adjoining one. One does not leave to chance the order in which the viewer perceives the items in the layout.