

Three Dimensional Design ART 151 Spring 2009

DEFINITIONS OF TERMS USED IN 3-D DESIGN

(You will be quizzed on these at mid-semester & at the end of the semester)

THE CREATIVE PROCESS

Step 1: Acceptance & Definition

Step 2: Ideation

Step 3: Judgment

REASONS FOR KEEPING A SKETCHBOOK

1. A Visual Notebook
2. An aid to thinking/ a thinking tool
3. To see where you have been and where you are going
4. To explore alternative solutions
5. To discover new relationships
6. To develop multiple variations with a minimum of effort
7. To explore structural or technical problems
8. To explore sources: from life (recording experiences, interpreting experiences, studies from nature, etc.) and from other artists (books, libraries, art magazines, museums, galleries, visiting artist lectures, etc.)

FUNDAMENTAL ELEMENTS OF 3-D

LINE: The element of form which is primarily understood in terms of its length.

LINEAR: Of or relating to a line or lines.

REAL LINE: An existing line, matter aligned upon an axis.

IMPLIED LINE: A non-existent line activating empty space, implied by the directional interaction of other lines.

PLANE: The element of form which can be described in 2 dimensions, characterized by surface.

PLANAR: Of or relating to a plane or planes.

REAL PLANE: An existing plane, matter distributed upon a surface.

IMPLIED PLANE: A non-existent plane activating empty space, implied by the directional interaction of lines.

VOLUME: Defined or coherent space that can be described in 3 Dimensions.

VOLUMETRIC: Of or relating to a volume or volumes.

REAL VOLUME: Matter occupying space. (can also be referred to as Positive Shape)

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IMPLIED VOLUME: Space- not occupied by matter- sensed as coherent and resulting from the interaction of surrounding elements of form, usually planes. (can also be referred to as Negative Space)

OTHER ELEMENTS

MASS: The perceived weight or density of an object. Factors that affect our perception of mass are visual density, value, material, surface characteristics, and spatial orientation.

REAL MASS: The real weight of an object (e.g. a steel cube)

IMPLIED MASS: The implied weight of an object (e.g. a paper cube painted to look like steel).

TEXTURE: The tactile surface characteristics of a 3-D object that are either felt or perceived visually.

REAL TEXTURE: Texture that is inherent to the material (e.g. the bark of a tree)

APPLIED TEXTURE: Texture that is added to an existing object (e.g. tool marks on a piece of wood)

COLOUR: An aspect of surface which can obscure or reveal the nature of material.

REAL COLOUR: The natural, inherent colour of a material (e.g. the rust colour of steel)

APPLIED COLOUR: Colour that is added to a surface artificially, concealing or changing its original colour (e.g. a painted steel sculpture).

RHYTHM: The quality of form which results from regular intervals or repetitions.

SURFACE: The planar areas of an object which are exposed to the viewer.

SCALE: Size relative to other elements within or outside of an object. It is also a physical measurement, and a way of relating forms by comparison.

CONTEXT: The relationship of an object to its environment.

CONTENT: The subject matter of a work of art, plus its emotional, intellectual, symbolic, spiritual, and/or narrative implications, as opposed to its physical form.

TIME: Movement, or change in an object over a period of time.

MIXED MEDIA: Combinations of different materials to create a visually and physically coherent whole.

FOUND OBJECTS: Objects not originally intended as art objects, but which are used in a 3-D design for their formal or conceptual qualities.

PERCEPTION: How the human mind understands information provided by our senses.

CONCEPTION: The psychological process of forming ideas.

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COMPOSITION: The arrangement, or structuring of various elements in a 3-D Design.

JUXTAPOSITION: The adjacent placement of visual elements.

OBJECTIVE: Free from personal feelings; the emphasis is on the descriptive and factual rather than the expressive or subjective.

SUBJECTIVE: Emphasizing the artist's emotions or personal viewpoint rather than informational content.

SHAPE & SPACE

SPACE: The 3-D field in which the artist works.

FORM/ SHAPE: The total visual appearance of a 3-D object, or parts of it.

ABSTRACT: Shapes or forms that simplify, emphasize, or distort qualities of a real-life image rather than trying to represent its surface details accurately. In some cases the intent is to present the "essence" of an object rather than its outer form.

REPRESENTATIONAL: Shapes or forms that accurately depict a real life source.

ORGANIC/ BIOMORPHIC: Shapes or forms that are found in nature- irregular, uneven shapes that have structure without angularity.

GEOMETRIC: Shapes or forms that are angular, frequently symmetrical, and mechanical.

FIGURATIVE/ ANTHROPOMORPHIC: Shapes or forms representing the human figure.

PROCESSES

ADDITIVE SCULPTURE/ CONSTRUCTION: 3-D work made by putting pieces of material together to build up a form.

SUBTRACTIVE SCULPTURE/ CARVING: 3-D work made by removing excess material from a larger piece of material.

MAQUETTE: A small-scale model for a larger sculpture.

ASSEMBLAGE: A work made from objects or pieces of objects originally intended for other purposes.

FABRICATION: The assembling of materials into forms by various construction techniques such as welding, bolting, lamination.

MOLDMAKING: Creating a hollow negative form around an existing positive form, for the purpose of casting.

CASTING: Creating forms by pouring liquid material into a mold and allowing it to harden.

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MODELING: Creating forms with pliable materials such as clay by using the hands and hand tools.

INSTALLATION ART: Sculptural environments that are usually site-specific, composed of mixed media, temporary, and which question the traditional notions of art presentation.

SITE-SPECIFIC: Refers to art works designed and installed exclusively in a particular location.

SOME RELEVANT ART HISTORICAL MOVEMENTS

POP: A movement which simultaneously celebrated postwar consumerism in 1950's and 1960's America, and a reaction against the prevailing style of Abstract Expressionism. Pop artists, such as Oldenburg, Warhol, and Lichtenstein, took a more playful and ironic approach to art and life.

FUTURISM: A movement, centered in Italy in the 1910's which rejected all influences from the past and celebrated the modern technological world of machines and speed. Artists include Boccioni and Balla.

CUBISM: A style, based mainly in Paris in the 1910-1920's, influenced by primitiveness of form derived from African masks and sculpture. Objects and figures are depicted as if viewed from multiple viewpoints in fragmented space. Artists include Lipchitz, Braque, and Picasso.

CONSTRUCTIVISM: A movement in pre-revolutionary Russia that was seen as part of a Utopian political structure, a revolutionary art that explored a love of science, engineering, function and materials. Artists include Gabo, Pevsner, Malevich, and Popova.

ORGANIC ABSTRACTION: Sculptors working in this style, such as Brancusi, Arp, and Moore, use shapes that evoke floral, cellular, and biomorphic forms.

GEOMETRIC ABSTRACTION: Sculptors in this style, such as Lipchitz, David Smith, and Louise Nevelson, focused their attention on planar, mechanical forms.