

Elements of Product design

Product design
Lecture 4
Presentation uses material from other authors

The "real" definition of ...

–The Elements of Design –

The basic ingredients used by the artist when producing works of art. Those elements are **shape, form, value, line, color, texture, and space.**

Ingredients? Like the things used to make your dinner?

Yes, kind of!!!!

Let's say you will make a burger (or a beautiful piece of art) for dinner.
I will need certain parts ingredients (or the Elements of Design) on hand to make it.



What are the burger's ingredients?.....

The Ingredients
(The Elements of Design)



The Burger
(The Composition)



The Ingredients

(The Elements of Design)



Line



Shape



Value



Form



Space



Color

The Burger (The Composition)



Form and Shape

- Shape (2D)- The two-dimensional contour that characterizes an object or area
- Form (3D)- the shape and structure of something as distinguished from its substance or material

S
H
A
P
E



Shape

An enclosed space defined and determined by other art elements such as line, color, value, and texture. Shapes can be categorized into two different types, **Geometric**, and **Organic**

Organic

An irregular shape, or one that might be found in nature, rather than a regular mechanical shape.



Geometric

Shapes that are created through use of mathematics. These shapes include **Circle**, **Oval**, **Triangle**, **Square**, **Rectangle**, **Hexagon**, **Octagon** and **Pentagon**.



This painting by Frank Stella contains **interlocking geometric** shapes.

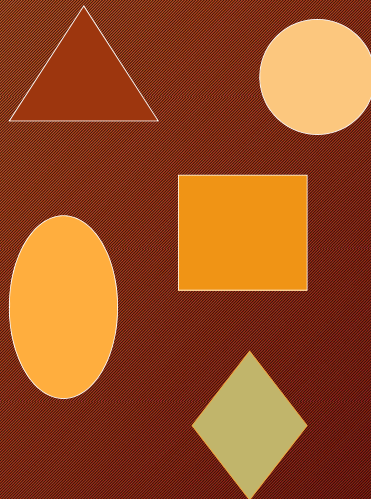


This painting by James Roper shows an explosion of **organic** and cloudlike **shapes**.

Element of Design- **white bold** Principle of Design - **red** Describing Words - **green**

Shape

- Two dimensional
- Made by connecting lines
- Circles, squares, rectangles, triangles, ovals, diamonds....



FORM



Form

An element of art that is three dimensional (height, width, and depth) and encloses volume. For example a triangle, which is two dimensional, is a shape, and a pyramid, which is three dimensional is a form.



Examples of **forms** include; **Cubes, Spheres, Ovoids, Pyramids, Cones, and Cylinders.**

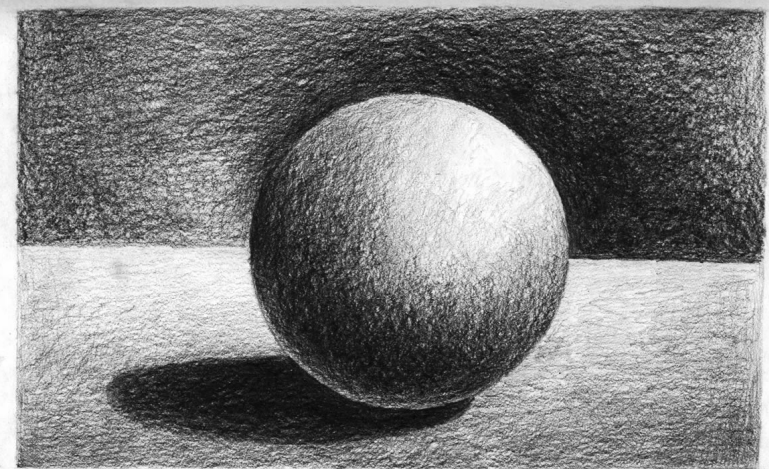
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Form

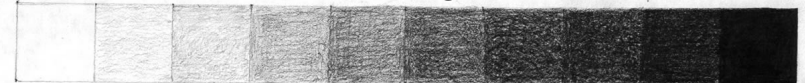
- Three dimensional
- Encloses space
- Spheres, cylinders, cones, cubes, pyramids....



Vs.



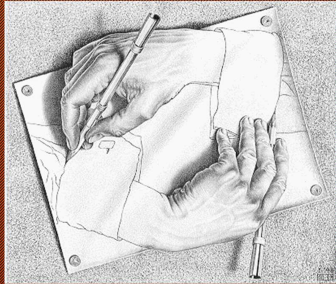
V A L U E



Value

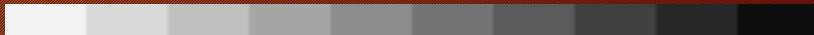
An element of art that refers to the lightness or darkness of a color. Value is an especially important element in works of art when color is absent. This is particularly likely with drawings, lithographs, photographs, and sculpture.

When you describe **value** in a critique, talk about the **shades** (darks, shades of color) and **tints** (lightness, highlights).



Value Scale

A gray scale, a series of spaces filled with the **tints** and **shades** of one color starting with white or the lightest tint on one end, and gradually changing into the darkest shade or black on the other.



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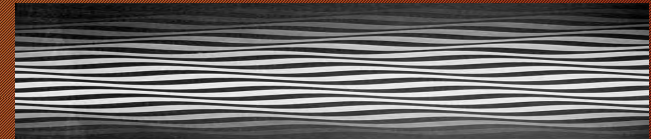
Value

- The relative lightness or darkness of a color
- Methods

- Shade: degree of darkness of a color
- Tint: A pale or faint variation of a color

Line

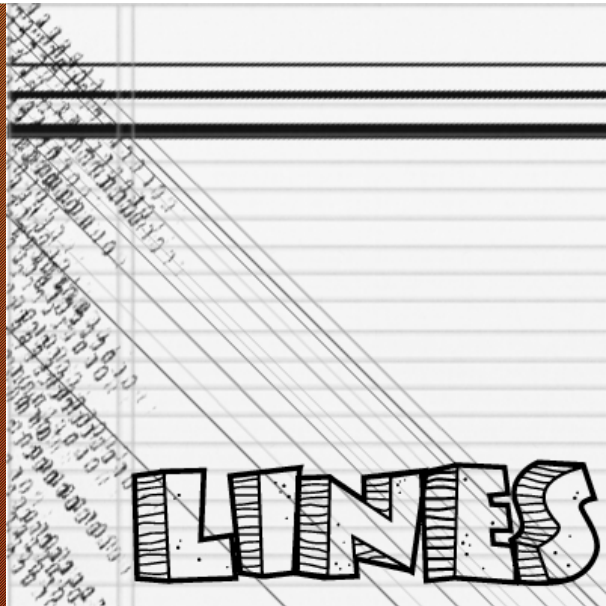
A mark made by a moving point that has length and direction. Often it defines a space, and may create an outline or contour, define a silhouette; create patterns, or movement, and the illusion of mass or volume. It may be two-dimensional (as with pencil and paper), three-dimensional (as with wire) or implied (the edge of a shape or form)



Words that DESCRIBE **Line** include: **vertical, horizontal, diagonal, straight or ruled, curved, bent, points, angular, thin, thick, or wide, interrupted (dotted, dashed, broken) blurred or fuzzy, controlled, freehand, parallel, hatching, cross-hatching, meandering, and spiraling.**



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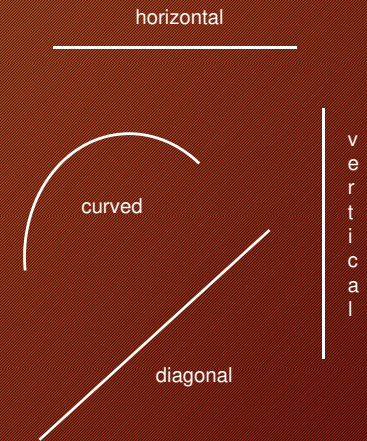
Line

• Types

- Vertical-Represents dignity, formality, stability and strength.
- Horizontal-Represents calm, peace and relaxation.
- Diagonal-Represents action, activity, excitement and movement.
- Curved- Represents freedom, the natural, having the appearance of softness, and creates a soothing feeling or mood

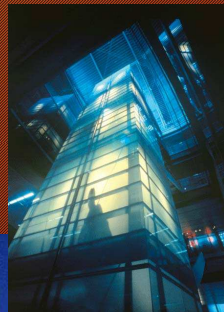
Line

- Long and narrow
- Connects two points
- Leads the eye from one point to another



Vertical Line

- Lends dignity and formality
- Creates feelings of aspiration and ascension



Horizontal Line

- Restful
- Relaxing
- informal



Diagonal Line

- Active
- Suggests movement



Curved Line

- Upward - lifts and inspires
- Horizontal - relaxed, denotes gentleness and femininity
- Downward - sadness and seriousness
- Small - playful



COLOR



Color

Produced by light of various wavelengths, and when light strikes an object and reflects back to the eyes.



An element of art with three properties:

- (1) hue or tint, the color name, e.g., red, yellow, blue, etc.;
- (2) intensity, the purity and strength of a color, e.g., bright red or dull red; and
- (3) value, the lightness or darkness of a color.

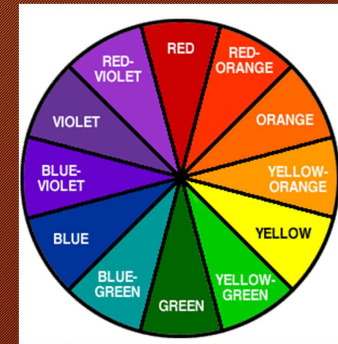
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Color

- Color has an immediate and profound effect on design
 - Warm colors: Reds, oranges, yellows
 - Cool colors: Blues, purples, greens

Color

- Reflected light
- Most important element
- Creates the most impact
- We'll cover this in depth later in the semester!



Pattern

- Repetition of line, shape, form, texture and/or color
- Reflects the mood of the elements used
- Can be formal, informal, calm, playful.....



TEXTURE

Texture

An element of art, texture is the surface quality or "feel" of an object., its smoothness, roughness, softness, etc. Textures may be **Actual** or **Implied**.



Actual **textures** can be **felt** with the fingers



While simulated **textures** are **suggested by** an artist in the painting of different areas of a picture — often in **representing** drapery, metals, rocks, hair, etc.

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Texture

- The surface quality of an object or item
- Tactile
 - How the object feels to the touch
 - Can feel the variation in the surface
- Visual
 - An illusion - how the object appears to feel
 - Applied using line, color, & shading

Texture

- The look and feel of an object
 - Smooth: Reflects more light (more intense)
 - Rough: Absorbs more light (appears darker)

Ribbed rough crinkled smooth soft
bumpy satiny silky fluffy hard
flat abrasive nubby shines
plush fuzzy ridged spikey
course gritty slick

Texture - Smooth

- Make colors appear lighter and brighter
- Generally considered more formal



Texture - Shiny

- Reflective
- Has more intense color



Texture - Rough

- Make color look darker and less intense
- Generally less formal



Texture





SPACE

Space

An element of art that refers to the **distance** or **area between, around, above, below, or within** things.



It can be described as **two-dimensional** or **three-dimensional**; as **flat, shallow, or deep**; as **positive or negative**; and as **actual, or illusory**.



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Space

- Enlarging or reducing visual space

Types

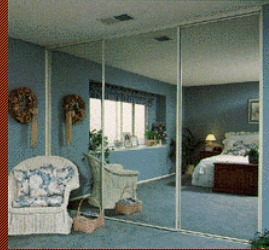
- Open
- Unused
- Cramped

Space



To help a small area feel spacious

- Allow for large open areas and empty space
- Use mirrors
- Use small prints, patterns, and textures
- Use light, cool colors



To help a small area feel spacious

- Allow as much floor to show as possible
- Place large pieces of furniture near walls
- Furniture should be up off the floor and not bulky



To make a large area feel intimate

- Place furniture perpendicular to walls
- Group furniture according to areas of activity
- Use large furniture that sits directly on the floor



The artwork



The Elements



The Principles of Design

