## Chapter Five

## Principles of Design

## Composition:

The organization of lines, shapes, colors, and other art elements in a work of art. More often applied to twodimensional art.
The term "design" is applicable to both twodimensional and three-dimensional works.

## Chapter Five Principles of Design

- Unity and Variety

Balance (Symmetrical, Asymmetrical)
Emphasis and Subordination

- Scale and Proportion
- Rhythm


## Unity:

The sense of oneness, of things belonging together and making up a coherent whole.

## Variety:

Differences that provide interest and contrast.

## Unity and Variety



Ben Jones, Black Face and Arm Unit, 1971. Painted plaster, twelve life-size plaster casts.

The Great Figure
Among the rain and light
I saw the figure 5
in gold
on a red
firetruck
moving
tense
unheeded
to gong clangs
siren howls
and wheels rumbling through the dark city.

Poem by William Carlos Williams


Charles Demuth, I Saw the Figure 5 in Gold. 1928. Oil on cardboard. 35X30". Metropolitan Mus. NY

## Balance

Visual Weight: The apparent "heaviness" or "lightness" of the forms arranged in a composition, as gauged by how insistently they draw the viewer's eye. When visual weight is equally distributed to either side of a felt or implied center of gravity, we feel that the composition is balanced.


Isamu Noguchi. Red Cube. 1968. Steel painted red.

## Balance

Symmetrical Balance: A design in which the two halves of a composition on either side of an imaginary central vertical axis correspond to one another in size, shape and placement.

## Balance: Symmetrical Balance



Leonardo da Vinci. Virtuvian Man. 148590. Pen and ink. 13X9"


## Symmetrical Balance

Architects: Louis Le Vau and Jules Hardouin-Mansart

Landscape Architect: André Le Nôtre

Versailles Palace and Gardens. 1661-1710, France. (Under Louis XIV)

0:43



Latona Fountain with the Grand Canal in the background


Jean-Baptiste Tuby
Fountain of Apollo at the head of the Grand Canal 1668-1671, originally gilded


Reflecting Pool and the Washington Monument. Washington D.C.


Khafre, Builder of 2nd pyramid, from Gizeh, Egypt, ca. 2520-2494 BCE. Dionite, approx. 5' 6" high.


## $\hat{N}_{*}^{*}$

## China's national flag

## き

## The red flag of the former Soviet Union

The Luo Brothers, Welcome the World's Famous Brands Beijing, China


## Balance

## Relieved Symmetry or Approximate Symmetry:

Slight differences between axial areas of a work.

## Frida Kahlo,

The Two Fridas.
1939. Oil on Canvas. $5^{\prime} 8^{\prime \prime}$ square.




Kahlo was influenced by Mexican folk art; this is apparent in her use of fantastical elements and bold use of colour, and in her depictions of herself wearing traditional Mexican, rather than European-style, dress.


## Balance

## Radial Balance:

 A circular composition in which the elements radiates outward from a central core.

Rose window. Chartres Cathedral. c. 1215.

John Feodorov (the artist is part Navajo and part Euro American). Animal Spirit Channeling Device for the Contemporary Shaman. 1997. $15 \times 12 \times 3$ in.


## Balance: Asymmetrical Balance

Asymmetrical Balance: Two sides that do not correspond to one another in size, shape, and placement.

- Although asymmetrical balance may appear more casual and less planned, it is usually harder to use because the artist must plan the layout very carefully to ensure that it is still balanced. An unbalanced page or screen creates a feeling of tension, as if the page or screen might tip, or things might slide off the side.


## Balance through Shape

2. A dark form is visually heavier than a light form of the same size.
3. A textured form is visually heavier than a smooth form of the same size.
4. A complex form is visually heavier than a simple form of the same size.
5. Two or more of small forms can balance a larger one.
6. A smaller dark form can balance a larger light one.

(a)

(c)

(b)

(e)

(d)

## Balance through Position

Visually heavier shapes near the center of the artwork can be balanced by lighter shapes farther away


Using only abstract shapes, draw one example of each:

1. Symmetrical balance
2. Relieved symmetry
3. Radial balance
4. Asymmetrical balance

- Did you achieve a balance in the composition?




## Nonomura Sotatsu. The Zen Priest Choka.

Edo Period, late $16^{\text {th }}$-early $17^{\text {th }}$ c. Hanging scroll, ink on paper; 37X14".
The Cleveland Museum of Art.

- Unlike physical balance, visual balance can be created through absence as well as presence.


## Balance through Color and Value:

Warm colors (red, magenta, yellow) tend to advance and/or have more visual weight than cool colors (blue, green, cyan).
Our eyes are drawn by color. Small areas of vibrant color can be used to balance larger areas of more neutral colors.

Paul Gauguin Femmes de Tahiti OR Sur la plage (Tahitian Women OR On the Beach) 1891


## Balance through Eye Direction

Your eye can be led to a certain point in a picture depending on how the elements are arranged. If the people in a picture are looking in a certain direction, your eye will be led there as well. Elements in a picture, such as triangles or arrows, will also lead your eye to look to a certain point and maintain the balance of a picture.


Joseph Mallord Turner. The Burning of the House of Parliament C. 1835. Oil on Canvas. 36X48". Philadelphia Museum of Art.


Sakai Hoitsu. Summer Rain, one of a pair of folding screens. Edo Period, late $18^{\text {th }}$ - early $19^{\text {th }}$ c. Color on silver paper. Tokyo National Museum.

## Emphasis and Subordination

Emphasis: The viewer's attention will be centered more on certain parts of the composition than on others.

Focal Point: A specific spot to which one's attention is directed.
Subordination: A less visually interesting area.

## Henry Ossawa Tanner.

The Banjo Lesson. 1893. Oil on Canvas, 49X35". Hampton University Museum.



Francisco de Goya. Executions of the Third of May, 1808. 1814-15. Oil on Canvas $8^{\prime} 9^{\prime \prime} \mathrm{X} 13^{\prime} 4$ ". Museo del Prado, Madrid.


Francisco de Goya. Executions of the Third of May, 1808. Detail. 1814-15. Oil on Canvas $8^{\prime} 9^{\prime \prime} \mathrm{X} 13^{\prime} 4$ ". Museo del Prado, Madrid.


Francisco de Goya. Executions of the Third of May, 1808. Detail. 1814-15. Oil on Canvas 8'9'X13'4'. Museo del Prado, Madrid.

> A work of art can be afocal

Larry Poons. Orange Crush. 1963. $80 \times 80$ in.

## Class Assignment 12

Find in your book two examples for the use of emphasis and subordination in a work of art.
Describe and explain your examples.

## Proportion and Scale

## Scale

Size in relation to "normal" or constant size.


## Proportion

Size relationships between parts of a whole or between two or more items perceived as a unit; also, the size relationship between an object and its surroundings.

A royal altar to the hand (ikegobo). Benin, $18^{\text {th }} \mathrm{c}$. Brass, height 18". The British Museum

## Hierarchical Scale:

The representation of more important figures as larger than less important figures.



## Palette of King Nammer (back)

From Hierakonpolis, Egypt,
Predynastic, ca. 3000-2920 BCE.
Slate, approx. 2' 1" high.
Egyptian Museum, Cairo.


## Palette of King Nammer (front)

from Hierakonpolis, Egypt,
Predynastic, ca. 3000-2920 BCE.
Slate, approx. 2' 1" high.
Egyptian Museum, Cairo.

## Palette of King Nammer (front)

Detail


Claes Oldenburg Clothespin, 1976 Cor-Ten and stainless steels height 45 , Centre Square Plaza, Philadelphia



Claes Oldenburg and Coosje van Buggen. Plantoir. 2001. Stainless steel, aluminum, plastic; height 23'11"


René Magnitte. The Listening Room 1958.

Rene Magnitte. Delusions of Grandezir II.
1948. Oil on Canvas, 39x32"

"I'll paint what the flower means to me-but I'll paint it big and people will be sumprised into taking time to look at it." Georgia O'Keeffe.


Georgia O' Keeffe. Jack-in-the-Pulpit No. V. 1930. Oil on Canvas.


Georgia O'Keeffe. Jack-in-the-Pulpit No. IV, 1930. Oil on canvas, $101.6 \times 76.2 \mathrm{~cm}$

El Greoo. Resumection
c. 1600-05. Oil on Canvas, 9X4'. Museo del Prado, Madrid


## Proportion and Scale

## The search for the "perfect proportions" in art and architecture

Fashion Model Size Requirements
How tall? 5'9" to 5'11"
Thin - 108 to 130 lbs
Desired figure - around 34B-24-34".
Age - 13-19 and if you have not made it by twenty it is
over ${ }^{-}$

The Egyptian Canon (system of proportions)


Menkaure and Queen Khameremebty (?) from Gizeh, Egypt, Dynasty IV, ca. 2490-2472 BCE. Graywacke, approx. 4' $61 / 2^{\prime \prime}$ high. Museum of Fine Arts, Boston.


Polykleitos, Doryphoros (Spear Bearer). Roman marble copy from Pompeii, Italy, after a bronze original of ca 450-440 BCE, 6 ' $11^{\prime \prime}$ high. Museo Nazionale, Naples.



## Leonardo da Vinci. Vitruvian Man.

 1485-90. Pen and ink. 13X9"The navel is naturally placed in the centre of the human body, and, if in a man lying with his face upward, and his hands and feet extended, from his navel as the centre, a circle be described, it will touch his fingers and toes. It is not alone by a circle, that the human body is thus circumscribed, as may be seen by placing it within a square. For measuring from the feet to the crown of the head, and then across the ams fully extended, we find the latter measure equal to the former, so that lines at right angles to each other, enclosing the figure, will form a square.
Vituvius (Roman Architect, $1^{\text {st }} \mathbf{c}$. BCE)

Golden Section: A mathematical proportion where the ratio between a small section (A-B) and a larger section $(\mathrm{B}-\mathrm{C})$ is equal to the ratio between the larger section (B-C) and both sections (A-C)put together.


## Golden Ratio - 1.61803...:1 (Phi, pronounced "fee" )

A Golden Rectangle is a rectangle with dimensions which are of the golden ratio, $1: \varphi$ (i.e., 1.61803...). It has been claimed to be the most aesthetically pleasing shape of a rectangle.

The large rectangle BA is a golden rectangle. If we remove square $B$, what is left, A , is another golden rectangle.





Le Corbusier, The Modulor


The Modulor is a scale of proportions devised by Le Corbusier. He used the golden ratio in his Modular system for the scale of architectural proportion.

## Can you find the Golden Ratio?



IKTINOS and KALLIKRATES, Parthenon, the Temple of Athena Parthenos Reconstructed model of the west facade. Acropolis, Athens, Greece, 447-438 BCE.


IKTINOS and KALLIKRATES, Parthenon, the Temple of Athena Parthenos Acropolis, Athens, Greege, 447-438 BCE.

## Rhythm

Rhythm is the repetition or alternation of elements, usually shapes, often with defined intervals between them. Rhythm can create a sense of movement, and can establish pattern and texture. There are many different kinds of rhythm, such as random rhythm, regular rhythm and alternating rhythm.


Peit Mondrian, Broadway BoogieWoogie, 1942-43. Oil on Canvas, 50X50". Museum of Modern Art, NY



Piet Mondrian, Compoasition with Red, Blue and Yellow, 1930, oil on canvas, $50.8 \times 50.8$

Leon Battista Alberti. Fagade of Sant'Andrea, Mantua. Designed 1470




## The Viewpoint



Pieter Bruegel the Elder. The Corn Harvest (August).
1565. Oil on panel. The Metropolitan Museum of Art, New York, USA .



Pieter Bruegel the Elder. Hunters in the Snow 1565. Oil on Panel. H 117 cm , W 162 cm


Pissarro, Boulevard Montmartre: afternoon, sunshine. 1897. 74 x 92.8", The State Hermitage Museum, St. Petersburg


Pissarro. Boulevard Montmartre: rainy weather, afternoon. 1897.


Gustave Caillebotte. The Floor Scrapers 1875. Oil on canvas $102 \times 146 \mathrm{~cm}$. Musee d'Orsay


Degas. The Tub, 1886. Pastel Musée d'Orsay, Paris, France

Antonio da Correggio. Assumption of the Virgin 1526-1530. Fresco. Cathedral of Parma

Di sotto in sù means "seen from below" or "from below, upward" in Italian.
A type of illusionism in painting, achieved by means of sharp foreshortening, in which the figures and architecture seem to be high above and receding from the spectator.


Antonio da Correggio. Assumption of the Virgin 1526-1530. Fresco. Cathedral of Parma


## Antonio da Correggio.

 Assumption of the Virgin. Detail: Virgin and angles. 1526-1530. Fresco. Cathedral of Parma


Peter Paul Rubens. The Sacrifice Of Isaac. 1620
Sketch for the Jesuit ceiling. Oil on panel 19 3/8 x 25 3/8


Frida Kahlo. Self-Portrait with Thorn Necklace and Hummingbird. Oil on canvas. 1940
24 1/2" x 18 3/4".
University of Texas, Austin


## Kahlo Frida Self Portrait with Monkeys

Oil on canvas 1943


Frida Kahlo. Diego in my Thoughts. 1943 Oil on masonite. 11 5/8" X 8 13/16"



Edouard Manet, Olympia. 1863. Oil on canvas. $13 / 8 \times 743 / 4$ ". Musee d'Orsay, Paris


ÉDOUARD MANET, Olympia, 1863

Ingres, La Grand Odalisque, 1814


Titian, Venus of Urbino, 1540s


Yasumasa Monimura Portrait (Futago), 1988; photograph; chromogenic print with acrylic paint and gel medium, $823 / 4$ in. $x$ 118 in; SFMOMA


ÉDOUARD MANET, Olympia, 1863


Edouard Manet. A Bar at the Folies-Bergere. 1881-82. Oil on Canvas, $37 \times 51$ ".


Stop. Edouard Manet, Une Marchande de Consolation aux FoliexBergere. Wood engraving from Le Journal Ausant, May 27, 1882

## Auguste Rodin, The Burghers of Calais

1884-86

## Bronze

$821 / 2 \times 95 \times 78$ in.






## Dorothea Lang. Migrant Mother (Florence Owens Thompson) 1936. Library of Congress, Washington D.C.



El Greco. The Burial of the Count of Orgaz,

1586-88. Oil on canvas, $480 \times 360 \mathrm{~cm}$. Santo Tomé, Toledo

According to the legend, at the time he was buried, Saint Stephen and Saint Augustine descended in person from the heavens and buried him by their own hands.





