

# Part Two: The Principles of Design

To help them combine the elements of design effectively, artists and designers follow certain guidelines, or principles. The principles of design are balance, unity, contrast, emphasis, pattern, movement, and rhythm. When used properly, these principles organize the parts of a design so that an artwork clearly communicates an artist's message or intention. They are used in all media—from painting to architecture to clothing design.

These principles are not binding, but are there to help you make choices: you may study, modify, or juggle them as you wish. You might think of them as recipes that have

worked for a long time for many people. Like the elements of design, these principles are rarely used separately. Although one of them may be more obvious in a particular design, it usually will be supported by others. There are many ways to combine the principles; artists sometimes even deliberately ignore or distort them.

The six chapters of Part Two define the principles separately and contain images to explain each one. (As in Part One, the images are from both nature and the arts.) Balance, for example, might involve pairing an extended arm and an outstretched leg in a sculpture of the human figure. Or it may mean contrasting certain colors in a painting. Once you understand these principles, you will likely begin to notice them in your environment—and your increased understanding of how artworks are put together will help you become a more sensitive viewer and a more skillful designer.



In this work, there is a great variety of pattern. By creating a contrast rather than a harmony of pattern, the artist sought to communicate all the patterns that make up the memories of her childhood.

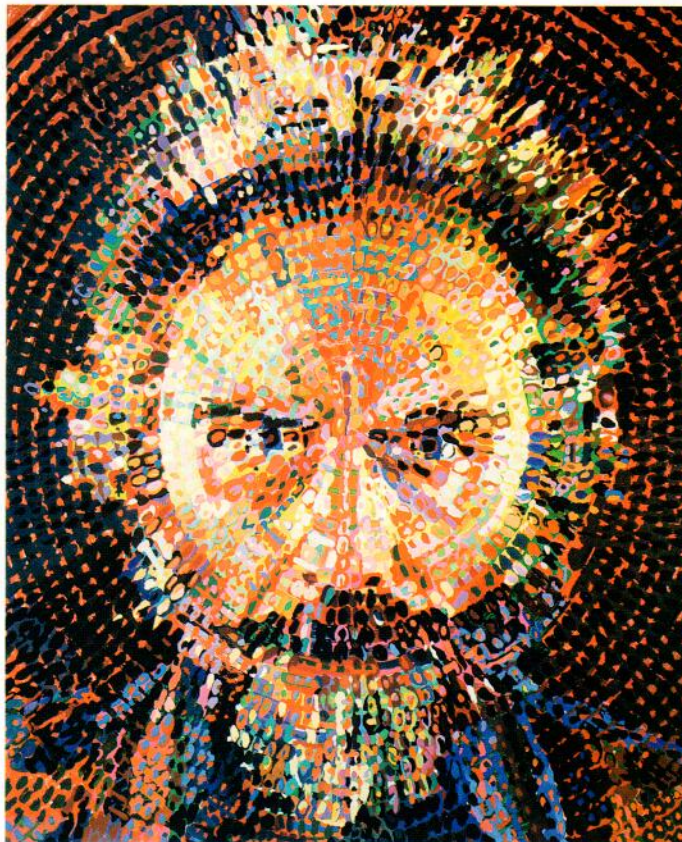
Ilisha Helfman (b. 1957). *The House I Keep in Mind*, from *Memories of Childhood*, 1994. Photoshop collage, 24" x 24" (61 x 61 cm).

Courtesy of the artist and the Steinbaum Krauss Gallery, New York.

### Key Vocabulary

symmetrical balance  
 approximate symmetry  
 asymmetrical balance  
 radial balance

**D**O YOU REMEMBER WHEN YOU FIRST LEARNED TO SKATE, ride a bike, surf, or dance? As long as you didn't lose your balance, you felt fine. But when you did, you probably became nervous for a moment. Staying in balance is one of our most important needs. But from the time we're born, we are at odds with the forces of gravity. Our earliest struggles to maintain balance occur when we learn to stand and walk. Later, we strive for other kinds of physical balance, as well as mental and emotional balance.



Artists strive for visual balance. Visual balance is the way that the different parts of a composition relate to one another. When dealing with issues of design and organization, artists always consider visual balance because it is so basic to art. Artists use the elements of design—such as shape, color, and texture—to create balance within a composition. The four most important types of visual balance are symmetrical balance, approximate symmetry, asymmetrical balance, and radial balance.

7-1 This is a portrait of Close's friend the artist Lucas Samaras. Generally, an artist tries to convey certain characteristics about a person when creating a portrait. What traits do you think Chuck Close was trying to capture in this portrait? How does Close communicate these characteristics?

Chuck Close (b. 1940). *Lucas Woodcut*, detail, 1992-93. Color woodcut with pochoir, 46 1/4" x 36" (116.8 x 91.4 cm). Edition of 50. Published by Pace Prints.



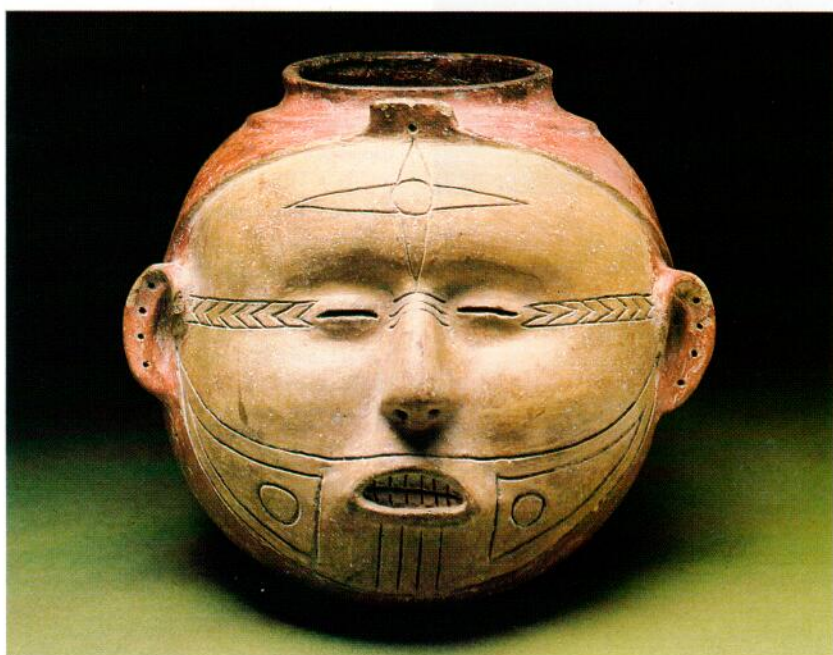
Use your knowledge of color to analyze how Green created contrast in this painting.

Jonathan Green (20th cent). *Family Fishing*, 1989. Acrylic on canvas, 48" x 36". (121.9 x 91.4 cm). Collection of John and Barbara Langston. Photo by Tim Stamm.



Notice how Biggers used white both to unify this painting and to move our eye through the composition.

John Biggers (b. 1924). *Jubilee: Gbana Harvest Festival*, 1959-63. Tempera and acrylic on canvas, 38 3/8" x 98" (97.5 x 248.9 cm). The Museum of Fine Arts, Houston. Museum Purchase with funds provided by Panhandle Eastern Corporation.



Artists sometimes use simplicity of design to emphasize a certain aspect of an artwork. What did the artist want to emphasize in this piece?

*Human head effigy bottle*, 1400-1650 (Late Mississippian culture/Nodena). Earthenware (Carson red on buff), 6 1/8" x 7 1/4" (15.6 x 18.5). National Museum of the American Indian, Smithsonian Institution, Washington, DC. Photo by Bernard Palais.

In representing the human figure, an artist must be very aware of balance. How did the sculptor seek to balance this figure? Was he successful?

Augustus Saint-Gaudens (1848-1907). *Victory*, 1892-1903, cast c. 1912. Gilded bronze, 41 7/8" x 23" x 35" (106.4 x 58.4 x 88.9 cm). Carnegie Museum of Art, Pittsburgh; Museum Purchase 19.5.2.





7-2 In this work, what does the artist do to create balance?

Richard Estes (b. 1932).  
*Eiffel Tower Restaurant*, from  
*Urban Landscapes III*, 1981.  
 Screenprint, 19 3/4" x 27 1/2"  
 (50 x 69.9 cm). ©Richard  
 Estes/Licensed by VAGA,  
 New York, NY/Marlborough  
 Gallery, NY.



7-3 Artists and architects sometimes purposely avoid an obvious sense of balance in their works.

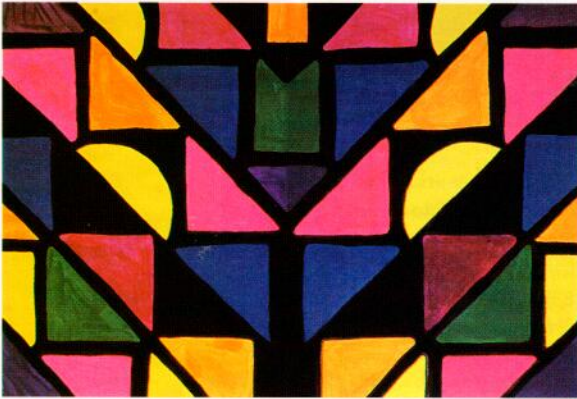
Frank O. Gehry (b. 1929)  
 and Associates, Inc.  
*Nationale-Nederlanden  
 Building*, Prague, Czech  
 Republic. Model. Photo by  
 Joshua White.

## Symmetrical Balance

Stand with your feet side by side and both arms extended outward to your sides. You are now in symmetrical balance. What happens if you drop or raise one arm? You become unbalanced and might even begin to lean to one side. When a design displays *symmetrical balance*, it is exactly the same on both sides. If you drew a line through the center of the design, one side would be the mirror image of the other. Symmetrical balance is sometimes known as bilateral, two-sided, or formal balance.

A well-shaped fir tree is symmetrically balanced, as is a well-formed apple. Compositions that display symmetry tend to be stable, dignified, and calm. In design, symmetrical balance is often evident in architecture. Notice, for example, the peacefulness achieved by the perfect symmetry of the famed Taj Mahal (fig. 7-8).

Symmetry refers not only to a single object or figure with identical halves. Symmetrical balance is also produced by the same shapes or forms on opposite sides of a composition. Look at fig. 7-4. The shapes and colors on one half of the composition repeat precisely on the other half.

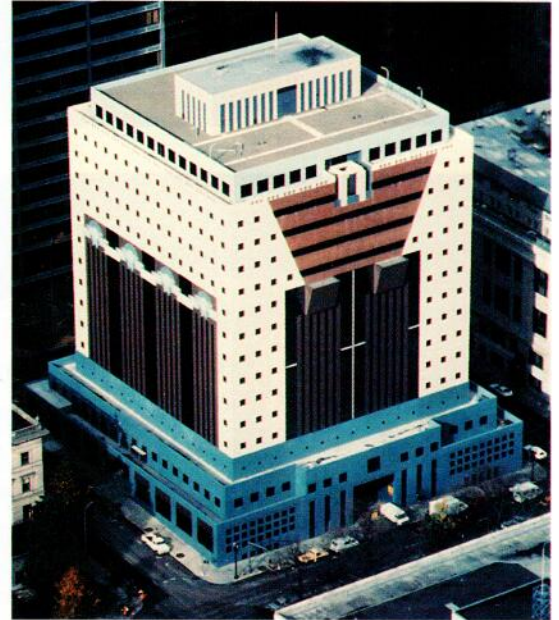


7-4 Variety of color and strong diagonal lines enliven this symmetrical composition.

Cory Longhauser (age 14). *Colorful Geometric Shapes*, 1997-98. Acrylic and tempera, 12" x 18" (30.5 x 45.7 cm). Manson Northwest Webster Community School, Barnum, Iowa.

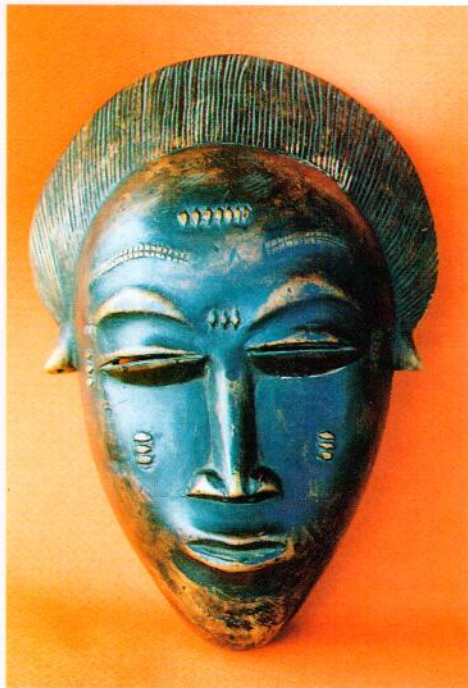
7-5 Why do you think that most architecture is generally symmetrical? Can you think of some practical advantages?

Michael Graves (b. 1934). *Portland Public Services Building*, 1980-82. Portland, Oregon. Photo by J. Selleck.



7-6 Ceremonial objects often display symmetry. The static, formal quality suggested by symmetry adds significance to the ceremony or ritual.

Mask, Senufo or Baule, Ivory Coast. Wood, 12" x 9" (30.5 x 22.9 cm). Collection of Joseph A. Gatto, Los Angeles, California.



### Try it

Choose two small pieces of paper equal in size, color, value, and shape. Place them on a larger piece of white paper. Move the two shapes away from an imaginary center line, observing the balance that occurs. What happens when you move the shapes toward the edges? What happens when you move them close to the center? After you've experimented with various locations, glue the shapes down to form a symmetrically balanced design.

# Taj Mahal

What kind of monument comes to mind when you think about a well-loved person's tomb? For a Mughal emperor in the seventeenth century, the Taj Mahal is such a monument. Its design and construction was ordered by Shah Jahan (ruled 1628–58) in memory of his beloved wife Mumtaz Mahal, who died unexpectedly in 1630.

Built from 1632–38 on the bank of the Yamuna River at Agra, this architectural treasure is one of the most famous landmarks in the world. Twenty thousand workers participated in the creation of the structure, which is surrounded by four minarets (slender towers from which Moslems are called to prayer). Each minaret has three divisions, echoing the levels of the tomb.

The octagonal tomb and its supporting platform are built from gleaming white marble. On each side, the building has a large central *iwan* (a vaulted opening with an arched portal) flanked by two stories of smaller *iwans*. These openings make the building seem weightless: it appears to float magically above the reflecting pool. The surrounding garden (1,000' x 1,900'), divided by water channels, is laid out in total symmetrical balance. Trees and flowers are planted

along broad walkways with inlaid stones in geometric patterns. Originally, fountains were a part of this outdoor environment.

In the tradition of the Moslem religion, the style of the building is entirely symmetrical, with panels of carved inscriptions and flowering plants for simple decoration. Two smaller buildings, mirror images of each other, are set behind the tomb. One is a mosque, and the other a resting hall. They share a base with the mausoleum's marble platform, but are constructed primarily from a contrasting red sandstone.

The Taj Mahal is the crowning achievement of Islamic architectural design. It represents, by its form and location, a description found in the Koran: "the Throne of God above the gardens of paradise on the Day of Judgment." For the power of its presence, the Taj Mahal might be compared to the pyramids in Egypt.

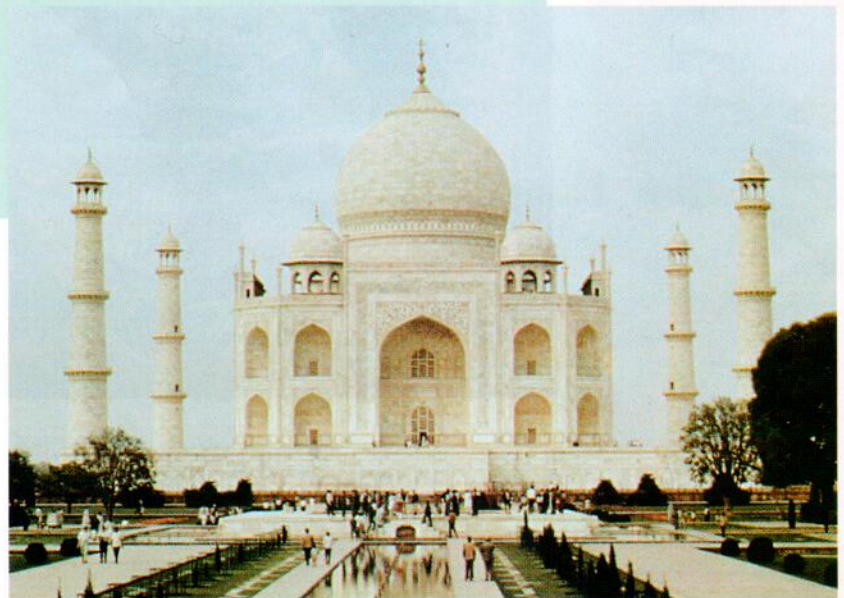
**7–8 The plan of this famous building and its grounds are perfectly symmetrical.**

India (Agra). *Taj Mahal*, 1632–38. Photo by David Gyscek.



**7–7 Can you think of other examples of symmetrical balance in the insect world?**

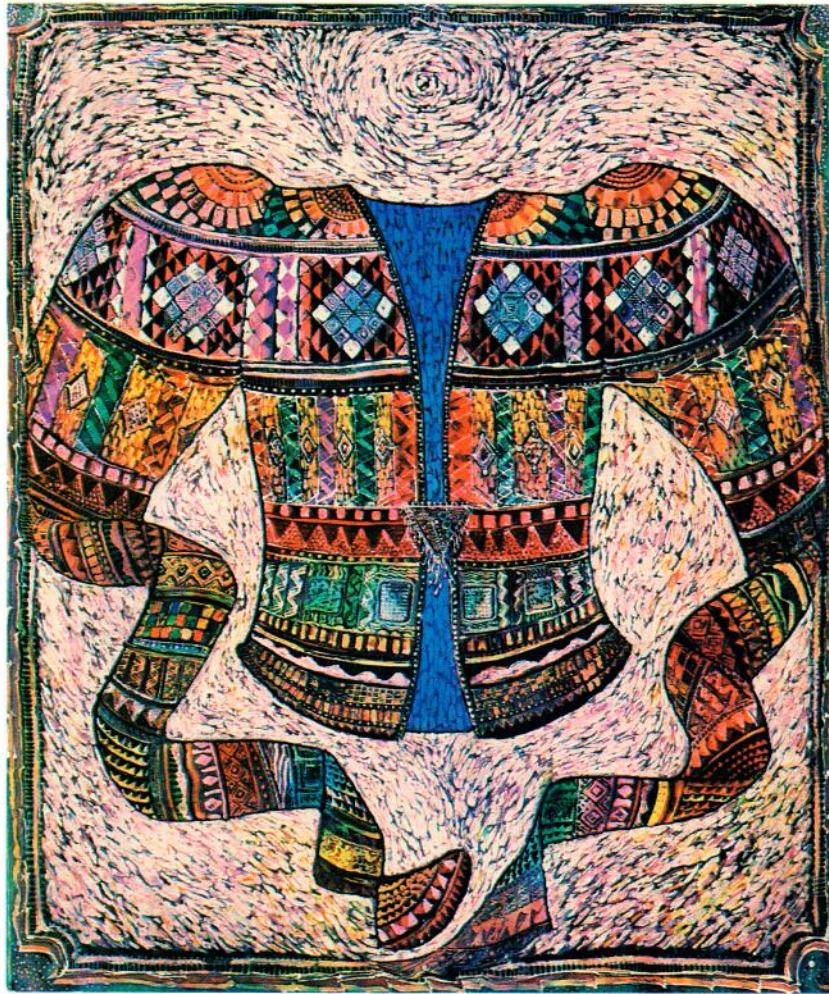
*Butterfly.* Photo by Sparrel Wood.



## Approximate Symmetry

Although symmetry is the simplest way to achieve balance in a design, it can be monotonous and may fail to hold a viewer's interest for long. Because one side repeats the other, the effect is usually static. An artist may actually wish to establish such a feeling of monotony, but most artists and designers prefer to use a less severe form of symmetry.

Look in a mirror. Most likely, you'll notice that your face is *almost* symmetrically balanced. One eyebrow may be a little higher than the other. Your nose may not be perfectly straight. Or you may have more freckles on the left side of your face than on the right. These slight differences between the two sides make you more interesting to look at.



7–9 What variations in this piece make its symmetry approximate? Consider color as well as shape.

Dorte Christjansen (b. 1943). *Borderjacket*, 1992. Batik on silk (satin), 32" x 36" (81.3 x 91.3 cm). Commission/Kremen.

### Note it

Look at images of paintings and sculpture throughout this book to see how artists and designers have achieved approximate symmetry in their work.

In a design, artists can break the severe monotony of pure symmetry by using *approximate symmetry*. With approximate symmetry, the two sides of a composition are varied. They offer enough differences to hold the viewer's attention, but the halves are similar enough to provide a sense of balance.

Study the photograph of the woman with her cats (fig.7-10). What variations do you see? You probably notice that the cats are different colors. But did you observe that the cats' paws are crossed? The photographer also allowed one tail to hang over the edge. These minor variations give the composition greater visual interest.

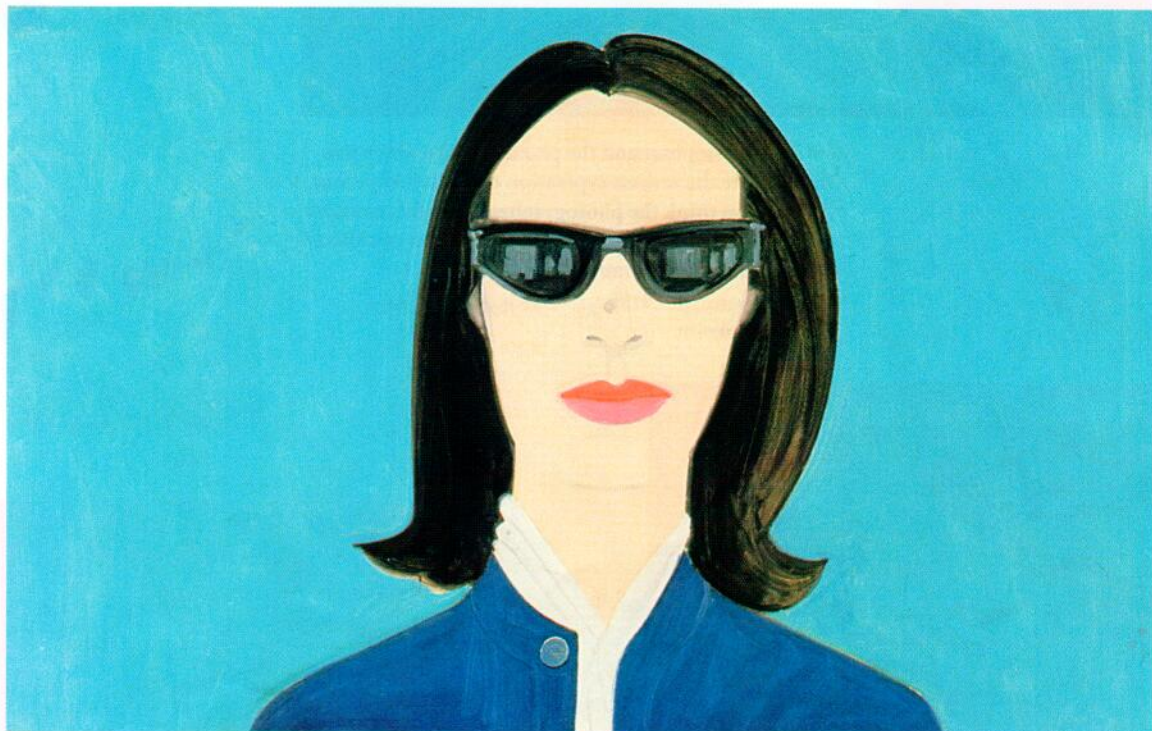


7-10 As you consider the approximate symmetry shown in this photograph, look also at the background of the composition. What might have been the artist's reason for including a generous amount of space above the subjects? How does this affect the artwork's sense of symmetry?

Paul Tanqueray (1905-91). *Elinor Glyn*, 1931. Bromide print, 9 1/8" x 5 1/2" (23.2 x 14.1 cm). Courtesy of the National Portrait Gallery, London. Reprinted with permission by Marc Bryan-Brown.

7-11 Several items cause the symmetry of this work to be approximate rather than perfect. Can you spot two?

Alex Katz (b. 1927). *Ada in Aqua*, 1963. Oil on canvas, 50 1/4" x 80" (127.6 x 203 cm). New Orleans Museum of Art, gift of the Frederick R. Weisman Foundation. ©Alex Katz/Licensed by VAGA, New York, NY/Marlborough Gallery, NY.



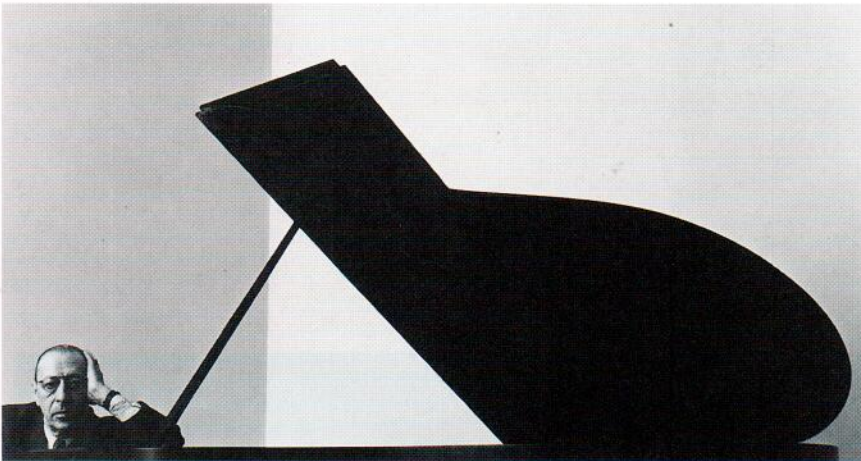


## Asymmetrical Balance

*Asymmetrical balance* (also called informal balance) is more complex than symmetrical balance. It often contrasts elements that at first glance may not seem to be balanced. For example, an artist may place a large shape on one side of a design and a group of smaller shapes on the other. Or, he or she may balance a small area of color with a larger, colorless space; or a small, bright area of color with a large, dull one. In each of these examples, the two sides will appear to have the same “visual weight.”

Asymmetry can provide balance in a design and also produce a sense of excitement and interest. Look at *Igor Stravinsky* (fig. 7–12). In this unusual portrait, Arnold Newman placed the composer’s face in a corner of the composition. To his right, the black shape of a piano lid takes up most of the space. Even though the face is very small, our attention is naturally drawn to it. The fact that it is close to the edge also adds enough “weight” to balance the much larger black shape.

Asymmetrical balance offers many possibilities and combinations to an artist, who might balance light against dark, large against small, or rough against smooth. But asymmetrical balance is more difficult to achieve than symmetrical, or formal, balance. Informal balance is something that the viewer senses in a composition; it cannot be measured. There is no center line or pairing of mirror images. As you manipulate the visual elements in a design, you’ll learn to judge when opposing elements are in balance.

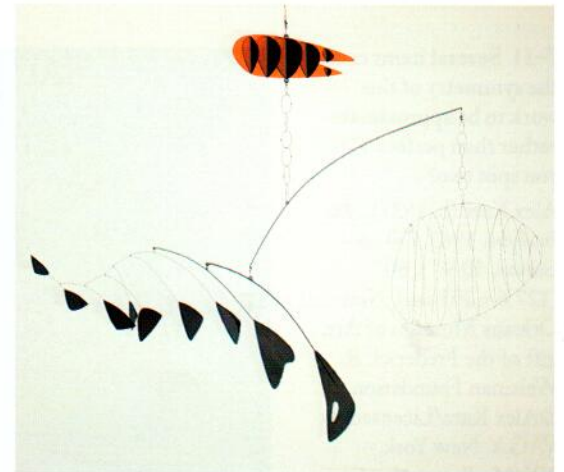


7–12 The composer and the piano become one in this image. Note the serious expression on Stravinsky’s face. Why do you think the photographer chose this composition? What impression does the image give you about the composer and his music?

Arnold Newman (b. 1918). *Igor Stravinsky*, 1946. Print.  
©Arnold Newman.

7–13 Mobiles display a continuously changing asymmetry. It is this characteristic that makes them so fascinating to the eye.

Alexander Calder (1898–1976). *Lobster Trap and Fish Tail*, 1939. Painted steel wire and sheet aluminum, 8’6” x 9’6” (2.6 x 2.9 m). The Museum of Modern Art, New York. Commissioned by the Advisory Committee for the stairwell of the museum. Photograph ©1998 The Museum of Modern Art, New York ©1999 Estate of Alexander Calder/Artists Rights Society (ARS), New York.



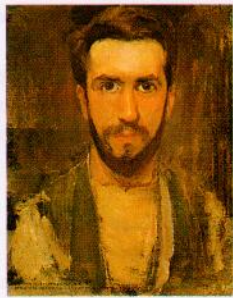
### Try it



Study fig. 7–13 and other mobiles by Alexander Calder. Then make a mobile of your own. Try to balance your work visually by contrasting large and small forms. To achieve equal visual and physical weight, use color and size variation.

# Piet Mondrian

If you want a challenge, try to find an artist who placed more emphasis on asymmetrical balance than Piet Mondrian. Considered by art historians to be one of the most influential pioneers of abstract art, Mondrian lived from 1872 until 1944. His paintings are now highly prized, yet he sold only a few of them during his lifetime.



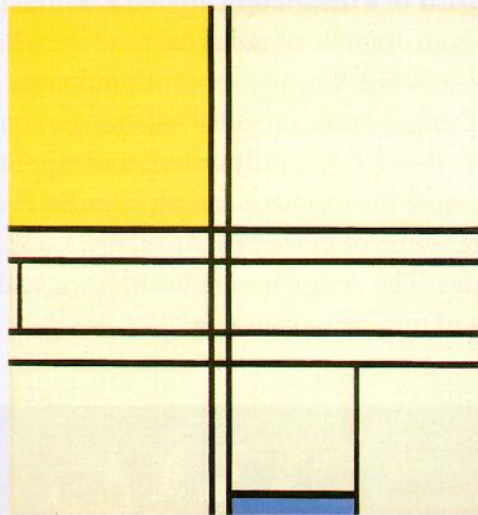
Piet Mondrian, *Self-Portrait*, c. 1900. Oil on canvas mounted on masonite, 19 7/8" x 15 5/8" (50.4 x 39.7 cm). The Phillips Collection, Washington, DC.

Born in Holland, Mondrian began painting after observing the work of his father and uncle, who were both painters. Although Mondrian's best-known works are his geometric compositions (fig. 7-14), many of his early works depicted the natural world. The flowers, trees, and windmills of the

Dutch landscape provided him with the inspiration to use strong horizontal and vertical elements. Mondrian was skilled at painting representationally, and a strong sense of balance is evident in his portrayals of natural scenes.

Largely self-taught, Mondrian studied Realism, Impressionism, Post-Impressionism, and, beginning in 1910, Cubism. His experiments in Cubism led him to focus on a style of nonrepresentational work called *De Stijl* (Dutch for "the style"), a type of art that purposely eliminated emotion and a sense of humanness from the viewer's experience.

Mondrian restricted himself to a palette of neutrals and primary colors, to vertical



**7-14** Keep in mind that though a work might be asymmetrical, it can still have a strong sense of balance. Can you analyze how Piet Mondrian maintained balance in this painting?

Piet Mondrian (1872-1944). *Composition with Blue and Yellow*, 1935. Oil on canvas, 28 3/4" x 27 1/4" (73 x 69.2 cm). Gift of the Joseph H. Hirshhorn Foundation, The Hirshhorn Museum and Sculpture Garden, Smithsonian Institution. 1972.72.205. Photo by Lee Stalsworth.

and horizontal lines, and to square or rectangular shapes. He worked within a regular, stable grid, using balance to achieve a dynamic but harmonious whole. Mondrian intended the paintings to be displayed flat against a wall, without frames, so that the wall would be experienced as an extension of the picture plane.

As an elderly man among many others who fled Europe during World War II, Mondrian made his way to New York. Although he died relatively unknown to the general public, he left a creative legacy that affects the way we view art today.

## Try it

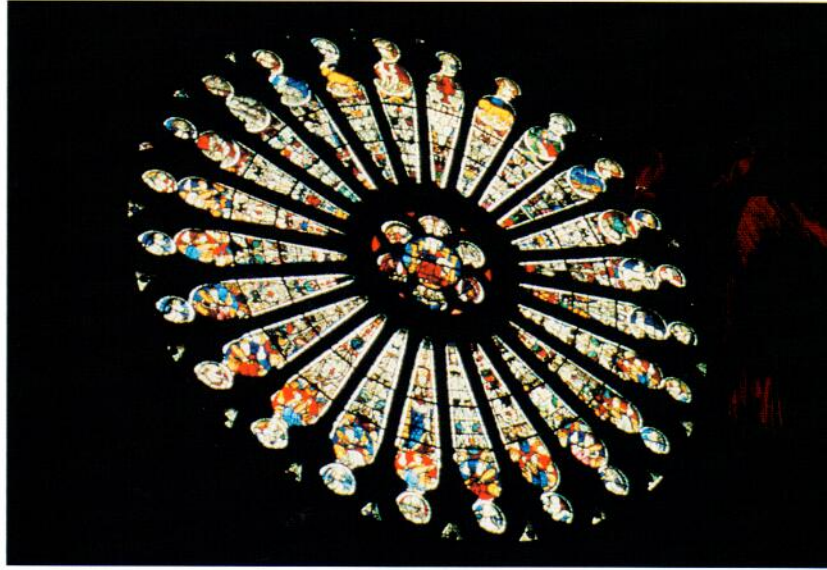


You can experience actual asymmetrical balance by placing a ruler across an outstretched forefinger, while resting your hand on a desk. Experiment by placing lighter and heavier objects on each side of the center. Move them until the ruler balances.

## Radial Balance

If the parts of a design turn around a central point, the design has *radial balance*. A bicycle wheel is an example of radial balance: the wheel has a central point from which the spokes radiate outward. The blossoms of sunflowers and daisies are other examples.

Designs based on radial balance are somewhat similar to those that use symmetrical balance: they are generally orderly and repetitious, and one side may be much like the other. But because the various elements in radial designs form a circular pattern, they often convey a greater sense of movement or energy. Look at the plate (fig.7-17) created by Maria Martinez. The design uses radial balance, and its circular repetition of feathers suggests a feeling of turning or spinning.



7-15 Rose windows are excellent examples of radial balance in architecture. This window is from the Cathedral of Angers, in France, which was completed during the 1200s. Rose windows such as this one were most often placed on the end walls of medieval churches to allow a burst of light to flood the interior.

*Cathedral of St. Maurice, c. 1150-13th century, Angers, France. South transept of rose window.*

7-16 We usually think of a daisy as a simple form, but if we look at it in terms of radial balance, it becomes a much more complex creation.

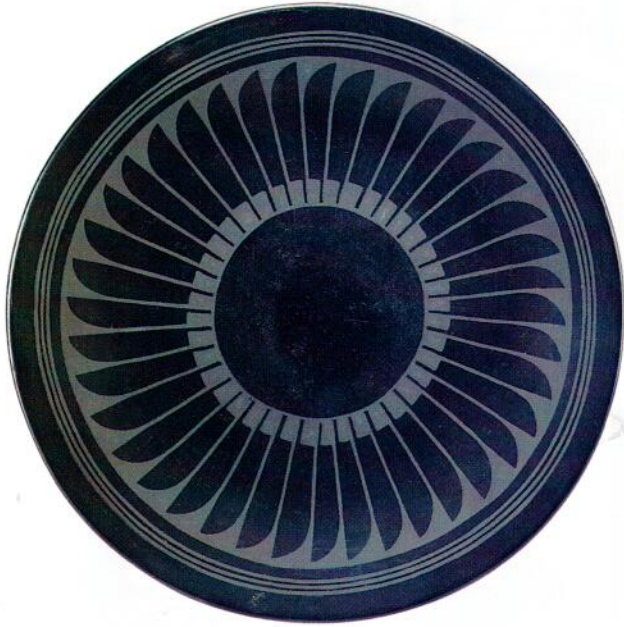
*Daisy.* Photo by N. W. Bedau.

### Note it

Look for simple and complex radial designs in manufactured objects. You might notice buttons, plates, fountains, or hubcaps. Make sketches to use as ideas for later artworks.



As they do with symmetrical balance, artists often modify radial balance to add greater visual interest or tension. They may vary the number, direction, or arrangement of the design's parts. One example of this is the so-called rose window commonly found in a church or cathedral (see fig.7-15). The "spokes" of this stained-glass architectural feature often depict a variety of scenes or figures, and, unlike the plate, the rose window would not look the same if it were turned upside down. Even with modifications, however, most radial designs tend to create an overall decorative effect.



7-17 Over her long lifetime, Pueblo artist Maria Martinez created many exquisite works, including this earthenware black-on-black plate. The ideas for this style came from prehistoric pottery discovered by archaeologists near her home in New Mexico.

Maria Poreka Martinez (1881-1980). *Plate*, c. 1943-1956. Slipped earthenware, 14 ½" diameter (36.8 cm). Gift of Mr. and Mrs. Charles Shucart. The Saint Louis Art Museum.

7-18 How has this artist used radial balance in her work?

Jessica Genelli (age 17). *In Good Times and Bad*, 1996. Oil pastel and watercolor. West Boylston Middle/High School, West Boylston, Massachusetts.



## Another Look at Balance

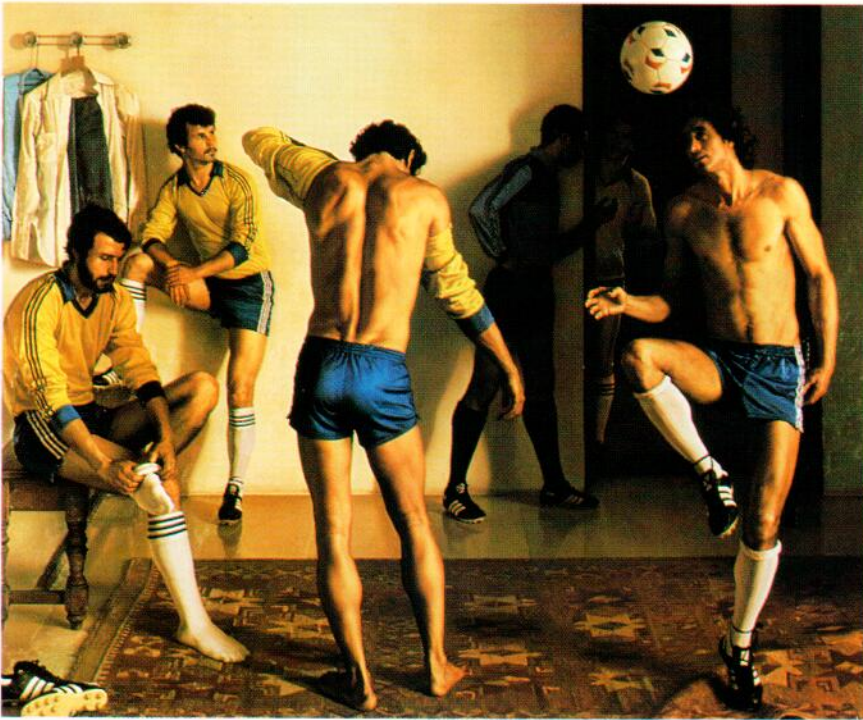


7–19 What type of symmetry is evident in this blanket?

*Polychrome Shoulder Robe (Chilkat Blanket)*, late 19th century, Tlingit, Yakutat, Alaska. Wool, 32 3/4" x 61" (83.2 x 154.9 cm). Honolulu Academy of Arts Purchase, 1935.

7–21 Describe how balance is achieved in this three-dimensional work.

Erin Freland (age 14). *Untitled*, 1998. Papier-mâché, 25" high (63.5 cm). Wachusett Regional High School, Holden, Massachusetts.



7–20 How did the artist maintain balance in this composition, despite the different pose of each athlete?  
 Claudio Bravo (b. 1936). *Before the Game*, 1983. Oil on canvas, 78 1/2" x 94 1/4" (199 x 239 cm). ©Claudio Bravo/Licensed by VAGA, New York, NY/Marlborough Gallery.



7-22 Empty space, or a void, is often used by Asian artists in a masterful manner. What effect does the emptiness here have on the viewer?

Nonomura Sotatsu (1576-1643). *The Zen Priest Choka*, Edo period. Hanging scroll, ink on paper, 37 3/4" x 14 3/4" (95.8 x 37.5 cm). ©The Cleveland Museum of Art, 1998, Norman O. and Ella S. Stone Memorial Fund, 1958.289.



7-23 Nakamura combines an overall radially balanced design with smaller areas of radial balance and symmetry. How many places can you see radial balance in this artwork?

Joel Nakamura (b. 1959). *Inspiration*, 1993. Poster for the 1993 AIGA Design Conference. Third in a series of four. Acrylic on archival board, 20" x 30" (50.8 x 76 cm). Courtesy of the artist. Photo by Art Works, Pasadena, CA.

### Review Questions

1. What is visual balance?
2. What are four types of visual balance? List an example of each from this book.
3. How do the two halves of a bilateral, or symmetrical, composition relate to each other?
4. How does approximate symmetry differ from bilateral symmetry?
5. Why might an artist wish to create an approximately symmetrical or asymmetrical design instead of a symmetrical one?
6. What type of balance does the design of the Taj Mahal display? Where is the Taj Mahal located? Why was it built? What is an *iwana*? Locate iwans in this structure.
7. Experiments in what art style led Mondrian to focus on a new style called De Stijl? Describe the restrictions that he placed on himself as he painted in the nonrepresentational De Stijl style.