How We Perceive Shape, Form, and Space

Vocabulary

point of view

Look up from this book to an object across the room to see if you can feel the movement of your eye muscles. If you didn't feel anything, try again until you become aware that your eyes are working to refocus.

You have just taken a trip through visual space. Your brain measured the amount of space between you and the object and sent a message to your eye muscles to adjust. The muscles then refocused your eyes so that you could clearly see the object.

Perceiving Depth

Your eyes and brain work together to enable you to see in three dimensions —*height, width,* and *depth*. Each eye sees an object from a slightly different angle. The brain merges these two separate and slightly different views into one, creating a three-dimensional image.

To see how this works try the following experiment. Close your right eye. Point to a specific spot in the room. Without moving your pointing finger, open your right eye and close your left eye. It will appear that you have moved your finger, even though you know you have not.

Point of View

The shapes and forms you see depend on your *point of view*. **Point of view** is *the angle from which the viewer sees an object.* Another viewer at another location will see the same shape or form differently. For example, a person looking down on a circle drawn on the sidewalk sees a round shape. If that person lies on the ground beside the circle and looks at it, the circle will appear to have an oblong shape. A person looking at the front end of a car will see a form different from the one seen by a person looking at the side of that same car. **Figure 5.14** shows three different views of a sculpture.

Activity — Shape and Point of View

Creating Visual Solutions Using Direct Observation. Look through magazines for three or more different views of one type of object. Look for TV sets, sofas, spoons, toasters, cars, or shoes. Cut out the objects and mount each one on a sheet of white paper. Observe and emphasize the changes in shape by drawing around each outline with a crayon or marker.

Computer Option. Divide the page into three equal sections. Use the Grids and Rulers menu to guide you if available. Choose an interesting but simple object such as a cup, a screw, pliers, a book, or a paint container. Observe and draw three views of the same object using the Pencil, small Brush, Crayon, or Marker tool. After drawing the contour or outer edges of the object, add shading to emphasize the form and surface from different views.

FIGURE 5.14 Notice how the feeling expressed by this sculpture changes as your point of view changes. You must view the sculpture from all angles to truly understand it.

Michael Naranjo. *Spirits Soaring*. 1985. Bronze. Height 50.8 cm (20″). Private collection.

Experiments in Point of View

You can learn about point of view by doing the following experiments. Place your hand flat on the desk and spread your fingers apart. The shape and form you see are the shape and form you would probably draw. They are part of the mental image you have of the object "hand." Now lift your hand and let your fingers relax. Notice how the shape and form of your hand change. Turn your hand and watch what happens. Your hand is still the same hand. Only its shape and form are different.

Next, look at a rectangular table. What shape does the top have when you are sitting at the table? Look at the top through a rectangular viewing frame. Are the edges of the table parallel to the edges of the frame? You know the top is a rectangle, but does it really look rectangular now? What shape does the top seem to take if you are sitting across the room from it? What would the shape look like if you viewed it from the top of a tall ladder? Do you think the shape you see will change if you lie on the floor directly under the table?

▲ **FIGURE 5.15** Grandma Moses is the professional name of Anna Mary Robertson Moses. She began to paint rural scenes from her memories in the 1970s. This painting depicts the many different aspects of making maple sugar. What point of view is she using? What effect does this point of view create for the viewer?

Grandma Moses. *Sugaring Off.* 1955. 50.8 x 63.5 cm (20 x 25″). © 1955 (renewed 1983) Grandma Moses Properties Company, New York, New York.

When you looked at your hand, your eyes stayed in the same place, but your hand moved. When you studied the table, it remained in one place, but you moved. In both cases, what you saw changed because your relationship to the object changed. Your point of view depends on where you are and where the object is. Look at **Figure 5.15.** Where is the artist's point of view in relation to the people in that picture?

Check Your Understanding

1. What three dimensions are we able to see?
2. Define *point of view.*
3. Why may people who are looking at the same object see different shapes and forms?