Section 3

Photography Essentials

In Section 2, you learned about the basic controls and functionality of a camera. Now that you understand how your camera works, you can begin tackling how to create great photos.

Section 3 will teach you how to properly utilize the elements of composition, as well as how lighting and exposure affect your final photo. Regardless of the equipment you have, the information in this section will be vital for taking great photos.

Chapter 9 explains the difference between "taking" a picture and "making" a picture. It has a heavy focus on the elements of composition. It also discusses how to focus viewer attention using various techniques and how to create visual effects while shooting.

In Chapter 10, you will learn how lighting affects your final image. This includes lighting equipment, setups, and accessories.

Chapter 11 will focus on how exposure affects your photo. Building on the previous chapter, this chapter will show you how to manipulate lighting in your photos to create specific effects.

Chapter 9
Making a Picture

Learning Objectives

After completing this chapter, you will be able to:

- Understand the difference between "taking" a picture and "making" a picture.
- Recall the six traditional elements of composition.
- Understand the concept of selective framing in composition.
- Explain how the rule of thirds is used in composing a photograph.
- Identify the various methods of focusing viewer attention.
- Describe techniques that can be used while shooting to create interesting visual effects in photographs.

ESSENTIAL QUESTION

How do compositional elements affect a photograph?

Technical Terms

camera angle
center of interest
composition
compositional elements
contrast
convergence
depth of field (DOF) preview
emphasis
extracting
formal balance
frame
informal balance
landscape mode
leading lines
lead room
line
negative space
panning
pattern
perspective
point
portrait mode
rhythm
rule of thirds
selective focus
selective framing
shape
viewpoint
visualization
zooming

Introduction to Making a Picture

Being told that you have a "good eye" as a visual artist, especially as a photographer, is high praise. Such a person looks at a scene or a subject in a way quite different from a non-artist. Being aware of the relationship of masses and colors, the emotional content of the scene, the interplay of light and shadow, and the meaning that goes beyond the obvious and readily apparent are among the many elements of seeing photographically.

Subjects are all around us. Which ones we select to photograph depends on many factors, but as you learned in Chapter 1, *Our Visual World*, the first is personal interest. We must recognize the person, place, or thing as a possible subject, and then decide that we want to photograph it.

"Taking" a Picture vs. "Making" a Picture

The commonly used term for photographic activity is *taking a picture*. This implies a simple recording of what is in front of the camera. The vast majority of all photographs that are taken are casual snapshots. These images are simple record shots of places visited, children's activities, and family events.

More serious photographers often use the term *making a picture*, which implies conscious control of the process and the final result. Instead of merely recording what appears in the viewfinder, these photographers make choices, applying the elements and principles of art to affect what the viewer of the final image sees. For example, a photographer visiting the local farmers market might first envision a photo of two shoppers examining the bananas in a large display of fruit. Looking a bit more closely at the subject, the photographer might decide to make an image depicting the banana's shape and texture instead. See **Figure 9-1**.

To control how the finished image appears to the viewer, the photographer must visualize the final result. *Visualization* is a technique in which the photographer controls how the final product will appear to the viewer by first seeing that desired final result in their own mind. Finally, keep in mind that almost all the techniques we discuss in this chapter apply to both digital cameras and smartphone cameras. You may not have as much control over the settings for a phone's camera, but you still have the ability to control most of the important things, like exposure and focus.

Selecting the Viewpoint

To capture a visualized image, a photographer must make a series of choices. The most basic decision is selecting the subject and determining how you want to portray it. For example, an abandoned building, such as an old factory, farm structure, church, or rural schoolhouse, could be shown in many different ways.

A   *Jack Frog/Shutterstock.com*

B   *Africa Studio/Shutterstock.com*

Figure 9-1. Taking a picture versus making a picture. A—This photo of shoppers at a farmers market, taken from standing eye level, is a competent but unexciting shot. B—To make a more interesting image, the photographer moved in closer to fill the frame, selected a different angle, and carefully exposed to bring out texture and shadow detail.

In **Figure 9-2**, each of the old church images involves a different *viewpoint*, or the distance and angle from which the camera (and eventually, the viewer) sees the subject. **Figure 9-2A** and **Figure 9-2B** are basically eye-level exterior views from some distance away. These images show the entire structure. The pattern shot could be made from almost any distance, depending on the lens used, but includes only part of the building, **Figure 9-2C**. Texture studies are often close-up views that show an even smaller part of the subject, **Figure 9-2D**. **Figure 9-2E** is an interior view portraying the roofless, abandoned nature of the building. The interior could be shown from a number of
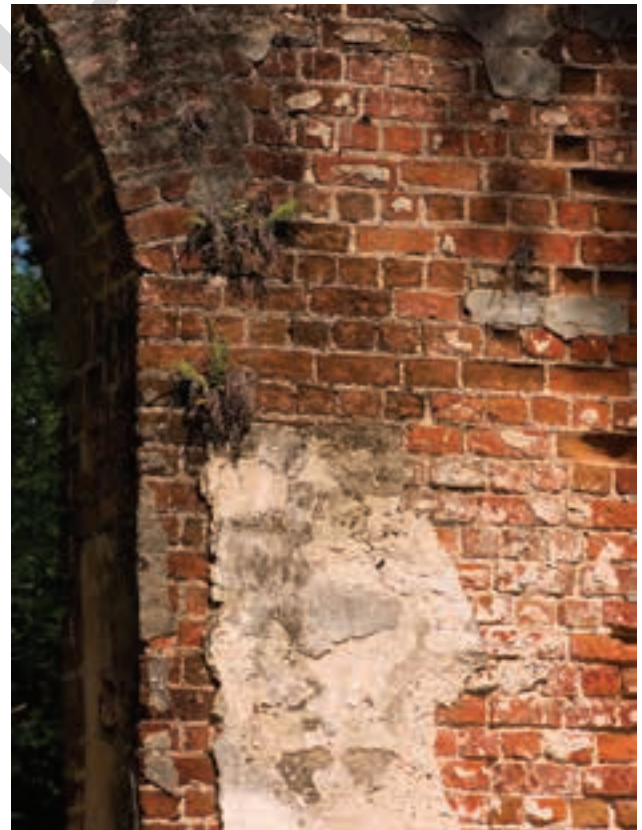

A

B

C

D

E

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-2. An abandoned building, such as this old brick church, can be portrayed in many different ways. A—A traditional three-quarters architectural view. B—In this wider environmental view, the church ruin is a focal point. C—Repetitive arch shapes form a pattern. D—Worn brick, weathered remnants of plaster, and encroaching plants provide rich texture to an interior wall. E—The church interior, open to the elements, is a portrait of abandonment.

viewpoints (wide angle, normal, or telephoto; eye-level, low angle, or high angle).

A picture is often taken from the first possible viewpoint the photographer encounters, typically resulting in an eye-level shot that may be competent, but probably is not very exciting. Photographers who want to make a picture instead of merely taking one move around the subject to see it from as many sides and distances as practical. They also try to visualize the result of shooting from a high angle or low angle.

Two other factors that affect the choice of viewpoint are the light and the background. The strength and direction of light can make a major difference in the impact of an image. In **Figure 9-3**, the interplay of the angled shadows with the opposing diagonal lines of the fire escape provide a dramatic statement that would be absent on a cloudy day. The viewpoint—looking upward at an angle—also creates a much different composition from a straight-on shot.

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-3. Directional light and shooting upward at an angle strengthen this composition.

What appears in your photo behind and around the subject must be taken into account. If you want to show a young couple pitching their tent in a peaceful natural setting, the viewpoint should not include a nearby line of electrical transmission towers or a factory smokestack. On the other hand, a portrait of a successful young architect might be quite effective when shot against the busy background of a construction site.

Composition Considerations

Composition is the arrangement of visual elements, such as shapes, colors, and textures, within the frame. It strongly influences the message the viewer will receive and can direct their attention toward or away from an object in the frame. For example, imagine that you have six identically sized balls and want to convey to the viewer that one of these is more important than the other five. **Figure 9-4** illustrates four compositional techniques that achieve this objective:

- **Size.** Place one of the balls nearer the camera so it appears larger. This directs your eye to the larger object, making it seem more important.
- **Focus.** Sharply focus on one ball and leave the others in soft focus. This directs your eye to the ball in sharp focus, which makes it seem more important.
- **Contrast.** Paint one of the balls a strongly contrasting color. This directs your eye to the ball that is a different color, making it seem more important. Contrast can also be shown by varying shapes, sizes, and hues.
- **Isolation.** Separate one ball from the others. This directs your eye to the ball that is isolated. Again, this makes it seem more important.

These are only a few of the many compositional techniques that experienced photographers use regularly. All techniques for composing photographs make use of a limited number of compositional elements. As visual artists, both painters and photographers make use of these same principles and elements of art. Painters can freely add, subtract, and rearrange the elements within the picture. Photographers, however, are bound by physical limitations of the scene. They must use careful framing, changes of angle, selective focus, and other techniques to achieve the desired composition, or layout, of the final photograph.

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-4. Compositional techniques. A—Apparent size. B—Focus. C—Color. D—Isolation.

Traditional Elements of Composition

Compositional elements are the basic components used for effectively composing photographs. Various sources list different numbers of and names for the basic elements of composition. The traditional compositional elements consist of these six elements:

- Point
- Line
- Shape or pattern
- Balance
- Emphasis
- Contrast

The figures in the following sections each demonstrate one of the elements listed. Evaluate the figures closely to see how they convey each compositional element and take note of how you can use them in your own photos.

Point

A ***point*** is a compositional element that is a single object, typically small in size, that attracts the eye. It may serve as the focal point, or it may be a distraction that pulls the eye away from a more important object. See **Figure 9-5**.

Line

A ***line*** is a compositional element that typically draws the viewer's eye along its length, making it a useful tool for directing attention. It is a "stretched point." The orientation and shape of a line can convey certain impressions. Straight horizontal or vertical lines are static, whereas diagonal lines imply motion. Gently curved lines are considered placid and restful, while sharply curved or bent lines, as well as broken lines, convey energy or strong movement. See **Figure 9-6**.

A

B

Figure 9-5. Point as a compositional element. A—In this photo, the small bright spot (the baseball) is the center of interest, drawing the viewer's eye to the desired area of the photograph. B—The small bright area in this photo, a discarded soda can, draws the eye away from the intended center of interest.

A

B

C

D

E

Figure 9-6. Lines as compositional elements. A—Vertical lines, like those of this war memorial sculpture, are static. B—Horizontal lines are stable and restful. C—Diagonal lines, such as these bridge girders, give a sense of action and movement. D—Gentle curves, like the *S* shape of this shoreline, are placid and restful-feeling. E—Sharply curved or broken lines are energetic and have a strong feeling of movement.

Shape or Pattern

A **shape** is a compositional element made by an individual object, and a **pattern** is a compositional element made by multiple objects. A shape may appear to be flat and two-dimensional, exhibiting only the properties of length and width. Light falling on an object creates shadows or tonal variations, adding a third dimension, the property of depth. See **Figure 9-7**. A pattern may consist of repetition of identical shapes or may have elements alternating or varying in shape, size, or color. Repeated shapes or lines establish a **rhythm** that moves the eye through the frame, **Figure 9-8**.

Balance

Overall arrangement of elements within the frame determines the compositional balance, **Figure 9-9**. **Formal balance**, also called *symmetrical balance*, is a compositional method that consists of matched halves—dividing the frame vertically or horizontally in the middle produces two mirror images. A common metaphor for formal balance is a seesaw with riders of equal weight at equal distances from the center balance point. **Informal balance**, also called *asymmetrical balance*, is a compositional method that provides a feeling of visual balance without the mirror image effect of formal balance. Using the seesaw example again, informal balance involves riders of different weights, with the larger of the two positioned closer to the balance point and the smaller rider farther from the balance point. In a photograph, informal balance may be achieved by the relative positions of two objects of different sizes or by using a smaller, brightly colored object to balance a larger dark object. Sometimes, a single large object may be balanced by several smaller objects.

Emphasis

Emphasis is a compositional element used to make some element of a picture stand out and capture the viewer's attention. By emphasizing a single element of the photo, you are making that element dominant and creating a center of interest. A **center of interest** is a single element of the photo to which all the other elements of the picture relate, and which sends a clear message to the viewer. Without a center of interest, or with more than one emphasized
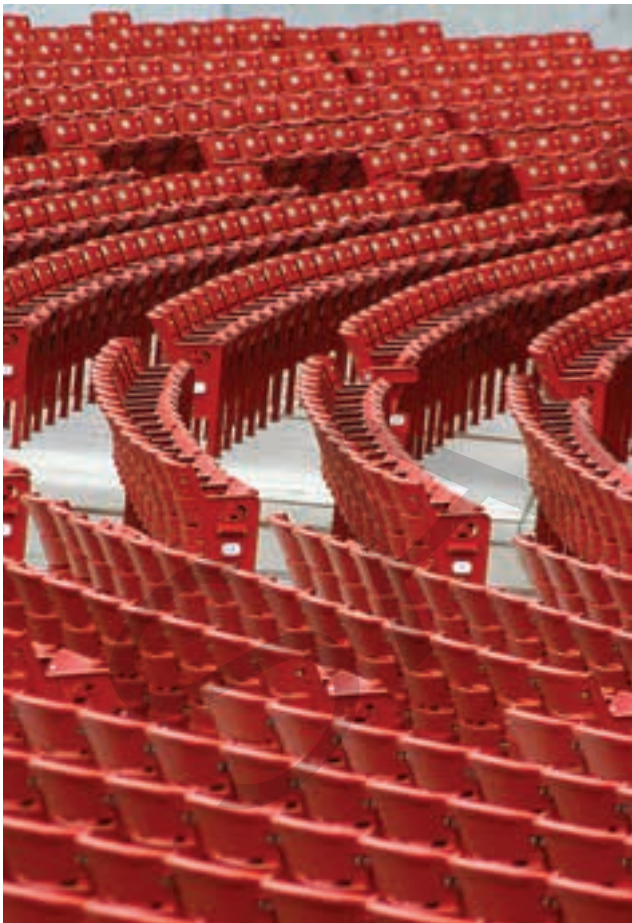
A

B

Figure 9-7. Shape as a compositional element. A—The silhouetted church spires are two-dimensional shapes. B—Light falling on the spires creates a three-dimensional appearance through tonal variation (light and shadow).

A

B

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-8. Rhythm as a compositional device is established when a repeated shape or line leads the eye through the frame. A—Repeated arches and statues. B—Curving rows of theater seating.

A

B

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-9. Balance as a compositional element. A—Formal balance. B—Informal balance.

element, the photo does not send a clear message to the viewer. An old design maxim, "all emphasis is no emphasis," is illustrated in **Figure 9-10**. When every element of the photo is given equal weight, nothing stands out because the viewer receives no guidance.

Contrast

Although it is a compositional element in itself, contrast is often used to provide emphasis. **Contrast** is the relationship of shadow and highlight within a photo. It is also a noticeable difference between adjacent elements of a composition, **Figure 9-11**. These include light and shadow, large and small size, dark and light (or saturated and muted) colors, smooth and rough textures, curved and straight-edged shapes, and sharp and unsharp (soft) focus.

A

B

Figure 9-10. Emphasis. A—With all objects equally emphasized, the viewer does not know where to look. B—Emphasizing one element provides a center of interest to guide the viewer.

Other Elements of Composition

In addition to the six traditional elements of composition, there are other elements that are just as important that help you properly frame and compose a photograph. The other compositional elements include perspective and harmony.

Perspective

One of the most important compositional elements a photographer must consider for their photos is perspective. **Perspective** is the relationship between objects in a photograph that can help provide a sense of depth or scale. Perspective is most often changed by altering the position of the camera itself. The three most common perspectives are bird's-eye angle, neutral angle, and worm's-eye angle:

- **Bird's-eye angle.** This angle looks down at a subject, often at a 40° angle. This perspective makes the subject seem much smaller and shorter than they are in real life, **Figure 9-12**.

Figure 9-11. This image illustrates two types of contrast—shape and color. It is also an example of formal balance.

Figure 9-12. A bird's-eye angle looks down at the subject. It is commonly used in landscape photography.

- **Neutral angle.** This angle is representative of how people view their surroundings and is often referred to as *eye-level angle*. Since this angle is close to how people see the world normally, it gives the viewer a familiar perspective. See **Figure 9-13**.
- **Worm's-eye angle.** This angle is positioned anywhere below the eyeline of a subject, filming up toward it. This perspective can help give your subject a sense of height and power, **Figure 9-14**.

Harmony

At its core, *harmony* is about creating an image that is visually interesting by combining different elements in the frame. These elements can include things like texture, shape, and color. An image is in harmony when all the elements of the photo work together to create a pleasing final composition.

Cast Of Thousands/Shutterstock.com

Figure 9-13. A neutral angle is level with the subject. It is most common for portrait photography.

Vadim Fedotov/Shutterstock.com

Figure 9-14. A worm's-eye angle shows the height or power of the subject. It is great for architecture photography.

In many instances, opposite elements make an image more interesting to look at and help create harmony. For example, opposite colors make one another appear stronger, such as black and white. A cool blue will also offset, but still complement, a bright red. Opposite textures can also have the same effect. A good example is when a wave is breaking on the shore and the textures of the water and the sand are contrasting, **Figure 9-15**.

Selective Framing in Composition

Selective framing is an important concept in composition. With **selective framing**, you decide what to include in the frame and what to exclude from the frame. What to include is called *inclusion*, and what to exclude is called *exclusion*. Sometimes referred to as *cropping in the camera*, selective framing produces the picture you visualized, without any extraneous elements. Depending on the situation, this may be accomplished through choice of lens (focal length), by changing angle of view, or by moving toward or away from the subject. Frequently, all three techniques may be necessary to frame the photo as you desire.

Moving in closer usually helps you create a better picture. Think of the lackluster family vacation photos you have seen, like the one in which your sibling—that tiny speck in the center of the frame—is shown at the rim of the Grand Canyon. Now think of the improved photo that would have resulted if your parent had moved in close enough so you could see your sibling's features and make out some of the details of the canyon behind them.

Lidiya Oleandra/Shutterstock.com

Figure 9-15. The contrasting textures of water and sand work together to achieve harmony.

As you compose your picture, check all the edges of the frame for distracting or unwanted elements, **Figure 9-16**. It is easy to focus your attention on placement of the main subject or the major elements of the composition and overlook something that is at the edge of the frame. Before pressing the shutter release, make it a habit to check the frame edges. If you find a problem, remove the distracting item if possible, or recompose to avoid it.

Also, check for the issue of *convergence*, a compositional problem in which parts of the image come together in an undesirable way. Convergence can also be referred to as *subject mergers*. A classic example of convergence is the flagpole or tree that appears to be growing out of your subject's head, **Figure 9-17A**. You can remedy this by either moving your subject or by shifting your position and taking the photo from another angle, **Figure 9-17B**. Other objects can create sometimes humorous results, but it's usually best to avoid convergence.

Seeing Pictures within the Picture

Images often contain a few, or even many, other potential images. Learning to see these pictures within a picture helps you make better-composed and more interesting photographs, **Figure 9-18**.

Figure 9-16. The table legs in the upper-right corner draw attention away from the main subject. Eliminate them by recomposing the shot before pressing the shutter.
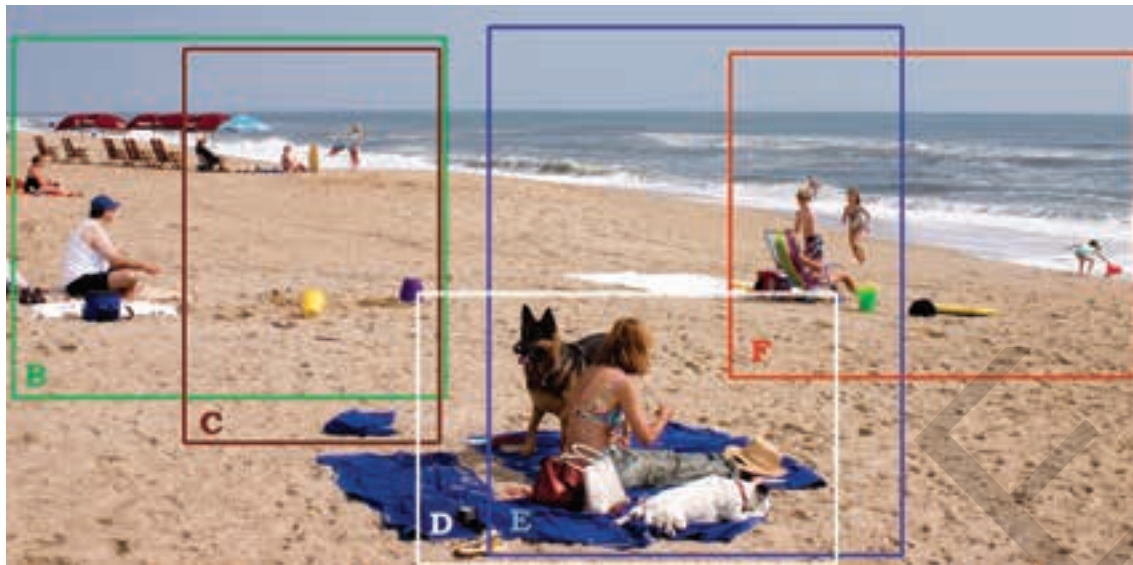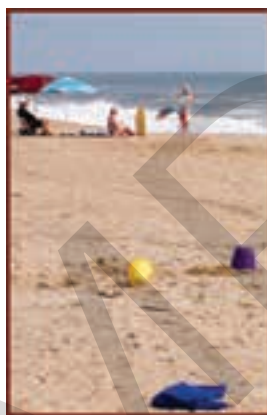

A

B

Figure 9-17. Convergence. A—Convergence can ruin an otherwise good photo. B—Shifting position and changing the angle or moving your subject can correct convergence.

Figure 9-18. Finding pictures within a picture. A—This beach scene contains many possible compositions that could be extracted. Five have been identified. B—Horizontal framing with near and distant subjects relaxing on the beach. C—A vertical scene with a family in the background and colorful foreground objects. D—A sunbather and their dogs isolated as a horizontal composition. E—The sunbather as foreground with children playing in the background. F—A horizontal view featuring the children.

With practice, you will look at a given scene and immediately begin to identify portions of that scene that could stand alone as individual shots.

Extracting (identifying and pulling out individual images from a larger scene) is most easily done with the aid of a zoom lens. While remaining in one spot, you can frame a possible image and then make necessary adjustments for good composition. If you are using a camera with a fixed focal length lens, you can still extract images from a larger scene by using the "two-legged zoom"—walking toward the subject until it is satisfactorily framed.

Choosing Vertical or Horizontal Framing

Unless you display your photos in the square format you can choose on Instagram or in your smartphone's native camera app, your images will be either landscape mode or portrait mode. *Landscape mode* is an image format that is wider than it is tall (a horizontal rectangle). *Portrait mode* is an image format that is taller than it is wide (a vertical rectangle). The frame ratio for many digital cameras is 2:3 (in landscape mode, two units high by three units wide). Some digital cameras also offer an image in a 3:4 ratio. The difference in ratios affects print proportions. A 2:3 ratio produces a standard 4″ × 6″ print using the full frame, while a 3:4 ratio yields a 4 1/2″ × 6″ image. The difference also affects display. A photo will be displayed as vertical or horizontal, depending on how the image was taken originally.

Certain subjects are suited to either landscape mode or portrait mode, **Figure 9-19**. Common subjects for landscape mode are street scenes, houses or industrial buildings, and group pictures. Portrait mode works well with subjects such as individual people, tall buildings, isolated flowers or trees, and statues.

When framing your subject, explore the possibilities by viewing both horizontal and vertical formats, possibly changing focal lengths as well to achieve a particular composition. See **Figure 9-20**. Professionals shooting for magazines strive to capture at least one striking vertical composition, since that format is required for selection as a cover image.

Using the Rule of Thirds

Since we live in a society that surrounds us with well-composed images, good composition should be almost instinctive. Unconsciously, we are disturbed

A

B

Goodheart-Willcox Publisher

Figure 9-19. Horizontal and vertical framing. A—The horizontal format was a natural choice for this intricate woven sculpture. B—The vertical format is ideal for portraying a tall and powerful building such as the US Capitol Building.

by a poorly composed image and pleased by a well-composed one.

The basis of any photographic composition is the frame. As you learned in Chapter 1, the *frame* is the working space within which a picture is composed. All the compositional elements are employed in

A

B

Goodheart-Willcox Publisher

Figure 9-20. Different formats. A—Horizontal composition. B—The same subject composed as a vertical.

relation to the frame. For example, a center of interest can be placed anywhere within the frame, but some locations are more effective than others. As a general practice, placing the center of interest in the physical center of the frame is considered rather static and boring, while placement elsewhere in the frame is usually more interesting visually.

A well-known compositional device is the rule of thirds. The ***rule of thirds*** divides the frame into thirds, both horizontally and vertically, **Figure 9-21**. The four intersections created by the crossing lines are considered the most effective spots to position the center of interest, **Figure 9-22**. By mentally imposing these lines in your camera viewfinder, you can see the effects of different placement. Digital cameras and even smartphone cameras have the option of enabling this grid in the settings, so it is constantly overlaid on your images. This tic-tac-toe grid does not appear in the final composition.

The compositional tool known as ***negative space*** is the area within the frame surrounding the subject. When used properly, negative space isolates and emphasizes the subject. The simplest example of negative space is a silhouetted subject, like the one
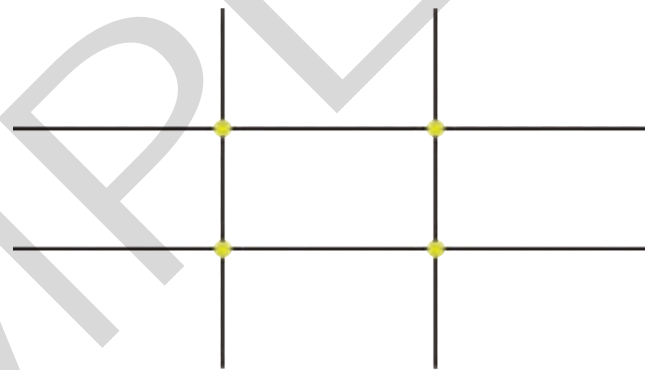
Mikhail Gnatuyk/Shutterstock.com

Figure 9-21. The rule of thirds grid will help you frame visually interesting shots. Note how the intersections are highlighted.
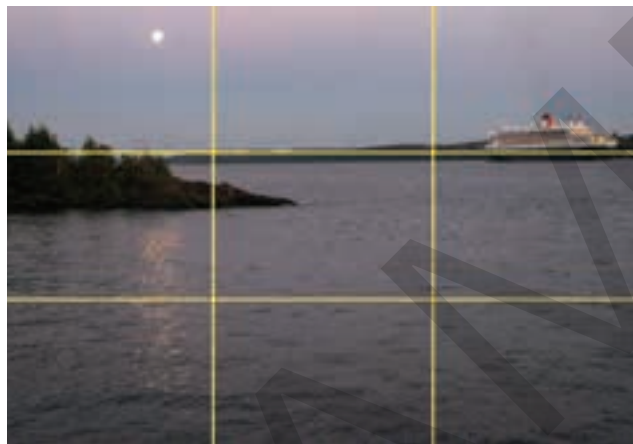

Darkroom Graphic/Shutterstock.com

Figure 9-22. Placing your center of interest at or near one of the four points where grid lines cross will make a more interesting composition than centering the subject.

shown in **Figure 9-7A**, but negative space may be any subdued background, such as a brick sidewalk, that helps the subject stand out.

The rule of thirds is a useful guide when your photo includes the horizon or another dominant horizontal or vertical line (such as a desert roadway or a lighthouse). Placing the horizon on or close to the top or bottom guidelines of the grid will make for a much more interesting photo than positioning it across the middle of the frame. See **Figure 9-23**.

Focusing Viewer Attention

Many different means can be used to direct the viewer's attention within a photograph. Various forms of emphasis have already been covered. You can also focus the attention of the viewer by using leading lines, different camera angles, or the elements of color, shape, and size.

Using Leading Lines

A commonly used method of directing attention is the use of *leading lines*. These pictorial elements draw the viewer's eye from one area of the photo to another, **Figure 9-24**. In an outdoor scene, a leading line might be a fence, a road, a railroad track, or even a fallen tree. In a portrait, the line of the subject's arm, a shadowed fold in clothing, or an object in the environment surrounding the subject can serve to lead the eye as intended by the photographer, **Figure 9-25**.

Try to avoid compositions that direct the viewer's attention out of the frame. This is most often a problem when photographing people or moving objects. If possible, provide some additional room on the side of the frame toward which the subject is looking or moving, **Figure 9-26**. This technique is called *lead room* or *lead space*, and it keeps the viewer's attention within the frame.

High horizon

Low horizon

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-23. Placing the horizon on or near one of the grid lines will result in a more effective photo.

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-24. Leading lines direct the viewer's attention. The railing of the stairway leads the eye to the house and then to the curving street in the quaint village of Chartres, France.

You can also have a "frame within the frame" by using a foreground object or shape to partly or fully surround your main subject. This technique directs attention into the frame, focusing it on the main subject and giving the picture a sense of depth. Although the use of an overhanging tree branch or a building archway as a frame has become a visual cliché, the concept of the frame is still valid and useful. See **Figure 9-27**.

Courtesy of the Library of Congress

Figure 9-25. The woman's arm leads the eye to her face in this classic portrait titled *Migrant Mother*, taken by Dorothea Lange in 1936. It was one of a series of photos depicting the plight of migrant farm families during the Great Depression.

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-27. A statue depicting George Washington meeting the Seneca Chief Guyasuta frames a view of the Allegheny River bridges in downtown Pittsburgh.

A

B

Goodheart-Willcox Publisher

Figure 9-26. Controlling viewer attention. A—A moving object can lead the eye out of the picture. B—Provide some space between the object(s) and the frame edge to hold attention within the frame.

Using Camera Angles

Changing your ***camera angle***, or any of the different points of view that can be used to vary a picture's composition and visual impact, can have a dramatic effect on a picture. See **Figure 9-28**. For example, an innovative way of photographing a field of flowers is to lie on your back and shoot upward through blossoms that are backlit by the sky.

Alternatively, you could stand on a chair or ladder for a high-angle approach, or even shoot from a second-story window or the roof of a building (be sure to take the proper safety measures when using a ladder or shooting from a great height). Photographing from a high angle is a good way to show patterns or to avoid a visual obstacle, such as a foreground fence. When photographing a landscape, a high angle permits you to tilt down and eliminate an uninteresting expanse of cloudless sky.

When working with children or animals, the opposite is true. Getting down to their eye level often results in a better picture than the bird's-eye view of shooting downward from an adult viewpoint. See **Figure 9-29**.

A

B

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-28. Using camera angle to focus the viewer's attention. A—A high-angle shot taken from the first platform of the Eiffel Tower. B—This low-angle view emphasizes the movement of these bicycle racers.

A

B

Goodheart-Willcox Publisher

Figure 9-29. Suit the camera angle to the subject. A—Photograph animals or children from their own eye level. B—Adult viewpoint diminishes shorter subjects.

Using Color, Shape, or Size

The viewer's eye is drawn to the brightest element in a picture. That brightest element is often white or a light color, but it also can be the most strongly saturated color visible. Shape and relative size are other tools you can use to focus viewer attention. See **Figure 9-30**.

Creating Visual Effects While Shooting

A number of techniques can be used to achieve visual effects that make your pictures more interesting or help to convey your intended meaning. Most of these effects work with both color and black-and-white images.

Motion Blur

While blurring as a result of camera shake is seldom desirable, motion blur due to movement of the subject can be used creatively. Manipulating a zoom lens during exposure can produce motion effects.

A technique called **panning** (moving the camera along with an object crossing the field of view) conveys speed and movement by streaking the background behind a sharply focused moving subject, such as when you are shooting moving vehicles. Practice and experimentation are needed to obtain acceptable results, but the concept is simple. See **Figure 9-31**. With the camera prefocused for the proper distance, frame the vehicle as it approaches, then pan (move the camera laterally) to keep the vehicle properly framed as it crosses in front of you. At the desired point, make your exposure without stopping the panning movement. Continuing to pan after pressing the shutter release is an important part of this technique. The result is a vehicle that is sharply focused against a background that is blurred and streaked horizontally to show movement.

Zooming is moving the camera's zoom lens in or out during the exposure, usually done to impart a sense of motion to a photo of a stationary subject. Striking motion effects can be achieved by using a relatively slow shutter speed and zooming out or zooming in during the exposure. Mount the camera on a tripod to hold the desired framing on the subject during the zooming action. See **Figure 9-32**. Each exposure made with this technique results in a different effect because the zooming rate and

A

B

C

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-30. Focusing viewer attention using different methods. A—Color. B—Shape. C—Relative size.

Iurii Vlasenko/Shutterstock.com

Figure 9-31. Panning the camera along with the motion of the subject conveys speed and movement.

Jack Klasey/Goodheart-Willcox Publisher

Figure 9-32. Zooming creates an interesting, almost abstract effect and a strong feeling of motion.

smoothness of the motion are different each time. Zooming in produces a different effect from zooming out. Lenses with different ranges of focal lengths can be used to create different effects.

Soft Focus

Soft focus is used primarily in portrait photography because it is flattering and helps to mask any minor blemishes. The effect is subtle and is different in quality from the unsharpness caused by imprecise focusing, **Figure 9-33**. To achieve the soft-focus effect, stretch a single thickness of sheer black stocking fabric across the lens, or smear a thin coat of petroleum jelly on a clear (UV) filter. However, you should avoid potentially damaging a filter or lens and instead use an image processing program

A

B

Goodheart-Willcox Publisher

Figure 9-33. Soft focus can be pleasing and flattering. A—Soft-focus portrait. B—The same subject in sharp focus.

to achieve the same effect. Special soft-focus filters are also available in several degrees of softness.

Selective Focus

Sharp definition of objects from the near foreground to the distant background is desirable in some photographs but less desirable in others. **Figure 9-34** shows two versions of a flower portrait. A depth of field that renders the busy background sharp enough to be recognizable distracts the eye from the main subject. A shallower depth of field that throws the background out of focus draws attention to the main subject. This *selective focus* technique is used extensively in photographing flowers and small animals, especially in natural settings. In the studio, it is often used for both product photos and portraits.

Depth of field (DOF) preview is a desirable camera feature that allows the photographer to see the scene at the desired aperture and assess the actual depth of field. It also allows the photographer to view the degree to which the background is out of focus or if one subject is emphasized and another is de-emphasized. The degree to which the background is out of focus can be judged and adjusted by shifting the plane of focus or changing to a higher or lower f-stop. Without depth of field preview, selective focus is more difficult to achieve. However, a depth of field chart or the depth of field scale found on some lenses can be used.

Multiple Exposure

Unintended multiple exposures were once a common occurrence. See **Figure 9-35**. Older cameras had separate mechanisms for advancing the film

A

B

Figure 9-34. Selective focus. A—The busy background draws attention away from the iris bloom. B—A wider aperture made the background much farther out of focus, isolating the flower.

and cocking the shutter for the next exposure. If the photographer forgot to advance to the next frame after making an exposure, it was easy to cock the shutter and make an unplanned second exposure on the same frame.

With most digital cameras today, a multiple exposure is impossible. Unlike film, which allows you to build up multiple images on the same frame, the sensor in most digital cameras is wiped clean after each exposure. Multiple exposures must be created using a computer and image editing software to combine individual files.

Technically, any image created in the computer by combining individual files is termed a *composite* rather than a multiple exposure, although the visual effect is the same. The multiple exposure photos shown in **Figure 9-36** and **Figure 9-37** were created from digital files. You should visualize the desired result, make a rough sketch if necessary, and then shoot the needed images. The techniques for creating composites are covered in Chapter 19, *Advanced Digital Postprocessing Techniques*.

Figure 9-36. This is a planned, creative double exposure. These files were taken separately and combined using postprocessing software for the photo you see here.

Figure 9-35. This unplanned double exposure combines vertical and horizontal scenes of children skating on a neighborhood pond.

Figure 9-37. Similar to **Figure 9-36**, this planned, creative triple exposure is a combination of three separate images.

PORTFOLIO ASSIGNMENT

Extracting Images

Without using a camera, practice the technique of "seeing pictures within the picture." Look at a scene and find parts of that scene you could extract as separate images. Refer to **Figure 9-18**. Once you are comfortable with the technique, try it with your camera.

1. Find an area that will give you the opportunity to find pictures within pictures, such as a classroom, a park, or a store.
2. Once you have chosen your location, frame and shoot several photos of the overall scene. Be sure to use your knowledge of compositional elements when framing your images.
3. Use your zoom lens to compose and record separate images that focus on more detail. Try to shoot at least four different subjects within your initial image. Take at least two photos for each of these subjects.

Select the best photo you shot of the overall scene, as well as the best one of each of your four different subjects. Include all five photos in your portfolio.

Chapter 9 Review

Summary

- Being aware of the relationship of masses and colors, the emotional content of the scene, the interplay of light and shadow, and the meaning that goes beyond the obvious and readily apparent are among the many elements of seeing photographically.
- The term "making a picture" implies conscious control of the process and the final result. To control how the finished image appears to the viewer, the photographer must visualize the final result.
- To capture a visualized image, a photographer must make a series of choices. The most basic decision is selecting the subject and determining how you want to portray it.
- Composition is the arrangement of visual elements, such as shapes, colors, and textures, within the frame. Four common compositional techniques are size, focus, contrast, and isolation.
- Compositional elements are the basic components used for effectively composing photographs. The traditional compositional elements consist of point, line, shape or pattern, balance, emphasis, and contrast.
- Other important elements of composition include perspective and harmony.
- Selective framing is an important concept in composition. With selective framing, you decide what to include in the frame and what to exclude from the frame.
- Images often contain a few, or even many, other potential images. Extracting (identifying and pulling out individual images from a larger scene) is most easily done with the aid of a zoom lens.
- Landscape mode is an image format that is wider than it is tall (a horizontal rectangle). Portrait mode is an image format that is taller than it is wide (a vertical rectangle). Certain subjects are suited to either landscape mode or portrait mode.
- The rule of thirds divides the frame into thirds, both horizontally and vertically. The four intersections created by the crossing lines are considered the most effective spots to position the center of interest.
- A commonly used method of directing attention is the use of leading lines. These pictorial elements draw the viewer's eye from one area of the photo to another.
- Changing your camera angle, or any of the different points of view that can be used to vary a picture's composition and visual impact, can have a dramatic effect on a picture.
- Color, shape, and relative size are other tools you can use to focus viewer attention.
- Motion blur due to movement of the subject can be used creatively. Two techniques to do this are panning and zooming.
- Soft focus is used primarily in portrait photography because it is flattering and helps to mask any minor blemishes.
- Sharp definition of objects from the near foreground to the distant background is desirable in some photographs but less desirable in others. Selective focus is used extensively in photographing flowers and small animals, especially in natural settings.
- With most digital cameras today, a double exposure is impossible. Multiple exposures must be created using a computer and image editing software to combine individual files.

Review Questions

Answer the following questions using the information provided in this chapter.

Know and Understand

1. _____ is a technique in which the photographer controls how the final product will appear to the viewer by first seeing that desired final result in their own mind.
   A. Selective focus
   B. Viewpoint
   C. Visualization
   D. Composition

2. The distance and angle from which the camera (and eventually, the viewer) sees the subject is called the _____.
   A. viewpoint
   B. camera angle
   C. center of interest
   D. frame

3. *True or False?* Composition strongly influences the message the viewer will receive and can direct their attention toward or away from an object in the frame.

4. Which of the following is *not* one of the six traditional compositional elements?
   A. Point
   B. Pattern
   C. Emphasis
   D. Color

5. A _____ is a compositional element that is a single object, typically small in size, that attracts the eye.
   A. line
   B. point
   C. shape
   D. pattern

6. *True or False?* Sharply curved lines are considered placid and restful.

7. Repeated shapes or lines establish a(n) _____ that moves the eye through the frame.
   A. formal balance
   B. rhythm
   C. informal balance
   D. emphasis

8. In a photograph, _____ may be achieved by the relative positions of two objects of different sizes or by using a smaller, brightly colored object to balance a larger dark object.
   A. informal balance
   B. formal balance
   C. center of interest
   D. rhythm

9. *True or False?* When every element of the photo is given equal weight, nothing stands out because the viewer receives no guidance.

10. _____ is a noticeable difference between adjacent elements of a composition.
    A. Emphasis
    B. Balance
    C. Contrast
    D. Pattern

11. *True or False?* A worm's-eye angle is representative of how people view their surroundings.

12. *True or False?* Inclusion is deciding what to include in the frame.

13. _____ is a compositional problem in which parts of the image come together in an undesirable way.
    A. Extracting
    B. Convergence
    C. Negative space
    D. Informal balance

14. Identifying and pulling out individual images from a larger scene is known as _____.
    A. inclusion
    B. convergence
    C. exclusion
    D. extracting

15. *True or False?* Portrait mode is an image format that is wider than it is tall.

16. The compositional tool known as _____ is the area within the frame surrounding the subject.
    A. shape
    B. size
    C. negative space
    D. focus

17. _____ is the additional room on the side of the frame toward which the subject is looking or moving.
    A. Lead room
    B. Composition
    C. Camera angle
    D. Frame

18. *True or False?* It is best to shoot photos of children and animals from a high angle.

19. *True or False?* The viewer's eye is drawn to the brightest element or most strongly saturated color in a picture.

20. _____ conveys speed and movement by streaking the background behind a sharply focused moving subject, such as when you are shooting moving vehicles.
    A. Soft focus
    B. Panning
    C. Selective focus
    D. Zooming

21. *True or False?* Soft focus is used primarily in portrait photography.

22. _____ is a technique that uses a shallow depth of field to throw the background out of focus, drawing attention to the main subject.
    A. Panning
    B. Zooming
    C. Soft focus
    D. Selective focus

23. *True or False?* Any image created in the computer by combining individual files is technically termed a composite.

Apply and Analyze

1. How is "making a picture" different from "taking a picture"?
2. List five of the six traditional compositional elements.
3. What is the rule of thirds and how is it used?
4. What does negative space do when used properly?
5. List the three common methods of focusing viewer attention.
6. Why is soft focus a technique commonly used in portrait photography?

Critical Thinking

1. Imagine you composed an image of a single colorful wildflower in the foreground, occupying about one-fourth of the frame. The space surrounding the flower is varying shades of green foliage. Do you think the space surrounding the flower can be described as negative space?

2. The rule of thirds is actually a useful technique rather than a rule. Many successful photographs have been created that do not conform to this rule. Think of some types of images that could be considered well-composed without conforming to the rule of thirds.

3. How can shadows be used in a photo to add contrast and drama to the image? Think of several different examples.

Suggested Activities

1. In small groups, examine the images in your portfolio and those belonging to the other members of your group. Discuss, analyze, and critique the compositional elements of each image. Each student should then choose three images from the portfolios and write a report. In the report, list the design elements noted and describe how those elements make the images more interesting or convey intended meaning.

2. Study the works of famous photographers. Print one image from each of three different photographers and prepare a written or oral report that discusses the composition of these images. Comment on the color, design, shape, shadow, negative space, and background shown in the images.

Communicating about Photography

1. **Speaking.** Choose one of the elements of composition (such as pattern or balance) discussed in this chapter. Prepare a visual display of three images that include this element. Explain to the class how the compositional element is used in each image.

2. **Writing and Speaking.** Working in a group, brainstorm ideas for creating classroom tools (posters, flash cards, and/or games, for example) that will help your classmates learn and remember the elements of composition. Choose the best idea(s), and then delegate responsibilities to group members for constructing the tools and presenting the final products to the class.

3. **Speaking.** In small groups, discuss the principles of design in photographic work with a focus on color. Discuss how color can be used to create contrast and focus viewer attention.