

# HOW WE SEE

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S E C T I O N

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Visual communication relies both on eyes that function and a brain that makes sense of all the sensory information received. An active, curious mind remembers and uses visual messages in thoughtful and innovative ways. Knowing about the world and the images that it conveys will help you analyze pictures. And if you can examine pictures critically, you have a good chance of producing high-quality images that others will remember.

General knowledge of the physics of light, how the eyes focus light, how the retinas collect light, and how the brain processes, sorts, and stores light is important because camera and computer construction is based on some of the same principles. A knowledge of the physics and physiology of light will enhance your use of the technologies of the future and the ability to decipher innovative visual messages. It is light that gives visual messages their life.

# TO SENSE. TO SELECT TO PERCEIVE.

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Think of all the visual messages that are a part of your life: a cracked bat given to you by a professional baseball player; your fingers on the handlebars during your first bicycle ride; the smile from your favorite teacher during your high school graduation; red blood dripping from a cut on your leg; the sight of a small stream during a quiet walk in the country; a passionate look from a lover. These visual messages are all a part of your repertoire of memories. These personal moments are forever stored in the gray recesses of your brain. Pictures weave themselves into your memory system, sometimes lying dormant for years. You remember and communicate these mental images because they are highly meaningful visual messages.

Think of all the personal visual messages you have experienced but may have forgotten: the billboard advertisements on the outfield wall during the baseball game; where you ended up on your first bicycle ride; the faces of your fellow graduates sitting next to

you as you waited for your diploma; the face of the doctor who treated your cut leg; all the colors of the plants as you walked along the trail; the pictures on the wall of your lover's bedroom. Actually, the proportion of remembered to forgotten images is quite small. Why are a chosen few easily recalled while a vast array of ambiguous memories are lost?

The brain deliberately and unconsciously sorts all the possible images and selects those that become a part of your long-term memory. That selection process depends largely on how much you want to know. For an image to be remembered, it must make such a strong impression that you want to recall it again and again. Through repetitive mental viewing over time, the image becomes permanent and your brain stores the visual memory. These pictures become a part of your visual message bank. When you see new images, you make new associations and comparisons with previously stored mental

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*The greatest thing a  
human soul ever does  
in this world is to see  
something . . . To see  
clearly is poetry,  
prophecy, and religion,  
all in one.*

*John Ruskin,*

PAINTER



Archive Photos; used by permission

**Figure 1.1**

*Blind in one eye and nearly blind in the other, Huxley was forced to wear glasses with thick lenses. Nevertheless, the low camera perspective, dramatic lighting effect, and his eye contact with the viewer reveal a strong personality behind the glasses.*

pictures. The content of the new and old images constantly bounces back and forth in your mind so that you learn from them. Otherwise, you will forget them, as you do most words and pictures. As the actor Rutger Hauer said in the movie *Blade Runner*, “All those moments will be lost in time like tears in the rain.”

Many famous and often reproduced images in Chapters 8 through 16 have visual messages that are so strong that millions of people who have seen them have memorized them. And when they see them again, people learn something more—they make new connections. These images are strong, compelling, and easily understood. They have helped shape Western culture and how large numbers of people feel about themselves. Although separate and individual in their intent, content, and medium, all are linked by the inescapable elements common to all visual messages: They are objects that get their life from light. That life comes not only from the light of day but also from the light of revelation, the light of understanding, and the light of education.

### ■ THE VISUAL PROCESS

Aldous Huxley, author of the novel *Brave New World* and other works of futuristic vision, detailed his efforts to teach himself how to see more clearly in his 1942 work *The Art of Seeing* (Figure 1.1). Huxley suffered from a degenerative eye condition known as *keratitis punctata* from the age of 16. One eye was merely capable of light perception, and the other could only view an eye chart’s largest letter from 10 feet away. In his book he described the physical exercises he used to overcome his handicap without the aid of glasses. However, his main idea is that seeing clearly is mostly the result of thinking clearly. Huxley summed up his

method for achieving clear vision with the formula: “sensing plus selecting plus perceiving equals seeing.”

The first stage of clear vision is to sense. To sense, or look, simply means letting enough light enter your eyes so that you can see objects immediately around you. Sensing also depends on how well the many parts of the eye work. Obviously, a damaged or improperly functioning eye will hamper sensing. Think of the human visual process as a camera without film; that is, little mental processing of the image occurs during the looking phase of visual perception.

Huxley’s next stage is to select a particular element from a field of vision. To select is to isolate a specific part of the scene within the enormous frame of possibilities that sensing offers. That isolation is the result of the combination of the light gathering and focusing properties of the eye with the higher level functions of the brain. Selecting is a conscious, intellectual act. When you select you engage more fully the objects in the scene than when you merely look. Selecting starts the process of classification of objects as known, unfamiliar, meaningful, or confusing. To select is to isolate an object within the area where the sharpest vision takes place in the eye: the foveal focus point in the back of your eyes. By selecting individual objects within a scene, you are doing what the eye’s physiology was made to do—to focus your mental activities on a single, small object that is isolated from all others.

About seeing, Huxley wrote that “the more you know; the more you see.” A former baseball player watches and sees a baseball game much differently from someone who attends a game for the first time. The newcomer probably will miss signals from a manager, scoreboard details, the curve of the ball’s flight as it speeds from pitcher to batter, and many other details observed by the former player.

The last stage in Huxley's visual theory is to perceive; that is, you must try to make sense of what you select. If your mind has any chance of storing visual information for long-term retrieval and to increase your knowledge base, you must actively consider the meaning of what you see.

To process an image mentally on a higher level of cognition than simply sensing and selecting means that you must concentrate on the subjects within a field of view with the intent of finding meaning and not simply as an act of observation, which demands much sharper mental activity. Ask yourself: Does the image have any significance for my life? The answer to that question determines whether you remember or forget a picture. Although you can certainly isolate a particular visual element with little mental processing when it is a new or surprising occurrence, analyzing a visual message ensures that you will find meaning for the picture. If the image becomes meaningful, it is likely to become a part of your long-term memory.

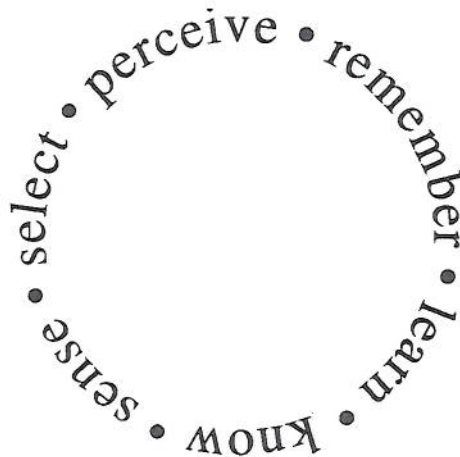
### ■ VISUAL COMMUNICATION'S CIRCLE DANCE

The more you know, the more you sense. The more you sense, the more you select. The more you select, the more you perceive. The more you perceive, the more you remember. The more you remember, the more you learn. The more you learn, the more you know.

*The mind* The greatest aid to clear seeing isn't eyes that function with or without glasses or a telescope that brings into sharp focus the craters of the moon. The process of sensing, selecting, and perceiving takes a curious, questioning, and knowledgeable mind. The goal of a visual communicator isn't simply to have an image published or broadcast.

The goal of a visual communicator is to produce powerful pictures so that the viewer will remember their content. Images have no use if the viewer's mind doesn't use them. As future image consumers and producers, you will want to see images that you remember and make images that others remember.

The goal of this book is to give you a method for analyzing visual messages regardless of the medium of presentation. Without systematically analyzing an image, you may see a televised image and not notice the individual elements within the frame. You might not consider its content as it relates to the story and to your life. Without considering the image, you will not gain any understanding or personal insights. The picture will simply be another in a long line of forgotten images. Analyzing an image makes you take a long, careful look at the pictures you see—a highly satisfying intellectual act. Those images become a part of your general knowledge of the world. You discover how images are linked in ways that you never thought of before. You become a more interesting, curious person (Figure 1.2).



**Figure 1.2**

Aldous Huxley's method for clear seeing makes a strong visual message. The words arranged in a circle and separated with dots stand out because of the familiar shapes (see Chapter 4).