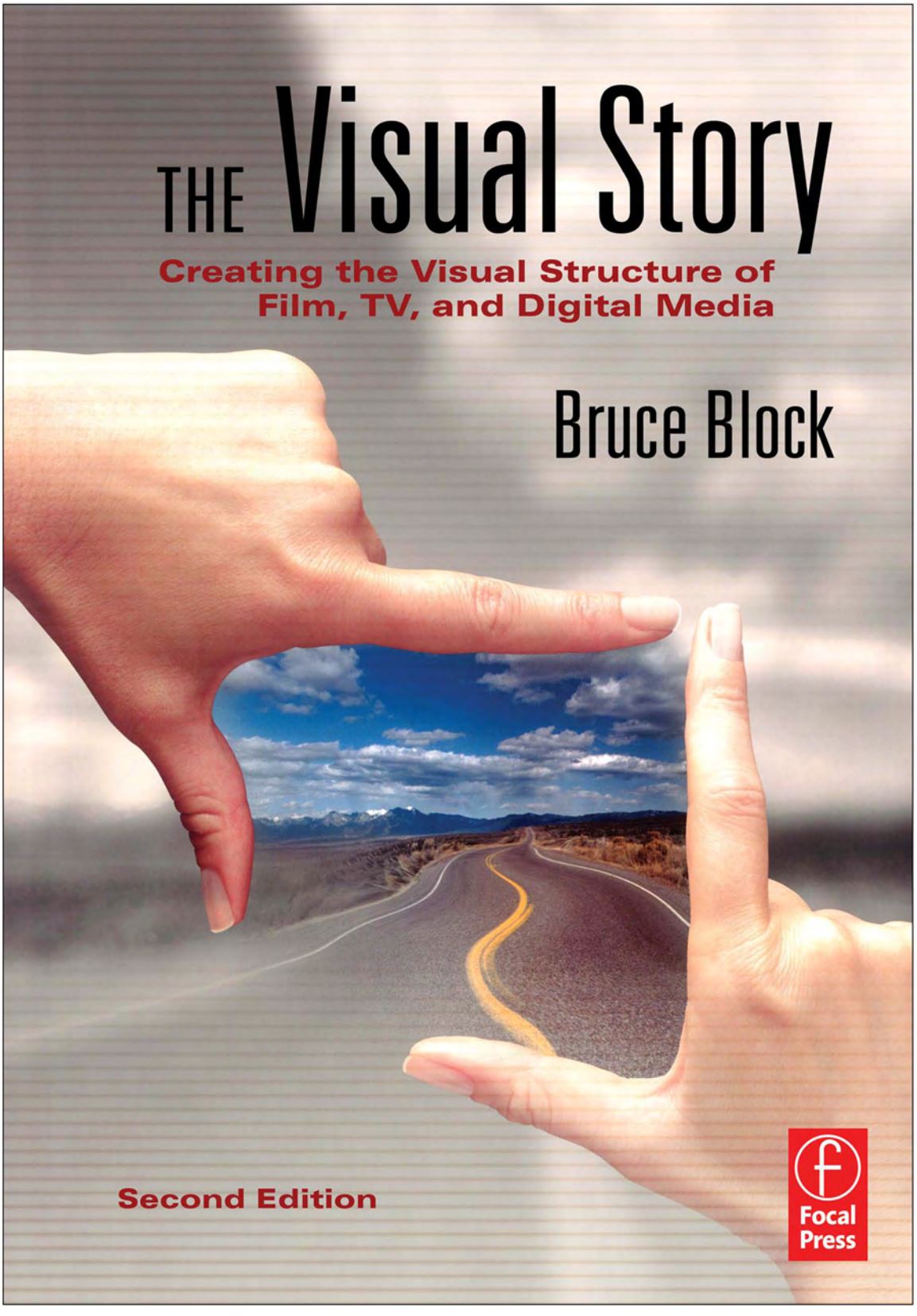


CHAPTER

4

Line and Shape

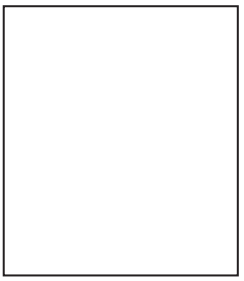
Lines are everywhere in the real world. For example, doorways have two vertical lines, and a volleyball has one curved line. The real world is also full of shapes. A door is a rectangle and volleyball is a sphere. Lines and shapes are closely linked because they define each other.

Line

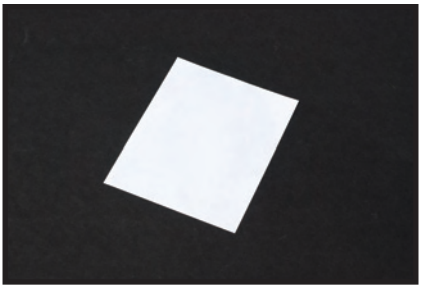
Line differs from the other visual components, because lines appear only due to tonal or color contrast. Depending on this contrast, a line can be revealed or obscured. Lines exist in an infinite number of ways in the real world and in the screen world. To make recognizing them easier, lines can be divided into seven perceptual types: edge, contour, closure, intersection of planes, imitation through distance, axis, and track.

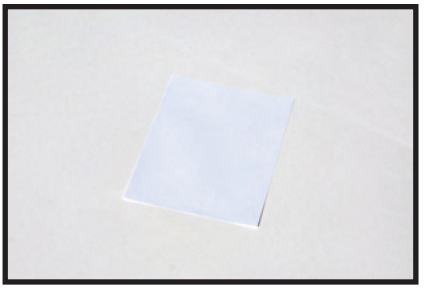
Edge

The apparent line around the borders of any two-dimensional object is called *edge*.



These four lines are a drawing of a piece of paper. Obviously, a piece of paper is not truly two-dimensional, but for our purposes it can be considered two-dimensional. When you look at this drawing of four lines, you imagine a piece of paper. Examine a real piece of paper, like this book page. There aren't actually any lines around the page, but the edges of the page are similar to lines. We accept this drawing of four lines as a representation of the edges of the page, but actually, a piece of paper, or any two-dimensional object, has no lines.



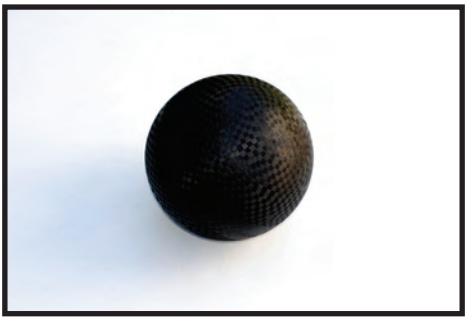


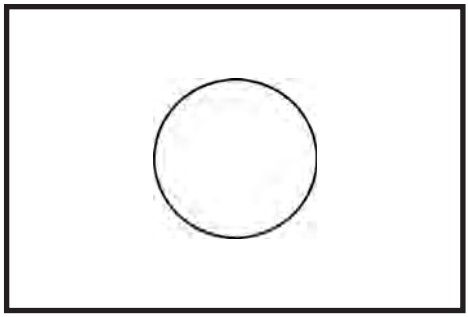
Lines will appear only if there is tonal or color contrast. A piece of white paper on a black background is easily seen. When the same paper is placed on a white background, the paper and its lines practically disappear. Without tonal contrast, lines don't exist.

A shadow cast onto a two-dimensional wall is an example of edge. We see an edge or line around the two-dimensional shadow, even though there's no actual line there at all.

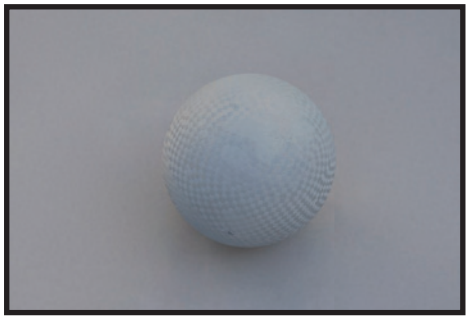
Contour

The apparent line around the border of any three-dimensional object is called contour. Most objects in the real world are three-dimensional, having height, width, and depth. We perceive a line around these objects.





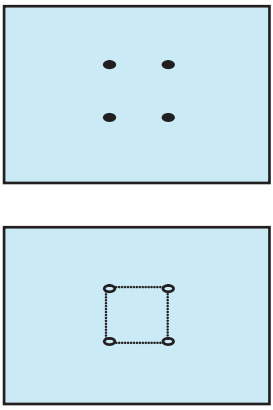
A basketball is a three-dimensional object. We accept the curved line around the ball as the border of the ball itself, but a real ball doesn't have a line around it. Our perception creates the line.



If the ball and the background are the same tone, the lines (and the ball) will disappear, because line needs tonal contrast to be seen.

Closure

Primary points of interest in a picture create imaginary lines.



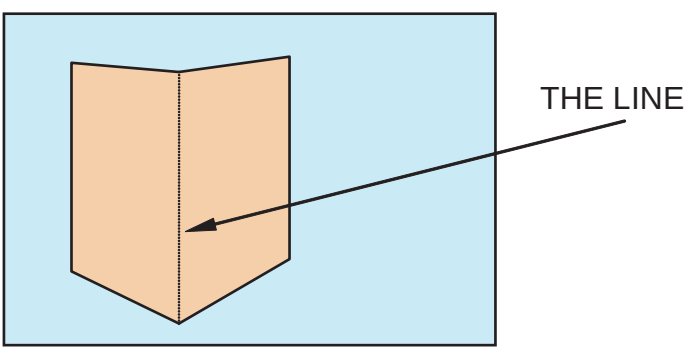
This is a drawing of four dots, but a viewer imagines lines that create a square.

The viewer connects the dots, or the primary points, in the picture to produce lines. The primary points can be important objects, colors, tones or anything that attracts the viewer's attention. The dots can connect to form any variety of curved or straight lines, triangles, squares, or other shapes.

Here, the primary points are people's heads. The closure creates a triangle and a diagonal line.

Intersection of Planes

When two planes meet or intersect, they appear to create a line.



Every corner of every room can create a line if there is tonal contrast between the two planes.

If the tonal range is changed to remove the contrast between the two walls (or planes), the lines disappear. As the tonal contrast is exaggerated, the lines become more apparent.

Intersection of two planes is an extremely common way to produce lines. The corners of furniture, windows, doorways, and the intersection of walls can all create lines if there is tonal contrast between the two planes.

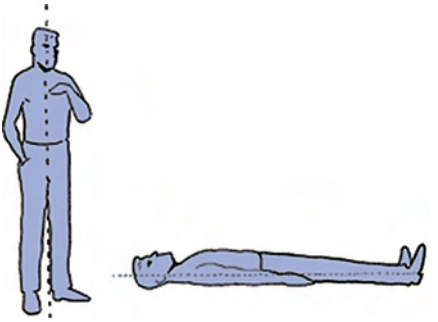
Imitation through Distance

Imitation through distance occurs when an object appears to reduce itself to a line or lines because it's so far away.

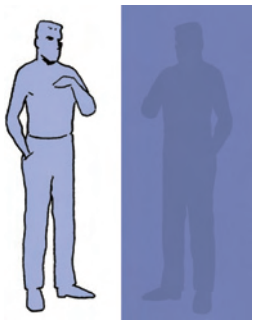
The girders of this tower are not lines; they're large steel beams, yet at a distance, they look like lines. The same is true for the telephone poles or the distant desert road. When viewed from a distance, the objects appear thin enough to imitate a line.

Axis

Many objects have an invisible axis that runs through them, and this is perceived as a line. People, animals, and trees are examples of objects that have an axis.

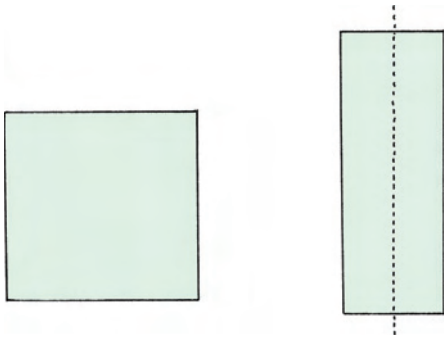


A standing person has a vertical axis. A reclining person has a horizontal axis.



An axis, like most other types of lines, needs contrast to be seen. The axis becomes difficult to define when the tonal contrast between the object and the background is reduced.

This shot has two vertical axis lines.



Not all objects have an axis. A square has no definite, single axis, but a rectangle does.

Track

Track is the path of a moving object. As any object moves, it will leave a track or line in its path. There are two types of tracks: actual and virtual.

Actual Tracks

When certain objects move, they actually leave a visible track or line behind them.

A skywriting airplane leaves a line of smoke behind it as it flies, and skiers moving down a snowy hillside will produce a line in the snow with their skis. The smoke and the indentations in the snow aren't actually lines, of course; they're imitation through distance or contour, creating a track left behind by the moving object.

Virtual Tracks

Most objects don't create an actual track or line when they move, but they do generate a virtual or invisible line. A virtual track is a line we must imagine.

A flying bird or a moving car, for example, generates virtual tracks. The lines left behind by the bird or the car exist only in the viewer's imagination. Since tracks deal with moving objects, we'll return to line and track in Chapter 7, "Movement."

Linear Motif

Any picture can be reduced to simple lines. This is called the linear motif. A picture's linear motif can be any combination of circular, straight, vertical, horizontal, or diagonal lines.

Here's a picture and a high contrast version of it that simplifies the tonal range, and reveals the linear motif. The linear motif is found by emphasizing the tonal contrasts in the picture.

There are two ways to reduce any picture to simple tonal contrasts and reveal the linear motif. Many cinematographers use a contrast viewing glass to light their shots and check tonal contrasts. A contrast viewing glass is used like a

monocle, but its glass is extremely dark, usually a dark brown or blue color. Looking through the viewing glass increases a picture's contrast and reveals the linear motif. Another way to see the linear motif is simply to squint. Squinting increases a picture's contrast, reduces detail, and emphasizes the lines that create the linear motif.

Squint at this shot. The linear motif is diagonal.

It's essential when evaluating or defining a linear motif that you analyze the line on the two-dimensional screen, not the line in real life.

In the real world, the fountain in this picture has two round bowls. In the screen world, the bowl's curved lines are not curves at all. The diagram reveals that the lines of the fountain bowl are nearly straight. The only curves in this picture are the arches.

Chapter 9 will examine the linear motif of entire films and show how important linear motif is to visual structure.

Contrast and Affinity

Line is used to produce contrast or affinity in three ways: orientation, direction, and quality. Remember that contrast and affinity can occur within the shot, from shot to shot, and from sequence to sequence.

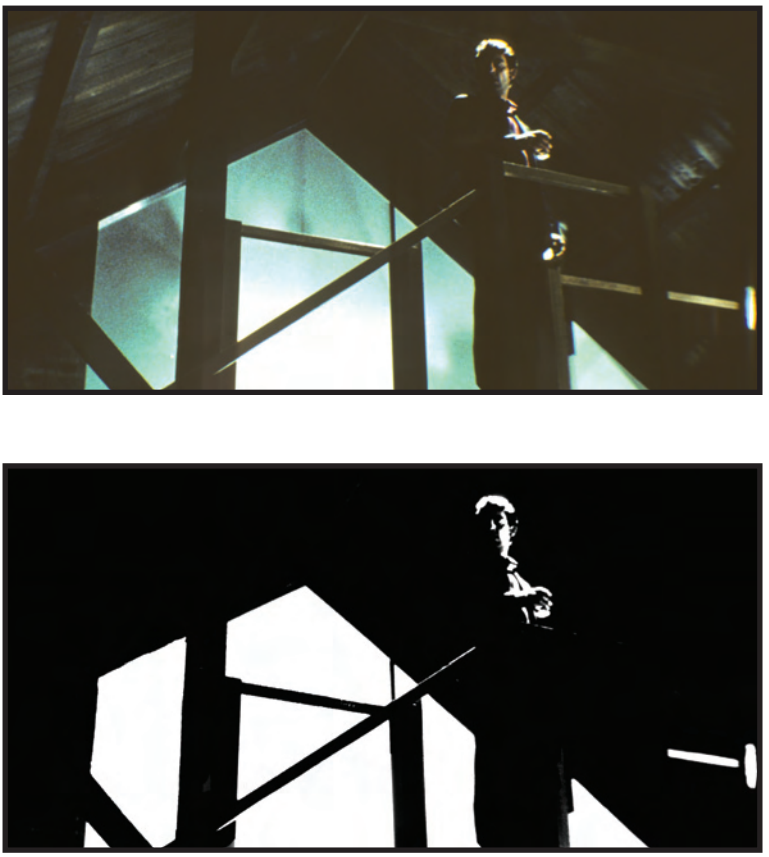
Orientation

Orientation is the angle of lines created by nonmoving or stationary objects. Most lines created by edge, imitation through distance, and the intersection of two planes are stationary lines. This includes room corners, doors, windows, furniture, sidewalks, curbs, trees, buildings, etc.

The three angles of line orientation are horizontal, vertical, and diagonal.

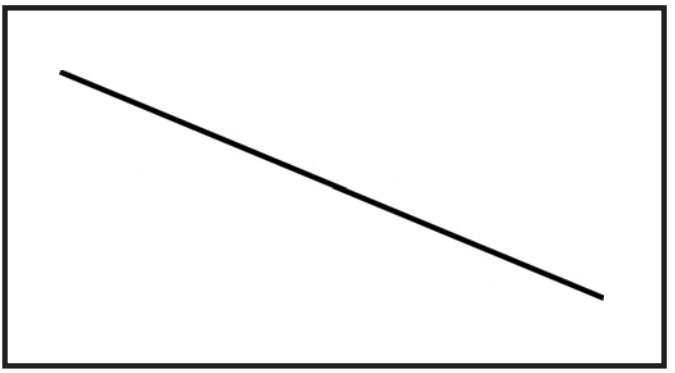
Linear motif is usually created by the orientation of lines. The linear motif of each picture is diagrammed in the accompanying drawing. If you can't see the linear motif created by orientation, squint at the picture to remove extraneous details that camouflage the lines.

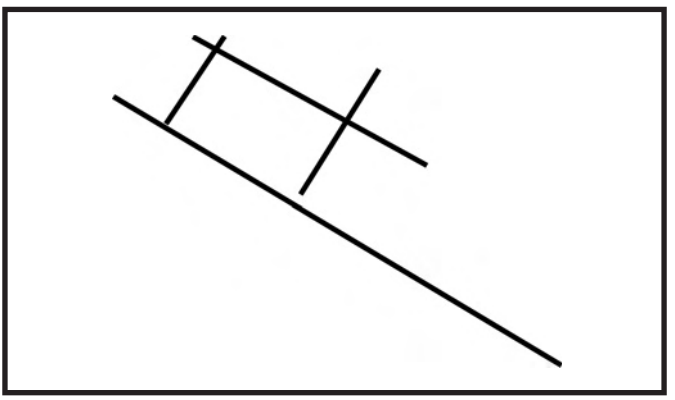
The diagonal line is the most intense, the vertical line is less intense, and the horizontal line is the least dynamic or intense line. Contrast of orientation can occur within a shot, from shot to shot, or from sequence to sequence.



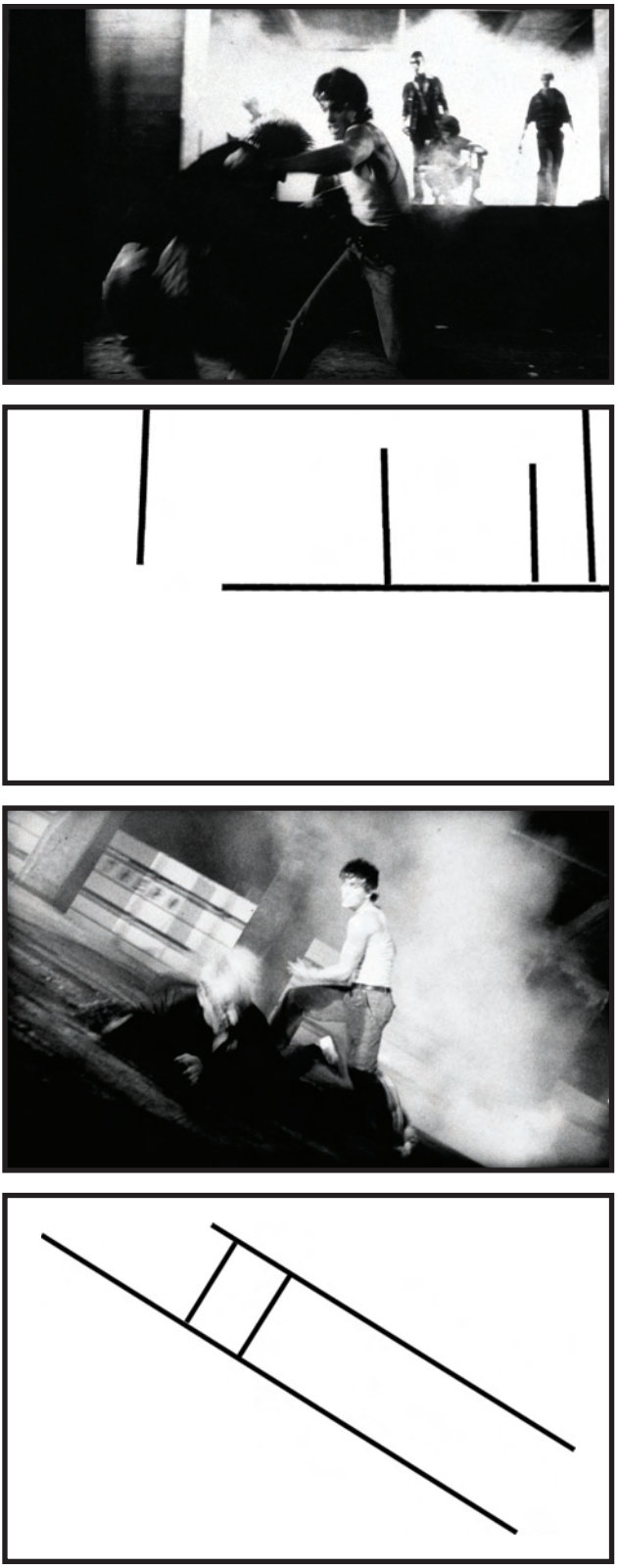
This shot illustrates contrast of line orientation within the shot.

This shot illustrates affinity of orientation within the shot.





These two pictures illustrate affinity of orientation from shot to shot, because the angle of the stationary lines is the same.



These pictures illustrate contrast of orientation of line from shot to shot.