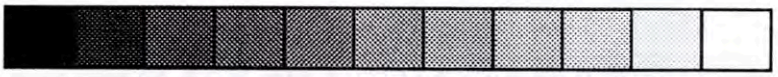
CHAPTER 2

CONTRAST AND AFFINITY

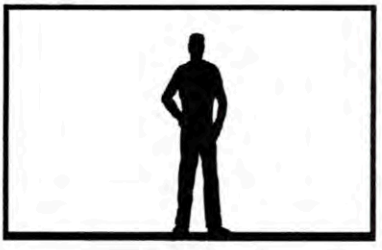
THE KEY TO VISUAL STRUCTURE

Visual structure is based on an understanding of the *principle of contrast and affinity*.

What is *contrast*? Contrast means difference. Here's an example of contrast using the visual component of tone.

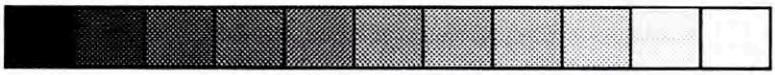


Remember, tone refers to the brightness of objects. We can illustrate tone with a gray scale. Contrast of tone means two shades of gray that are as different in terms of brightness as possible. On the gray scale, which two tones show maximum difference or contrast? The correct answer is the black square and the white square. So a picture illustrating maximum contrast of tone would use only black and white.



This shot, all black and white, is an example of maximum contrast of tone.

What is *affinity*? Affinity means similarity. So what is an example of affinity of tone?



Since affinity means similarity, we would pick any two grays that are next to each other on the gray scale and create a picture that only used those two grays.

This shot is an example of tonal affinity. It uses only black and very dark gray, two tones that have great similarity or affinity.

Every visual component (space, line, shape, tone, color, movement, and rhythm) can be described and used in terms of contrast and affinity, which we'll discuss in the chapters that follow.

Now that we've defined contrast and affinity, we can explain the *principle of contrast and affinity*:

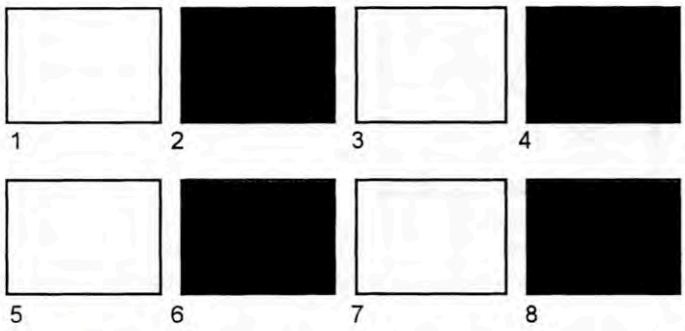
The greater the contrast in a visual component,
the more the visual intensity or dynamic *increases*.
The greater the affinity in a visual component,
the more the visual intensity or dynamic *decreases*.
More simply stated:
CONTRAST = GREATER VISUAL INTENSITY
AFFINITY = LESS VISUAL INTENSITY

Now, what does "visual intensity" mean? Watching a sequence of a great film, we might say: "Wow, that was really exciting!" When watching a less intense sequence we might say: "It was very low-key or quiet." These comments refer to what we're calling "intensity" or "dynamic." A computer game can be engaging or boring. A television commercial can be agitating or soothing. These emotional reactions are based on the intensity you feel when you watch them.

Intensity or dynamic relates to the emotional reaction members of an audience feel when they see a picture, read a book, or listen to music. The reaction can be emotional (they cry, laugh, or scream) or more physical (their muscles tense up, they cover their eyes, they fidget in their seats). Usually the more intense the visual stimulus, the more intense the audience reaction.

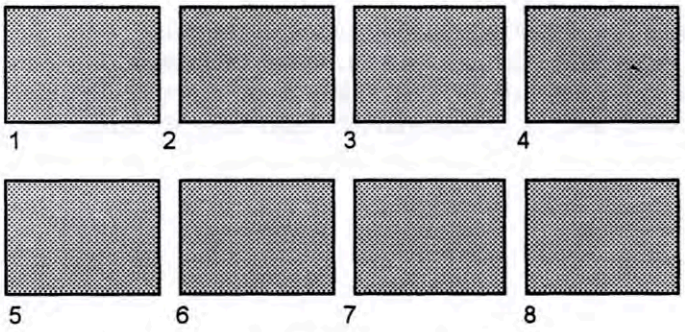
A good writer carefully structures words, sentences, and paragraphs. A good musician carefully structures notes, measures, and bars. A director, cinematographer, production designer, or editor structures visuals by applying the *principle of contrast and affinity* to the basic visual components.

Let's take an extremely simple example. We'll create two short abstract movies.



This is the storyboard for the first film. A storyboard is a set of drawings that illustrate what the final film will look like. The first shot in this film will be a white frame. One second later we'll cut to a black frame. A second later, we'll cut back to the white frame, and so on. This alternation of white and black will continue for several minutes. The audience's response will be "it's making me crazy!" The rapid contrast of black and white assaulting the audience will become too intense and impossible to watch.

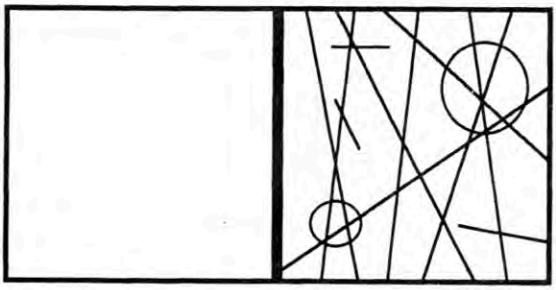
Now let's switch to the second abstract film.



Here's the storyboard for the second film. Every frame is the same; nothing changes. We'll ask the audience to watch this movie for several minutes and, of course, they will quickly lose interest. The film is all affinity. It lacks visual dynamic.

The contrast of the black/white movie is too intense, and the affinity of the gray movie has no intensity at all.

Here's another example.



Which half of this frame is more intense? The right half or the left half? The right half of the frame is full of lines that create a visual intensity that the left half of the frame lacks.

So there is something about the black/white movie and the right half of the frame drawing that have intensity or dynamic. It is an emotional, intellectual, and muscular response an audience feels when they look at pictures. It is visual intensity.

Although the basic principle of contrast and affinity is simple, using it can get complicated. Each visual component can be broken down into many subcomponents, and all of them can be related back to contrast and affinity.

Once we understand the basic visual components and how contrast and affinity work for each one, we'll be able to devise visual structures for our productions. Visual structure will depend on how we control the contrast and affinity. Visual structure can be extremely simple (full of affinities) or extremely complex (full of contrasts) or, better yet, a combination of the two.

In the next seven chapters, I'll define each basic visual component. We'll discuss how to see them, evoke emotions by controlling them in practical production, form a visual style, and most importantly, learn how to build visual structure.

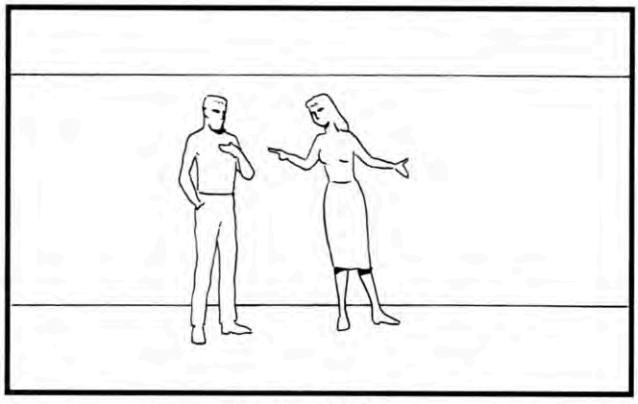
CHAPTER 3

SPACE

Space is a complex visual component. It not only defines the screen where all of the other visual components are seen, but space itself has several complex levels or sub components that we need to understand. To simplify our discussion, this chapter on space is divided into two parts. Part One defines the four basic sub components of space and Part Two describes all of space's secondary properties.

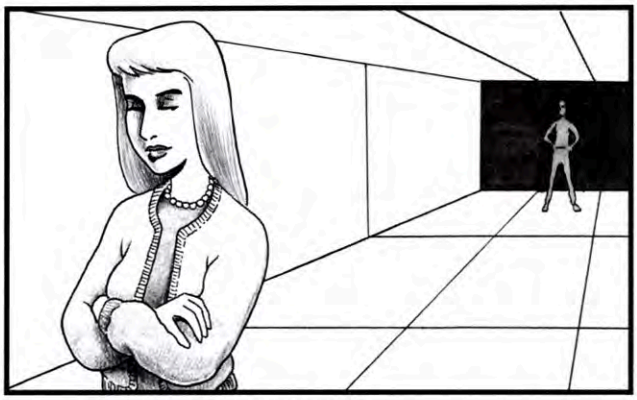
COMPARING THE FOUR SPACE TYPES

We've now discussed four ways to arrange the space of a shot: *deep*, *flat*, *limited*, and *ambiguous*. If we're going to stage a scene of two people standing in a hallway, we now have four distinctly different ways to produce the space for that shot.



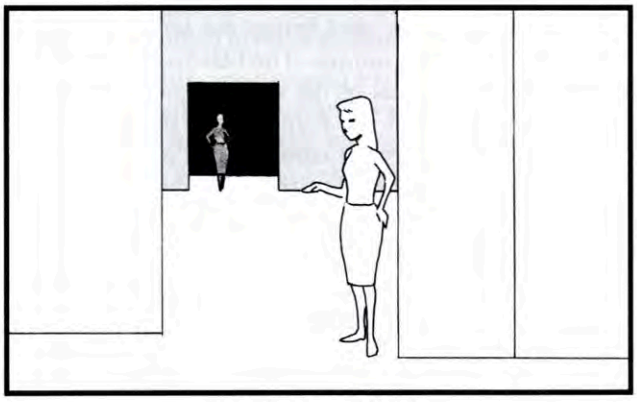
FLAT SPACE

The first version is the flat space rendition of the shot. The walls are frontal and there are no longitudinal planes or converging lines. The actors are staged on the same horizontal plane, and they're the same size. They also have the same amount of textural detail, and any movement will be parallel to the picture plane. The camera will zoom or dolly parallel to the frontal wall plane.



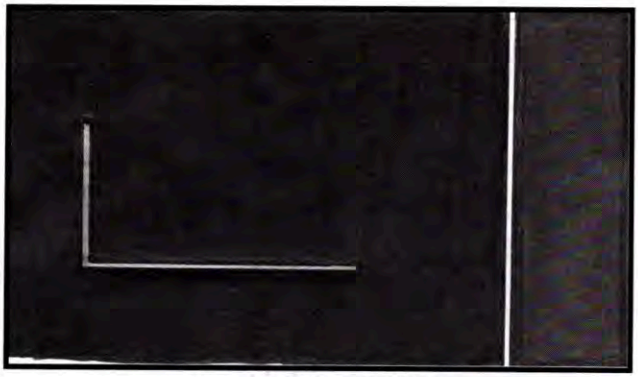
DEEP SPACE

In the second version, we've produced deep space. The shot still exists on a two-dimensional surface, but it has illusory depth. There are several longitudinal planes, one-point perspective, shape change, size difference, textural diffusion, tonal separation, up/down position, and the camera will crane down and dolly in as the foreground actor walks perpendicular to the picture plane.



LIMITED SPACE

The third version produces limited space. The depth cues in this shot include size difference, textural diffusion, up/down position, and tonal separation, but there are no longitudinal planes and the actor's movement will remain parallel to the picture plane.



AMBIGUOUS SPACE

In the fourth version, we have the same shot of two people in the hallway but now the space is ambiguous. The lights are off in the hall, some stray light from a doorway illuminates part of a wall, the camera is low to the floor, and our two actors are somewhere in the dark. It's ambiguous because it's impossible to tell the actual size and spatial relationships in the shot. Where are we in the hallway? How close is the door? Is there a door? Are we upside-down? The ambiguous space has made things unreliable, creating a unique sense of the location.

Each of these four versions of the hallway shot brings the script to life, but each version has visual characteristics that are unique. The best spatial choice for your production will be based on your analysis of the script. You may feel that deep space best visualizes the ideas in your story. Perhaps you think flat space would tell the story best. You might discover that a combination of flat and deep space is necessary to visualize the difference between the characters. You might decide that ambiguous space is best for parts of your production because of its specific effect on the audience. Whatever your choice, you should understand that there are four basic types of visual space and that each has its own visual characteristics. We'll learn how to apply these spatial ideas to visual structure in Chapter 9, "Story and Visual Structure."

CONTROLLING SPACE DURING PRODUCTION

Let's stop defining space and look at a practical situation. Tomorrow you're going to direct a scene and you've decided to use deep space. How can you create deep space on the set?

1. *Emphasize longitudinal planes.* Any wall, floor, or ceiling can generate a longitudinal plane if the camera is in the correct position. You'll want these planes to be as longitudinal as possible, which dictates where you'll put the camera. Keep frontal planes out of the shot because they're too flat. By recognizing the longitudinal planes on your location or set you'll be able to find the vanishing points and include them in the shot if you want. The creation of longitudinal planes and vanishing points is probably the most important way to create deep space.

2. *Stage movement perpendicular to the picture plane (towards or away from the camera).* Some directors call this "staging in depth." This staging will help emphasize size difference and produce illusory depth.

3. *Take advantage of the tonal separation depth cue.* Ask the cinematographer to light the scene in a contrasty manner and make objects in the foreground brighter than objects in the background.

4. *Move the camera.* Get a dolly, lots of dolly track, and a crane. To create deep space, you'll want to keep the camera moving as much as possible. Dollying in and out, tracking left and right, and craning up and down will help produce deep space. You can move the camera without a dolly. Hand-hold the camera or use special rigs and harnesses to help you move the camera smoothly.

5. *Consider using a wide-angle lens.* A wide-angle lens has a wider field of view and a greater ability to include more depth cues in the shot. Wide-angle lenses also have a greater depth of field than other lenses. Depth of field refers to the area in front of the lens that is in acceptably sharp focus. Objects must be in focus if they're going to read as depth cues.

Now let's assume that you're going to shoot a scene using flat space. You can create the space by taking advantage of the flat space cues.

1. Eliminate the perspective of longitudinal planes and emphasize frontal planes.

2. Stage the actors parallel to the picture plane. Keep movement parallel to the picture plane. This is sometimes called "flat staging."

3. Ask your cinematographer to light the scene more flatly and condense the gray scale. It will be important to reduce tonal contrast. The production designer should have condensed the brightness level of the sets and reduced the general tonal range to any third of the gray scale. The color range should be limited to all warm or all cool colors. Reversing the depth cue of color and tonal separation will further enhance the flat space. Remember, warm colors and brighter backgrounds appear to advance, and cool colors and darker foregrounds tend to recede.

4. You won't use a dolly or crane for camera movement unless the dolly moves parallel to frontal planes. A tripod and a zoom lens will be fine because you only need to tilt and pan to maintain flat space. Your crew will appreciate the convenience a dolly provides, but it isn't needed for production. Zooming will keep the space flat, but if you hate the zoom lens then don't zoom.

5. Consider using telephoto lenses that will exclude depth cues because of the lens's narrow field of view. The longer lens will force you to stage objects further away from the camera, eliminating the depth cues of size difference and textural diffusion. When objects are the same size, the picture looks flatter. Don't be fooled into thinking that a telephoto lens flattens the image. See Part B in the Appendix for a complete explanation of lenses and space.

6. A shallow depth of field will allow the backgrounds to go out-of-focus. Blurred objects create flat space.

Part One of this chapter has outlined the basic types of visual space. But space is a complex visual component. In Part Two we'll discuss some secondary properties of space.