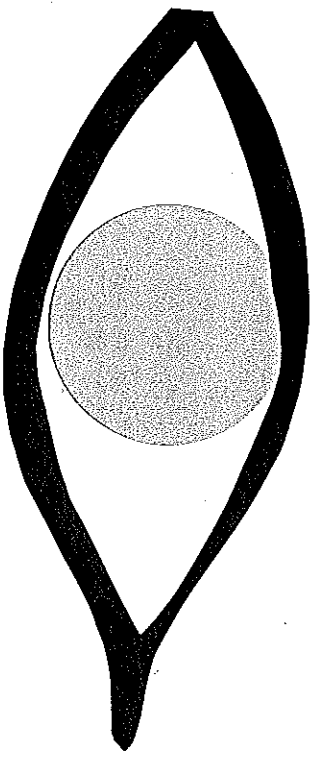


**PICTURE THIS**  
HOW PICTURES WORK



**MOLLY BANG**

*chronicle books, san francisco*

*6/00*

## THE PRINCIPLES

I can't remember the order in which these principles occurred to me. I had read a lot and thought a lot about what went on in pictures, but largely things seemed to either "work" or "not work" for unrelated reasons. I think the principles pretty much came to me all at once, while I was playing with the Little Red Riding Hood pictures. What has taken time is paring them down to the bone. I've ordered them not in any hierarchical order, because I don't feel there is a hierarchy here, but more in the order that seemed most logical. Was it when I tilted the trees that I saw how gravity affected pictures? Whatever the reason, the first principles have to do with gravity.

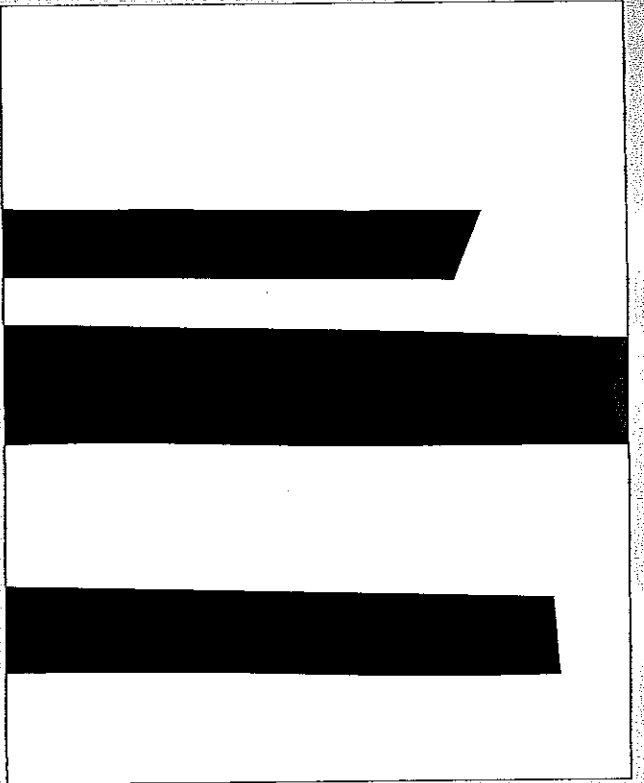
Gravity is the strongest physical force that we're consciously aware of, and we're subject to it all the time. The force of gravity affects our responses to horizontal, vertical, and diagonal shapes, and it affects our responses to the placement of shapes on the page.

This all sounds very abstract, but what does it mean in concrete terms?

### 1. Smooth, flat, horizontal shapes give us a sense of stability and calm.

I associate horizontal shapes with the surface of the earth or the horizon line — with the floor, the prairie, a calm sea. We humans are most stable when we are horizontal, because we can't fall down. Shapes that lie horizontal look secure because they won't fall on us, either. Because of this, pictures that emphasize horizontal structure generally give an overall sense of stability and calm.

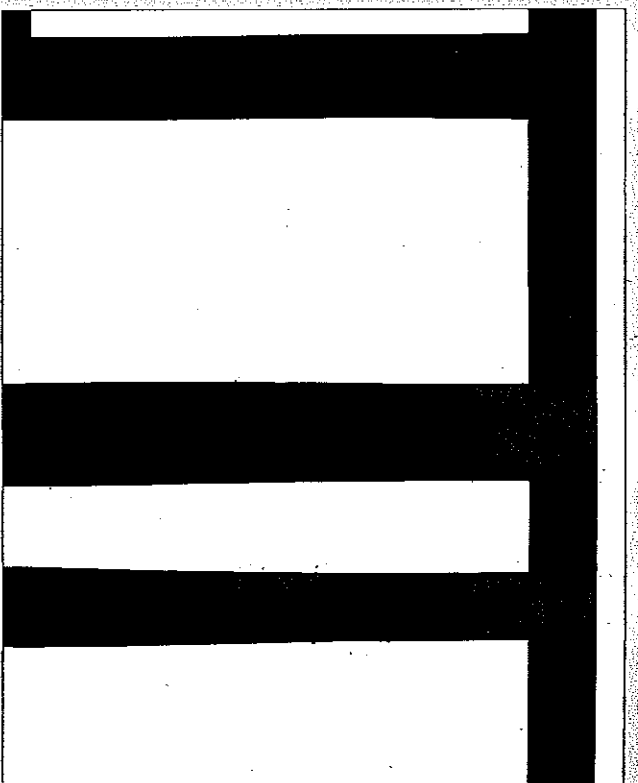
But also, smaller horizontal or horizontally oriented shapes within a picture can be felt as islands of calm. Part of the stability we felt in Little Red Riding Hood as a triangle was due to her wide, flat, horizontal base.



2. Vertical shapes are more exciting and more active. Vertical shapes rebel against the earth's gravity. They imply energy and a reaching toward heights or the heavens.

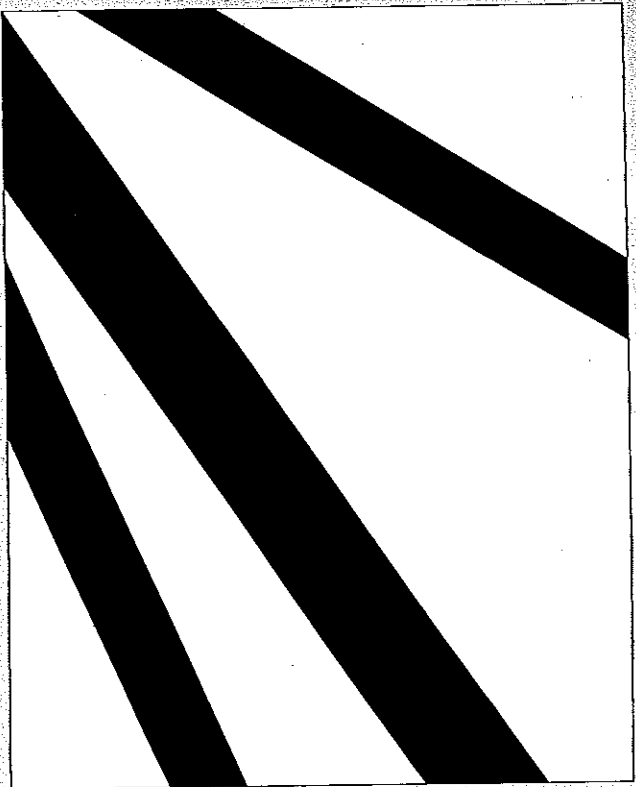
Think of the things that grow or are built vertically: trees and plants grow up toward the sun; churches and skyscrapers reach toward the heavens as high as they can go. These structures require a great deal of energy to build — to become vertical. They will release a great deal of energy if they fail.

Vertical structures are monuments to kinetic energy of the past and the future, and to potential energy of the present.



If a horizontal bar is placed across the top of a row of verticals, stability reigns again, as in a Greek temple. The sense of vitality and reaching toward the heavens has been checked. But the verticals give the horizontal aspect some regal quality. There is order and stability here, and the pride that goes with height.

When we change from a state of infancy to toddlerhood and rise up off the floor on two strong legs, life is suddenly much more exciting. Not only can we see more, not only are we above all sorts of things that used to be at our own low level, not only can we begin to move about faster, but life is more exciting because



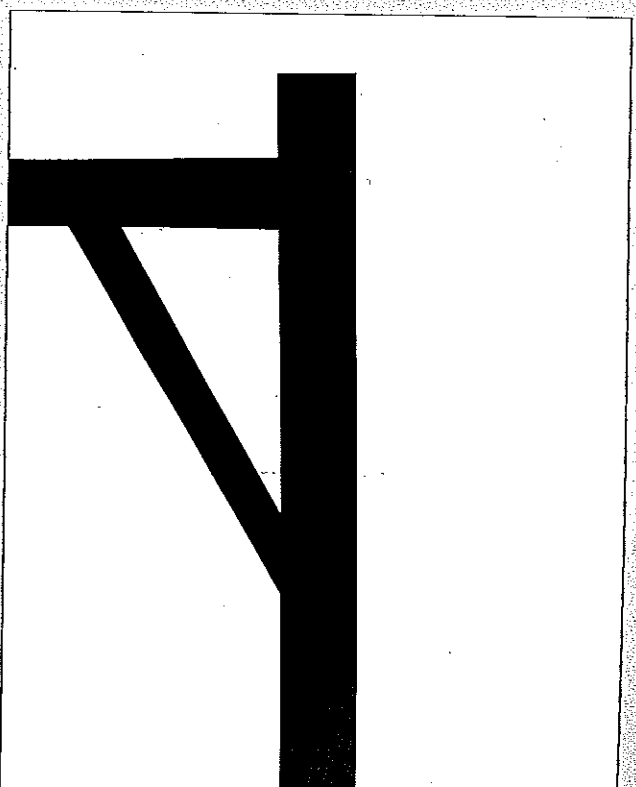
we can fall.

### 3. Diagonal shapes are dynamic because they imply motion or tension.

Objects in nature that are on a diagonal are either in movement or in tension. Most of us see these diagonal lines as some sort of pillars falling. (I see them as flat bars of iron.) They could as easily be roof beams, supported by structures outside the picture, or parts of growing branches, pulled up toward the light of the sun but at the same time pulled down to the earth by gravity.

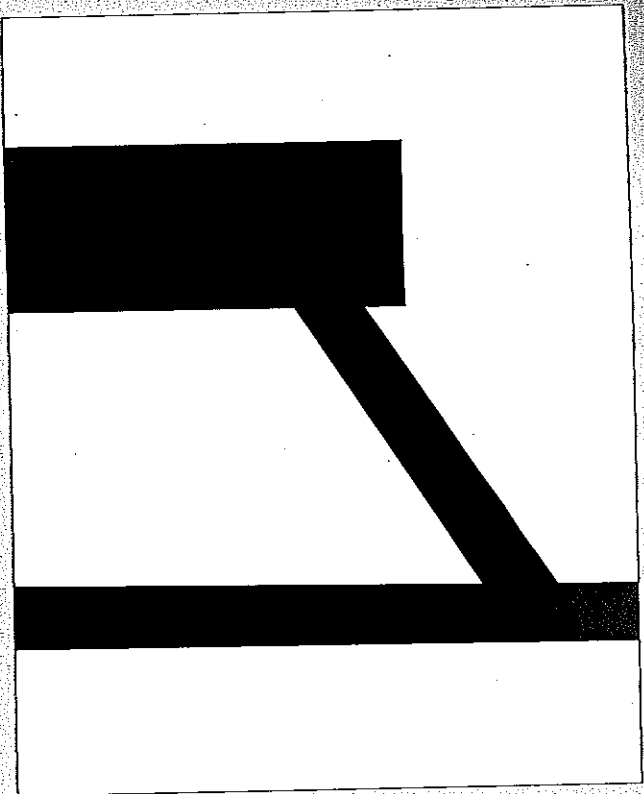
We can also see these bars as leading us into the picture, leading us back into space. In an asymmetrical frame, diagonals give a sense of depth.

But however we see the bars, they are felt to be in movement or in tension because they are on a diagonal.



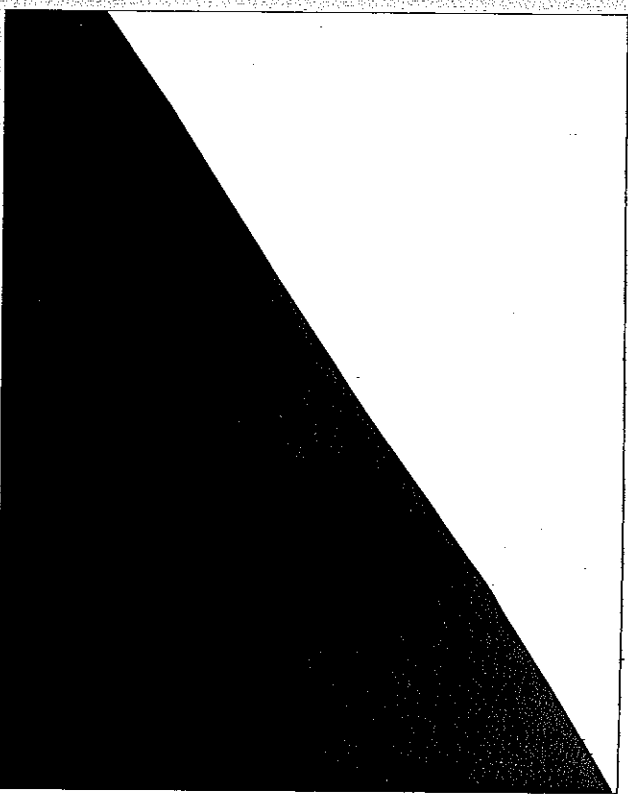
A diagonal strut holding in place a vertical stud and a horizontal beam is in tension, supporting the one, restraining the other, and tying the two securely together as a much more stable unit.

Diagonals in pictures often perform exactly the same function.



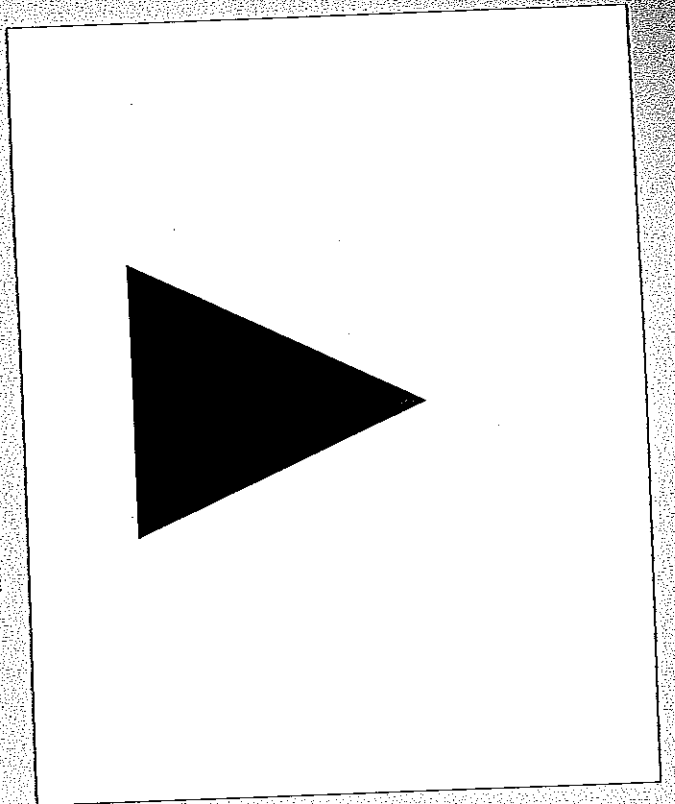
The flying buttress is an architectural device that was invented to enable the builders of Gothic cathedrals to construct walls ever higher and ever thinner, helping to give an airy, almost weightless feeling to these structures. If a roof had been built on these walls without their having additional support, they would have buckled outward from the pressure. Flying buttresses are diagonal wedges braced against thick outer walls to support the inner shell of the cathedral. These diagonal buttresses are under great tension.

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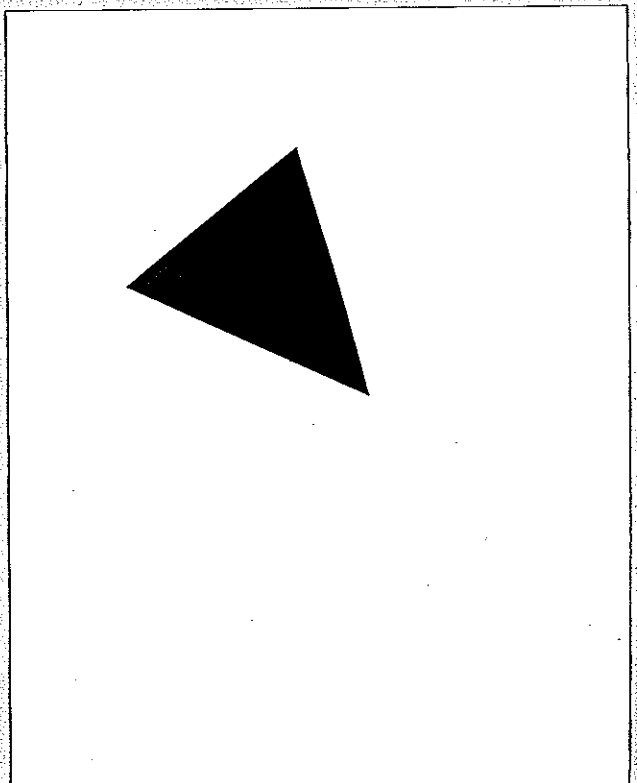
Mountains, sliding boards, waves: all of these are diagonals in movement or in tension. (Mountains are not visibly in motion, but they are gradually being worn down to flatness.) If we imagine an object on this surface, it has to move. Even our eyes can't help moving down and up it. Notice how we tend to read diagonals from left to right, as though they are going up or descending.

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A triangle placed on a flat base gives a feeling of stability.

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The same triangle placed on a diagonal gives a sense of movement — whether we see it as a triangle teetering on one point, about to fall back and lie flat again, or whether we read it as a missile shooting up toward the right-hand corner of the page.

Notice how it feels as though it is floating, because there isn't any defined ground or baseline attached to it.

51

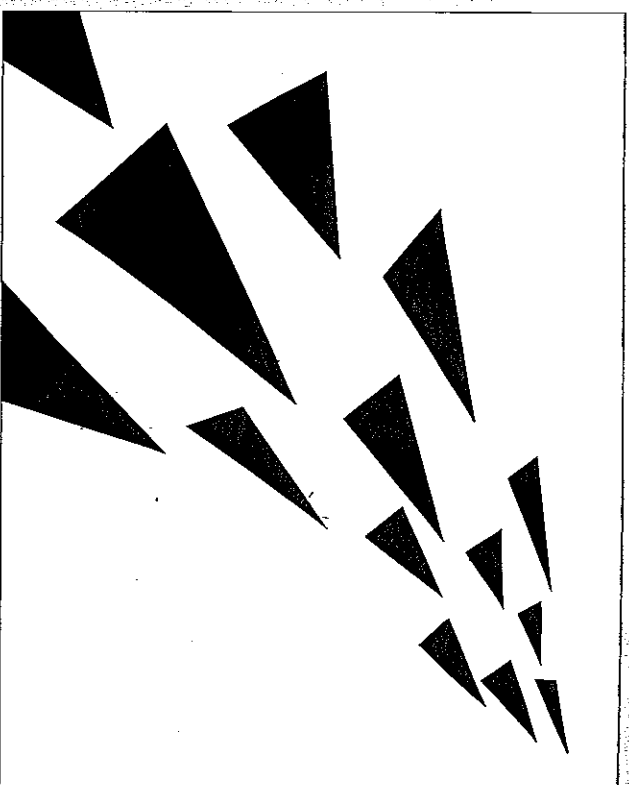
When it is made sleeker and joined by other similar triangles placed on a diagonal and decreasing in size, it becomes part of a slew of arrows, bullets, rocks, or unprogrammed missiles, following a diagonal trajectory.

When I took an art history course in college, the professor one day showed a slide of a painting that featured a mass of writhing figures. The artist had dramatically lit the bodies so that a diagonal section of them stood out from the rest, which was left in shadow. The instructor talked about the "dynamic of the diagonal" shown there. The statement obviously meant something to him, and I still have a clear memory of the painting he was discussing. But I could never understand what he meant until I figured out this principle, and then that bubble of memory floated up from out of the darkened college auditorium of twenty-five years before.

It means that any picture that emphasizes the diagonal — whether with shapes or colors or light or any structural element — is dynamic, because the diagonal implies movement or tension.

This picture has an even greater sense of movement because the triangles get progressively smaller and because the outline of the whole group is triangular, or arrow-shaped. When I first played with the shapes, I cut them all the same size and had them more nearly parallel to each other. They still felt as though they were moving, but the result was quite boring and heavy.

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Pictures are usually read as though there is an invisible, emotional horizon line stretching across the middle of the space and dividing it into top and bottom.

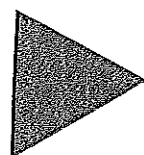
**4. The upper half of a picture is a place of freedom, happiness, and triumph; objects placed in the top half often feel more "spiritual."**

When we are high up, we are in a stronger tactical position: we can see our enemies and throw things down on them. Down low, we can't see very far; things might fall on us and crush us.

If we identify with an object that is in the upper half of a picture, we tend to feel lighter and gayer. If we want to show the spirituality of an object, we tend to place it high up. Again, this is due to the force of gravity: objects that are higher up give a sense of floating or flying or otherwise escaping the gravitational pull of the earth.

Think of some of the expressions we use every day to show that we're feeling happy or have done well: "Top o' the morning to you!", "She's at the top of the charts/the class/her form," "top man on the totem pole," "top gun," "top dog," "top-drawer," "top-notch," "Things are looking up," "I'm high as a kite," and so forth.

When people are said to be "high," however, it implies that they may eventually have a "terrible downer" when they "come back to earth."

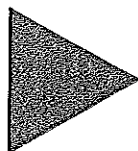


The bottom half of a picture feels more threatened, heavier, sadder, or constrained; objects placed in the bottom half also feel more grounded.

Think of expressions that show sadness or failure: "down in the dumps," "feeling down," "feeling low," "low-down dirty dog," "living the low life," "lower than a snake's belly," and so on. We feel the same sorts of emotional responses to this lower position in pictures.

On the other hand, because we tend to see pictures as extensions of our world, thinking of the top half as "sky" and the bottom half as "ground," objects in the lower half of the picture feel more grounded — more attached to the earth and less mobile.

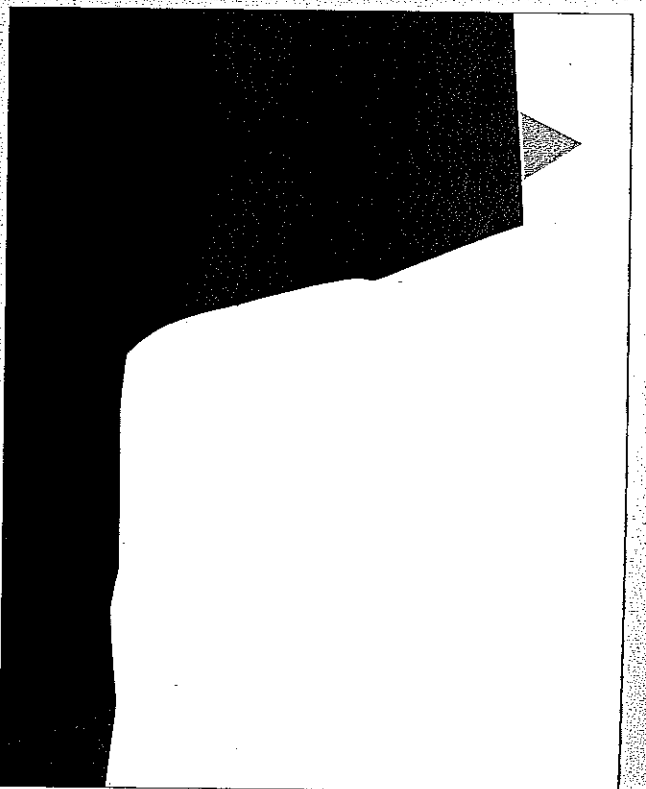
There is an odd corollary here, which at first seems contradictory: an object placed higher up on the page has "greater pictorial weight." This simply means that our attention is drawn to the same object more, or it feels more important, if it is higher up than if it is lower down. We must feel that most things truly "belong on the ground," and we are perturbed when this is not the case. All other things being equal, if we want to put more emphasis on an object, we tend to place it in the upper half of the page. It tends to feel freer, less attached to the earth, and lighter; but it also has greater pictorial weight.



Before leaving the effects of gravity, I'd like to stop for just a moment to remember that these principles are used not one by one, but always in combination and always in some context. Each of the principles appears quite clear when it is considered individually, but each picture we see uses a combination of principles, which makes the interactions of the parts and the overall effect more complex. The addition of each new element can modify the effect of the other elements or even change them completely.

I made two very simple configurations, to explore the way in which my response is determined partly by the content and partly by the structure of the picture and to see how the structure can enhance or detract from the content. This picture might be of a person about to commit suicide by jumping off a cliff, a general surveying the surrounding territory, or a lone climber who has reached the summit and is gazing back over the vista below. We feel differently about it according to its meaning-content. How does the structure enhance or detract from this meaning-content?

Of the three possibilities, the general surveying the territory feels the most appropriate to me. The figure is high on the page — that is, "up" — but it is also "grounded" on a stable horizontal. It feels stately because of its equal sides, and its wide, flat base gives it stability and calm. The points and color enhance its martial aspect, and the triangle suggests a cape. The cliff is high enough in comparison to the size of the figure that I wouldn't want to fall off it, but I don't feel terribly threatened. It is a good vantage point from which to survey my land and troops.

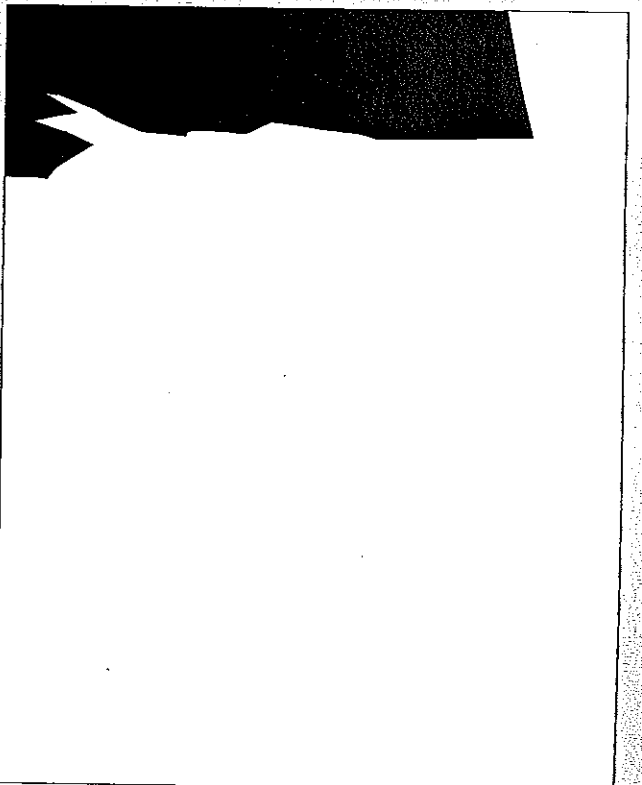


If the figure represented a climber, the land might not extend off the page to the left, but instead might form a peak. It would be more effective if no low ground were shown. The figure might be smaller and in a less stately pose — either with arms raised in triumph or perhaps balanced on two thin legs that would indicate the climber's frailty and exhaustion. I also reworked it to see how it could look more like a person about to commit suicide. The cliff, and the ground below, are more jagged now. I cut the figure of the person smaller and thinner and made it off balance, then brought it closer to the edge and tilted it over. Red would be appropriate if the person were killing himself in rage and revolt. I chose the paler, "melancholy" color. [This reminds me of pictures by Edward Gorey.]

These examples are given as indications of the following: the basic principle that higher means happier or freer or more "spiritual," and lower means gloomier or more grounded, is true, but the principles work in conjunction with each other, and they are subservient to context and content — to the picture's meaning.

The principles described so far result from gravity's effect upon us and the world and the pictures we look at. The next principles have to do with the picture as a world of its own.

As has been said before, we see pictures as extensions of reality. When we look at a picture, we "read" it as though gravity existed inside the picture as well as outside. Most pictures are rectangular, and their horizontal and vertical edges accentuate our sense of gravity's force. (When pictures are circular, they give the impression of floating, as complete circles within a picture seem to be floating or rolling. This again relates back to gravity, though, and to our experience with round objects.)

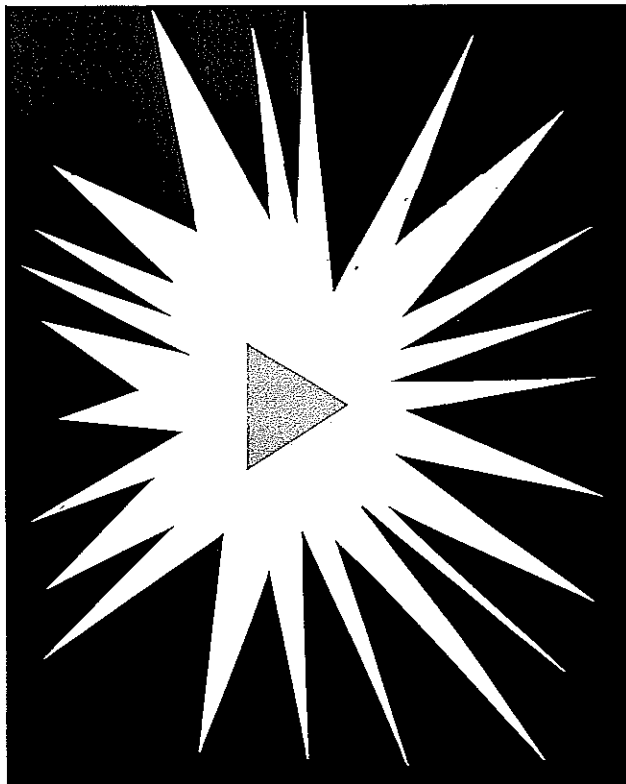


But there are other forces acting at the same time. The rectangular frame of the picture forms a separate world inside itself. The center of this framed world is the focal point of our attention; the edges enclose our attention and force it to the center. The frame creates a center/frame sort of visual conflict that can be thought of as a radial force, mainly radiating lines inward from the frame to the midpoint. To some extent, but to a much lesser degree, the center of the picture also radiates energy out of itself. You can sense this even more strongly when the picture frame is square or round; then the center is so strong that it is much harder for the eyes to get away from it and move around. Yet one of the goals behind most pictures is precisely that: to encourage the viewer to wander around inside this framed world and explore it all over. If a picture is meant to be explored, it is better to keep the main emphasis away from the center.

**5. The center of the page is the most effective "center of attention." It is the point of greatest attraction.**

This picture can be read either as a jewel radiating light (or a heroine radiating triumph) or as a figure surrounded on all sides by attackers. Our emotional response depends on the context, but the fact remains that it is difficult to take our eyes from the center and move them around the page. They are trapped, pinned to the center.

What happens when the focus of attention is shifted away from the center of the page?

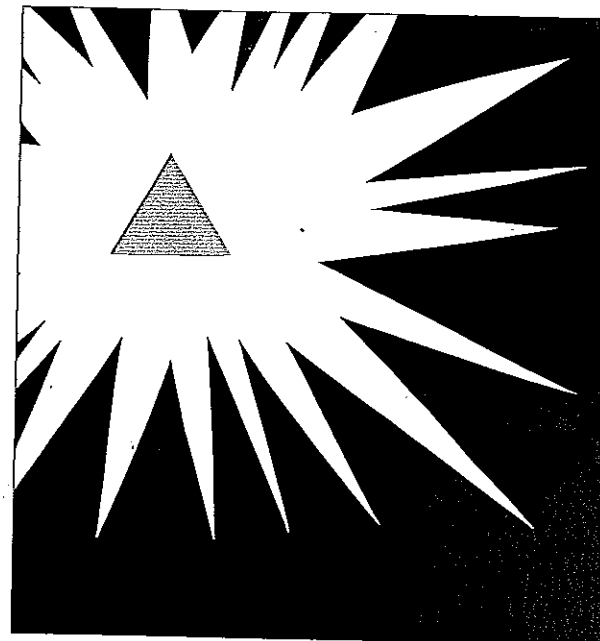


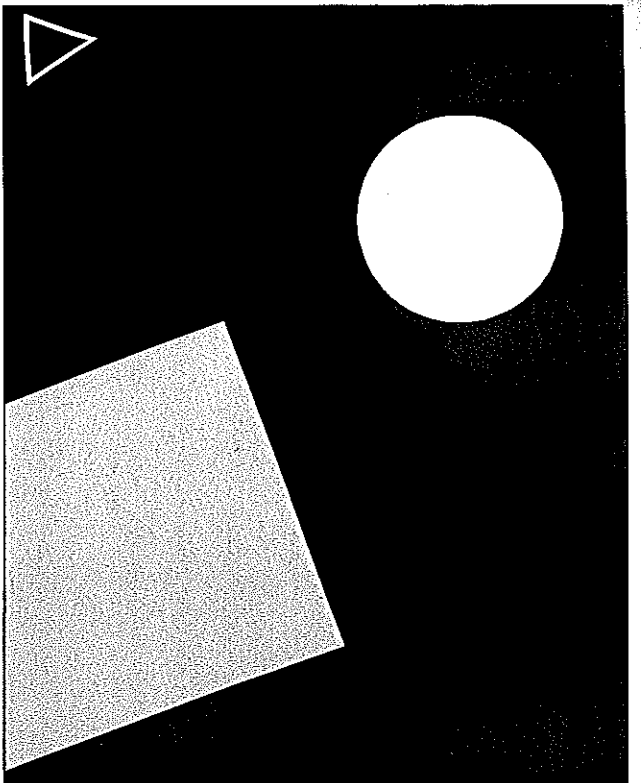
First of all, the picture is more dynamic. We feel that the red triangle is moving now, on a diagonal path either down toward the lower right and out toward us or away from us and toward the upper left. This sense of movement comes about because our eyes are now encouraged to move. We can shift along the points to the darkness at the right, which has now become a focus on its own; we move from darkness to the red triangle and back again.

Or we can move to the white space at the left — and clear off the page. Because the white area extends to the frame, the picture implies space outside itself. It breaks out into the world beyond.

But notice that with all of this moving around, the invisible lines of force are ever-present. We are aware of gravity as we move up and down and across the page. At the same time, we are very aware of the center as our eyes go back and forth across it; we are aware of the jagged lines dividing the page down the center. The center can be used as the hub of the picture, where more intense action takes place, as an empty area of calm or incompleteness, as a divider of left from right, as the area at which two equal elements join, and so forth. But whatever we do with the center, our eyes are drawn to it and our feelings are strongly affected by it.

We are also aware of "breaking out of" the rectangular frame. Whether or not we are conscious of these forces, we are aware of them. They encourage our eyes to move in certain directions, and they affect our emotional response to what is going on.





**The edges and corners of the picture are the edges and corners of the picture-world.**

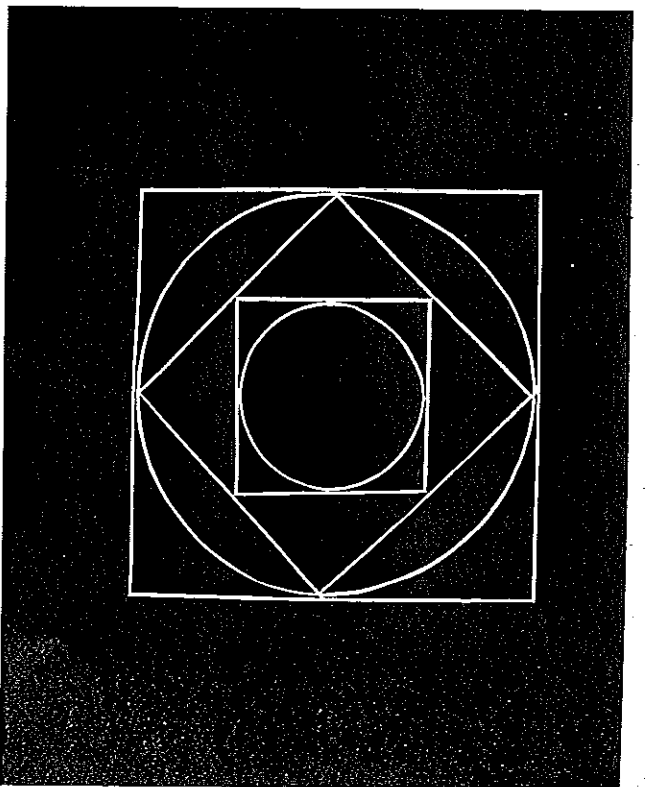
Just as the emotional effects of high and low placement on the page have their verbal equivalents, so do the edges and corners of pictures.

"He's cornered," "she's in a tight corner," "I had to sit in the corner," and "edgy," "on edge," "my nerves are on edge," and "she's pushing him over the edge" all mean the same things when they are expressed visually.

The closer an object is to the edge or to the center, the greater the tension. It reminds me of a golf ball on a green: when it sits comfortably far from the hole, we just look at it as a white ball on a green, but the closer it gets to the hole, the more we want to push it over the edge and in.

I find that when I cover up the red shape in this picture, the space becomes much flatter. It's only when I see the red box break out of the frame that I'm aware that the other two objects can escape it, too.

**66**



Artists seldom place their figures in the exact center of the page unless that figure is meant to be an object of meditation. Visual aids to meditation, whether they be Tantric or Christian or nonspecifically religious, tend to show the object of meditation in the center of the page so as to better enable the viewer to "center the mind."

With an object or a hole centered in the middle of the page, it is difficult to move away from the center.

Of course, a third invisible force we read into pictures is the force of movement and of life. We see some elements as moving and others as immobile, according to whether or not they are alive or move in reality. We imbue them with movement appropriate to the picture context, but what principles do they follow? Happily, we also imbue these creatures with wills of their own, like the viewer's, and at this point they are no longer subject to constricting principles. They may begin their movements on cue from the artist, but they move as the viewer wills them to.

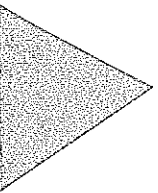
**67**

The next principle has to do with light and dark. We read light backgrounds as day and dark backgrounds as night, twilight, or storm.

**6. White or light backgrounds feel safer to us than dark backgrounds because we can see well during the day and only poorly at night.**

As a result of our inability to see in the dark, black often symbolizes the unknown, and all our fears associated with the unknown, while white signifies brightness and hope.

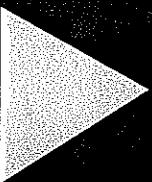
There are, however, exceptions to every rule, usually due to context. Two obvious exceptions here are that we would feel safer if we were escaping from some danger "under cover of darkness," and we would feel terrified if we were deserted on a limitless expanse of ice.

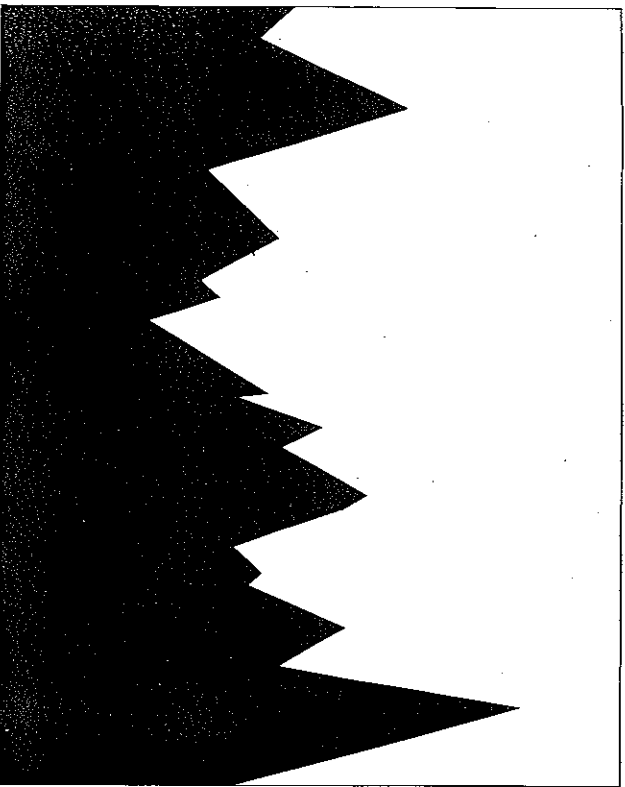


But at the same time, both black and white are "noncolors," and both represent death. When Europeans mourn a person's death, they wear black. Mourners in India and Korea wear white. We say "black as death," while we say "milk-white" or "snow-white." But we also say "dead-white."

We associate red with blood and fire. What things in nature are either black or white? Many of them are lifeless: black night, white bones, black coal, white sea foam and clouds, black pitch or charred wood, white pearls, white snow.

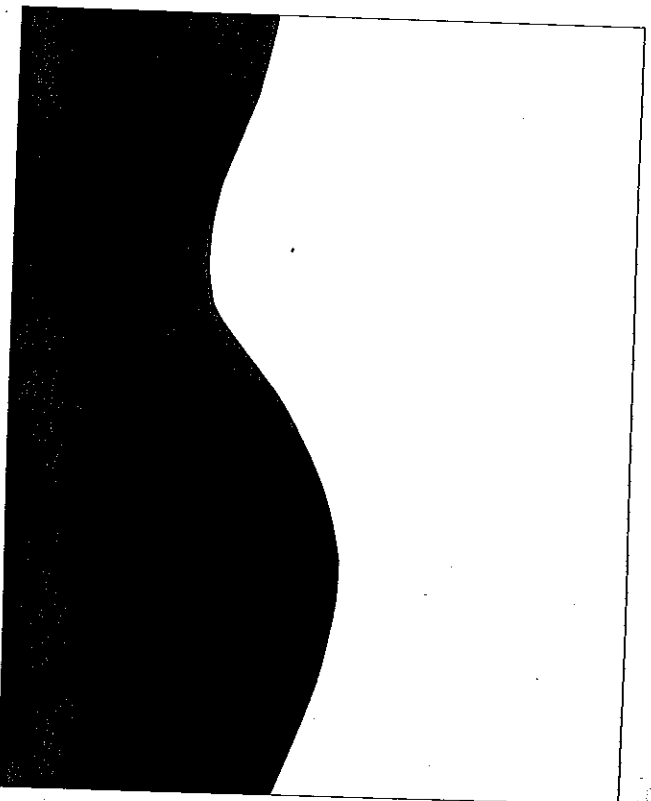
Notice the way the red glows against the black. Bright and pale colors glow like jewels against dark backgrounds. Against white or pale backgrounds, bright colors often look washed out. There is a physiological reason for this: since white light is made of all the colors, all the color receptors in our eyes are activated and become "bleached out" when we see white. The black background enables the color receptors to "rest" — except, of course, in the area of the red triangle.





7. We feel more scared looking at pointed shapes; we feel more secure or comforted looking at rounded shapes or curves.

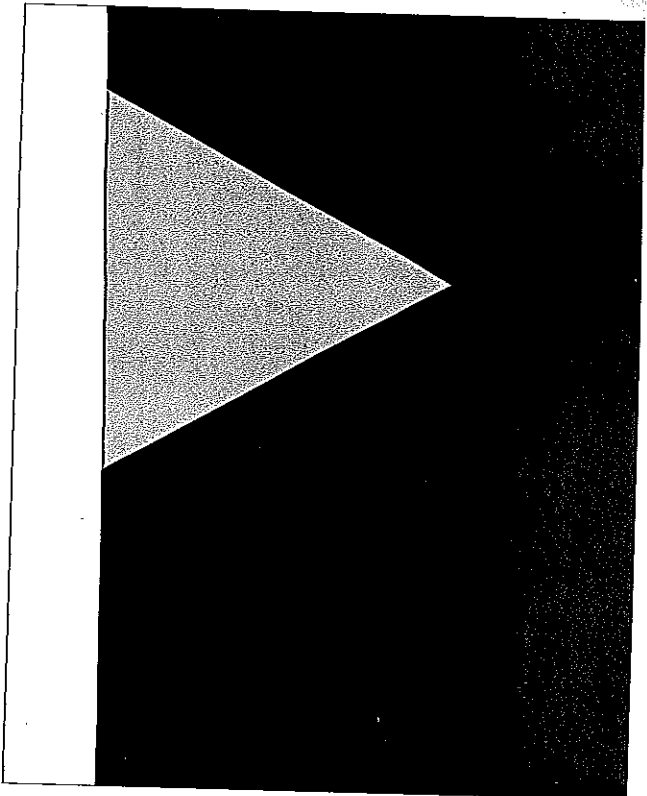
Our skin is thin. Pointed objects can easily pierce through to our innards and kill us. What do we know of that has sharp points? Most weapons are pointed: knives, arrows, spears, missiles, rockets; so are rocky mountains, the bows of boats that cut through the water, cutting tools like scissors and saw blades, bee stingers, teeth . . .



Curved shapes embrace us and protect us.

This picture of curves can't make us any safer than can the picture of points, and we know this, but the picture of curved surfaces makes us feel more secure than the one with sharp points, because of our associations with these shapes. What do we know of that is formed from curves? Rolling hills and rolling seas, boulders, rivers — but our earliest and strongest association is with bodies, especially our mothers' bodies, and when we were babies, there was no place more secure and full of comfort.

Because of these associations, pictures with curved shapes feel more secure and comforting than ones with sharp points, which feel scarier and more threatening.

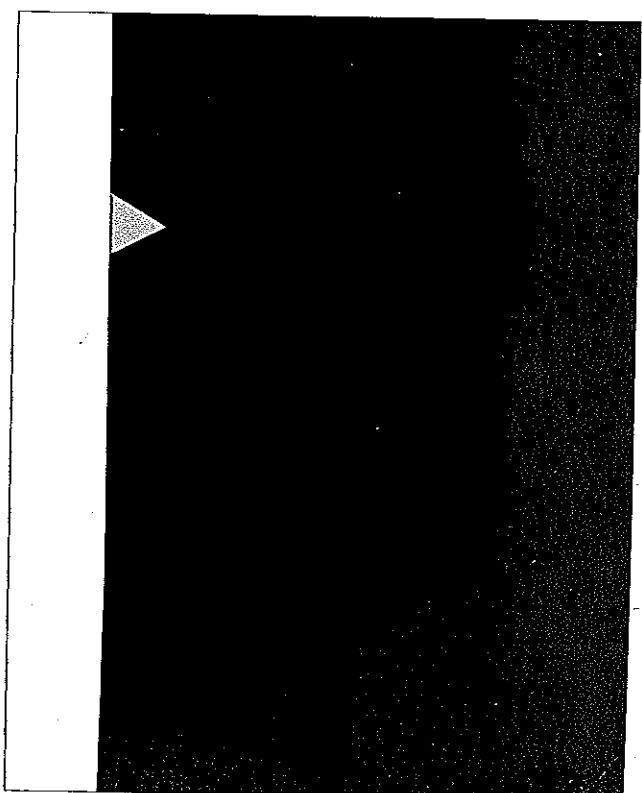


#### 8. The larger an object is in a picture, the stronger it feels.

We generally feel more secure physically when we are big than when we are little, because we're more capable of physically overpowering an enemy. One of the easiest ways to make a protagonist — or a threat — appear strong is to make it VERY large.

The same figure appears much more vulnerable if it is made very small. If we want to show a protagonist facing a terrible danger, the danger will seem much more threatening if it is huge and the protagonist is very small. We associate size with strength — strength of any sort.

72



This word *associate* is the key to the whole process of how picture structure affects our emotions. We know these pictures can't do us any more harm or make us any safer than a blank sheet of paper can, but we feel different looking at different pictures, because we associate the shapes, colors, and placement of the various picture elements with objects we have experienced in the "real" world outside the picture.

When we look at a picture, we know perfectly well that it's a picture and not the real thing, but we suspend disbelief. For a moment, the picture is "real." We associate pointed shapes with real, pointed objects. We associate red with real blood and fire. Specific elements such as points or color or size seem to call up the emotions we felt when we experienced actual sharp points or colors or noticeably large or small things. It is these "emotions attached to remembered experiences" that seem largely to determine our present responses.

73

Color's effect on us is very strong — stronger than that of other picture elements.

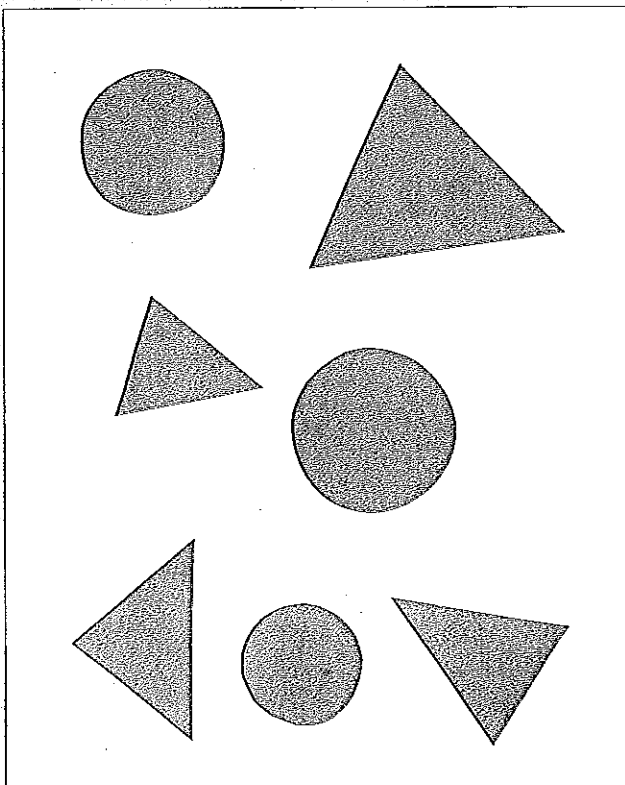
We've already noticed that much of our reaction to various colors seems to result from our association of these colors with certain natural objects — that is, we associate red with blood and fire, white with light, snow, and bones, black with darkness, yellow with the sun, blue with the sea and sky, et cetera. I'll call these objects "natural constants." Now these associations make perfect sense, and in many cases they might have helped us to stay alive.

But we then go on to make an interesting generalization. Just as we assume that all pointed shapes are sharp, we assume that everything with the same color as these "natural constants" also has their inherent qualities: a white swan seems more pure than a mallard duck, a red rose is more expressive of the blood and fire of our love than a pink one, a black crow looks nastier than a cuckoo, and so forth. These secondary associations are completely false, but we make them all the time. This "symbolism of color" is part of the way we function every day. Color is one of the most powerful elements used in advertising, in propaganda, and in all visual fabrications. Color symbolism is based on a false generalization. It also works — very, very well.

We also associate objects of the same color when they're seen at the same time.

Pretend for a moment that you are in kindergarten, and the teacher asks you to separate all of these shapes into two groups of similar elements. How do you immediately divide them?

Almost all of us instantly distinguish the circles from the triangles. In other words, we divide them according to shape. We associate like shapes with like shapes.



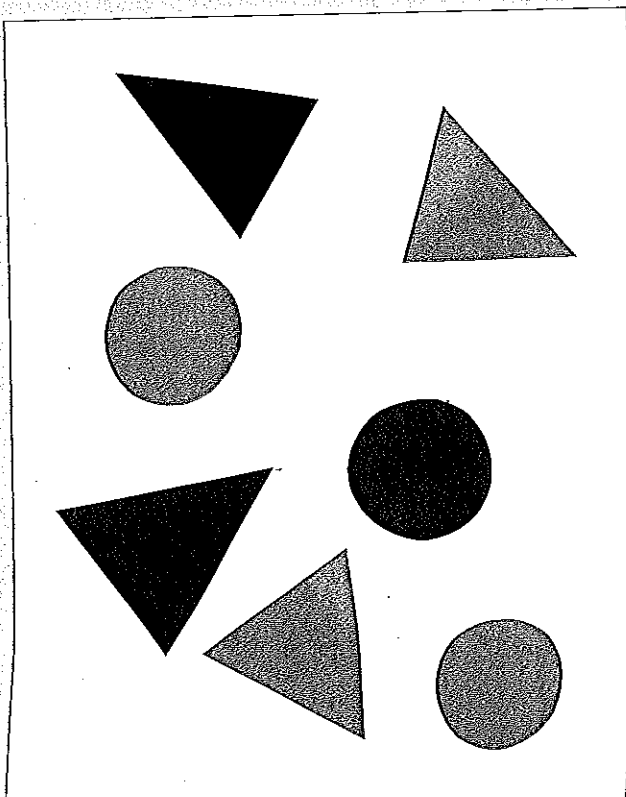
However, notice what happens when we are given the same instructions for this collection of shapes.

Our eyes immediately associate the forms by color, regardless of their shapes. We can still make groups of triangles and circles, but we are forcing ourselves to do it; our strongest association is by color. (This is not necessarily the case for small children, however; they tend to make a stronger association with shape.)

**9. We associate the same or similar colors much more strongly than we associate the same or similar shapes.**

Our association of objects by color is immediate and very strong.

The association can be "positive," as with Little Red Riding Hood and the wolf's eye and tongue. But in both cases we associate entities of the same color, and we read a meaning into their association.



This page represents a situation that I'm not clear enough about to give a name to or call a principle, but that I can see working.

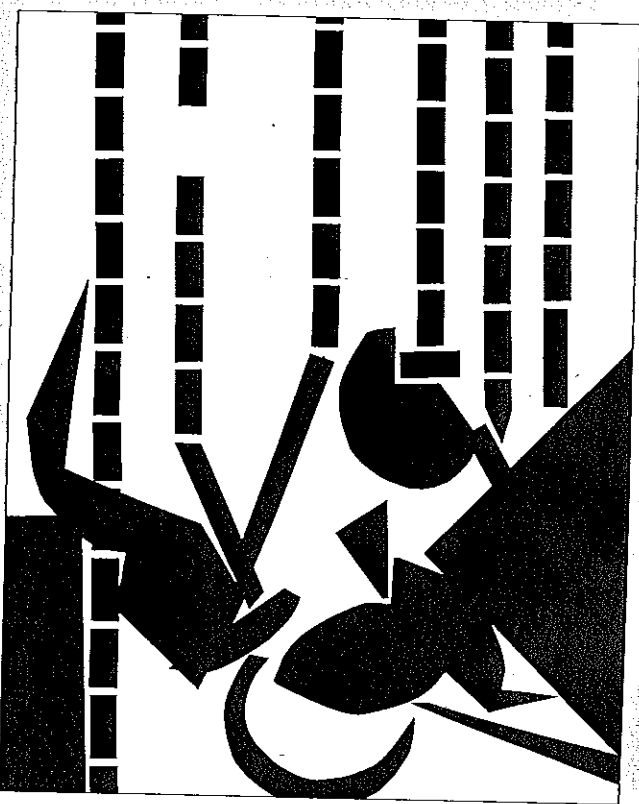
Repetition and confusion (regularity and irregularity? order and disorder?) are more difficult to talk about than the other elements because they involve patterns made by those other elements. Our eyes search for repetitive patterns, which enable us to make sense out of what we see. We notice repetition amid confusion, and the opposite, and we notice a break in a repetitive pattern. But how do these two sorts of patterns make us feel?

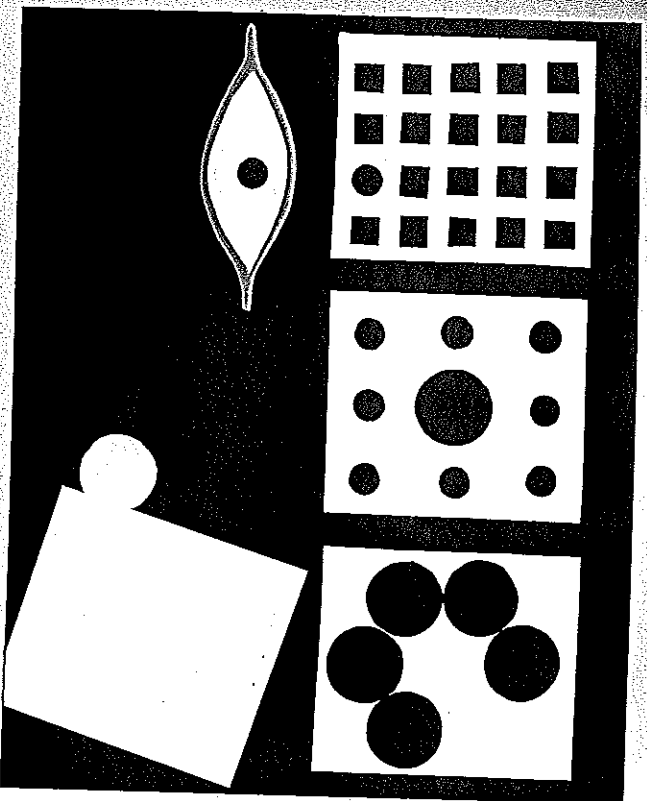
My question is hampered by the idea of "perfect" regularity and "perfect" chaos. Some repetition gives us a sense of security, in that we know what is coming next. We plant our hedges and beans in orderly rows and arrange our lives in largely repetitive schedules. Confusion is more frightening for most of us. We say we are "disoriented."

But "perfect" regularity — continual, relentless repetition — is perhaps even more horrifying in its monotony than confusion is. It implies a cold, unfeeling, mechanical mind, whether human or inhuman. Such patterns do not exist in nature; there are too many forces working against each other.

Either extreme is terrifying. I think of a remark made by the Japanese novelist Ryunosuke Akutagawa, that for him the worst hell would be an unending forest of cherry trees in full bloom.

Life needs a mixture. Our feelings seem to be elicited by the proportion and "perfection" of regularity and irregularity, as well as by what shapes and colors are chosen.





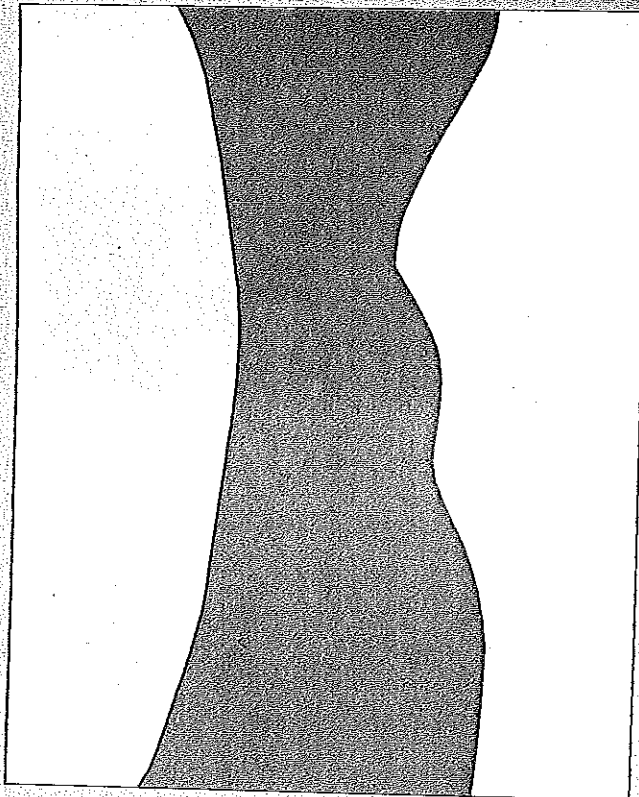
The last principle involves combinations of all the others and is perhaps the most basic to our survival and to our way of understanding the world — and pictures. It is simply that:

**10. We notice contrasts, or, put another way, contrast enables us to see.** The contrast can be between colors, shapes, sizes, placement, or combinations of these, but it is the contrast that enables us to see both patterns and elements: Pictures — and human perceptions — are based on contrasts.

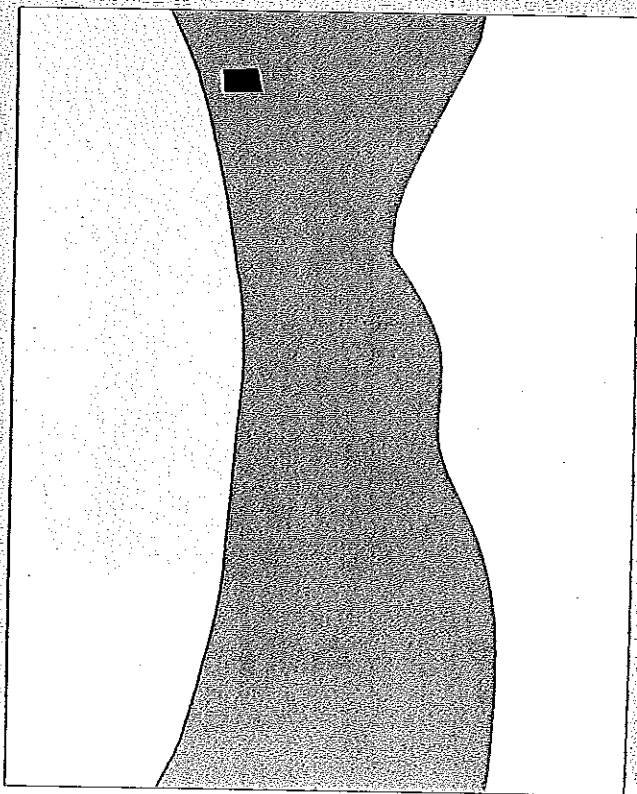
### Some Remarks about Space

Pictures are two-dimensional, whereas we live in three-dimensional space, with many more dimensions added by our passions and intelligence. When we translate or reform our multiacted experience into this flat, rectangular format, we play with space.

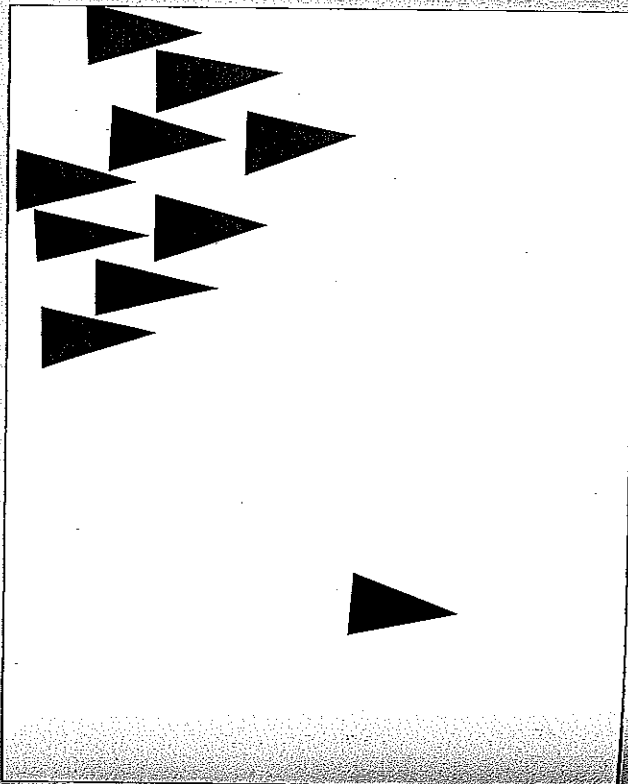
I'd like to look at a few features of picture space, not trying to find principles anymore, just noticing some things that happen.



The picture contains a space all its own. We exist outside the picture until

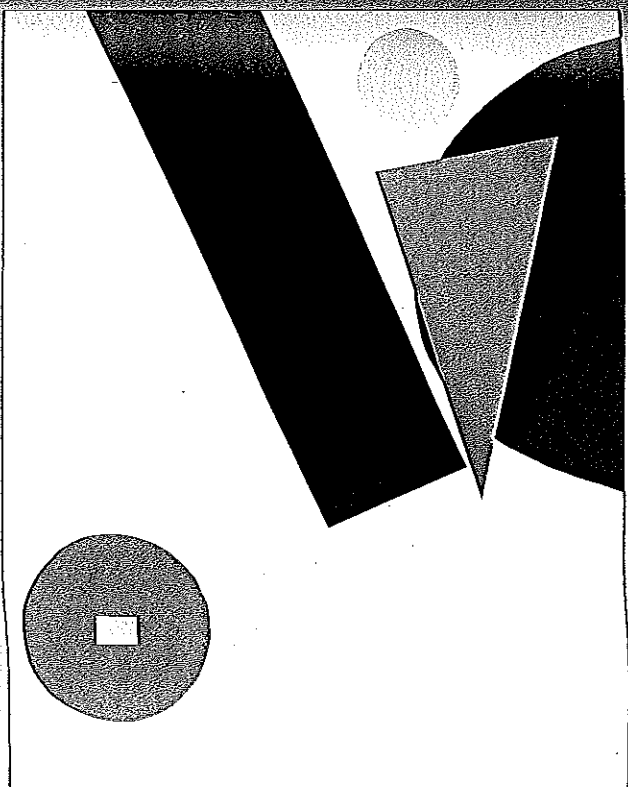


our eyes fix on and 'capture' an object inside it like prey — but the prey in turn draws us to itself inside the picture space.



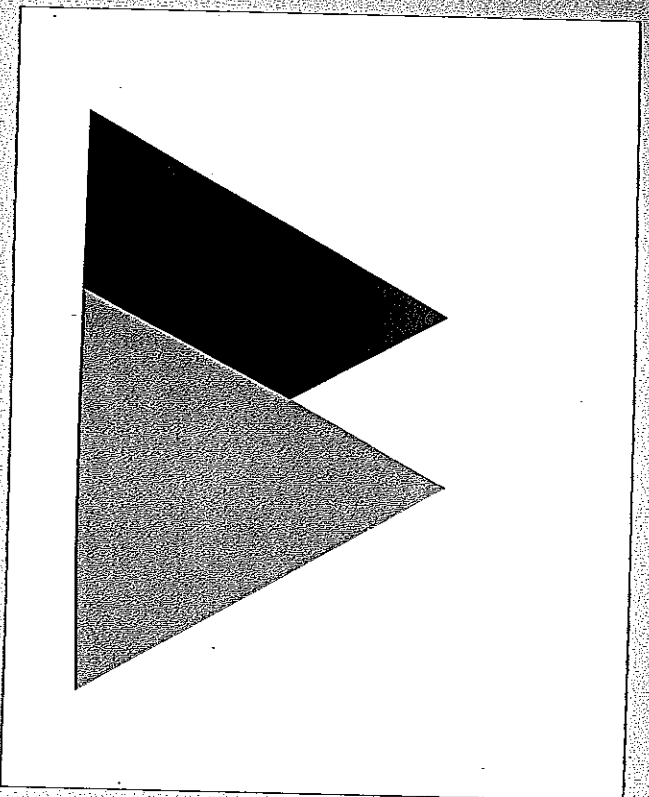
Space isolates a figure, makes that figure alone, free, and vulnerable. The figure would stand out even more if it had a different shape, size, and/or color, but would it feel more isolated?

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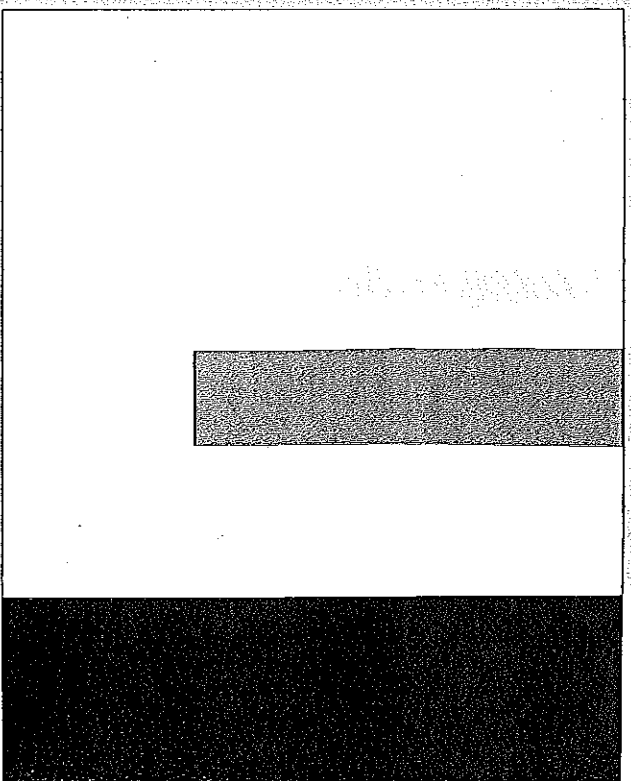
We fill a space with objects of different shapes and sizes. The movement of the picture is determined as much by the spaces between the shapes as by the shapes themselves.

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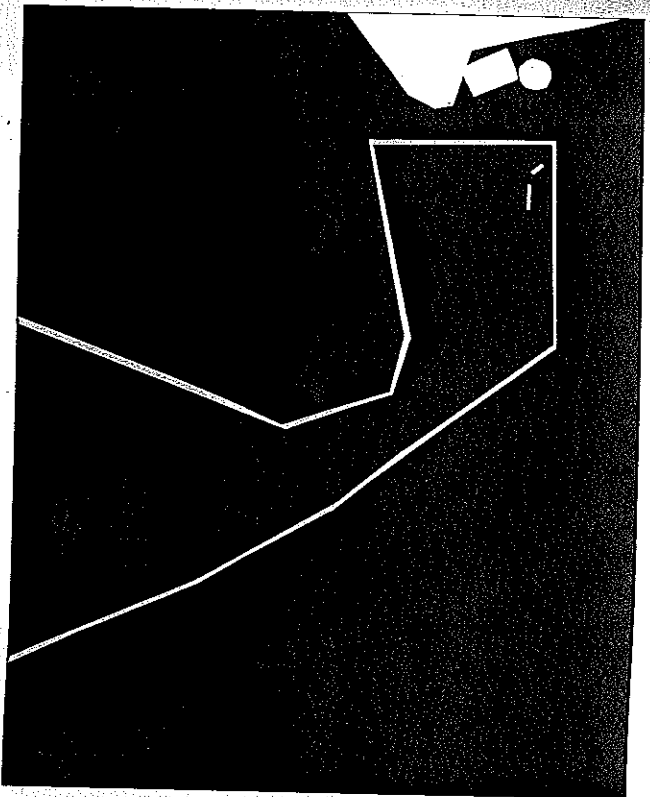


As soon as two objects overlap, the overlapping object "takes the space" of the covered one. Especially when we are beginning to make pictures, we feel this very strongly: it is hard for us to make one object overlap another. We want to leave each element as an integral piece, unbroken, inviolate. We want to allow space around each one.

The overlapping object "pierces" or "violates" the space of the other, but this also joins them together into a single unit.



A sense of depth in space is created by placing the bases of progressively smaller/thinner/lighter objects gradually higher on the page. The effect is stronger if, as the objects recede, the spaces between them decrease in a regular geometric progression rather than an arithmetic one — that is, if each space is one-half or one-third smaller than the preceding one, rather than each space being decreased by a consistent, fixed amount.



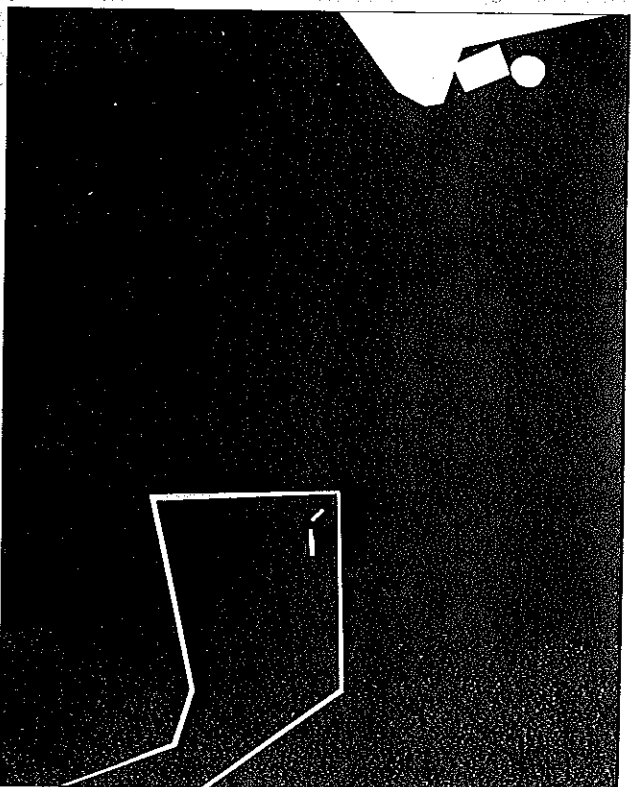
Space implies time.

This picture feels frightening to me, but part of me also wonders whether these two figures aren't just having a jolly old chat.

A threat doesn't feel so scary when it's right next to the victim, because there is no time for the victim to move before it gets devoured — and no time for us to be scared. The deed is a done thing.

I remember reading a story by Jack London in which the protagonist was dying on the icy tundra and saw a wolf sitting not six feet away. He couldn't understand why the wolf looked so completely friendly until he realized that there was no reason for the wolf to be aggressive. The man was dead meat.

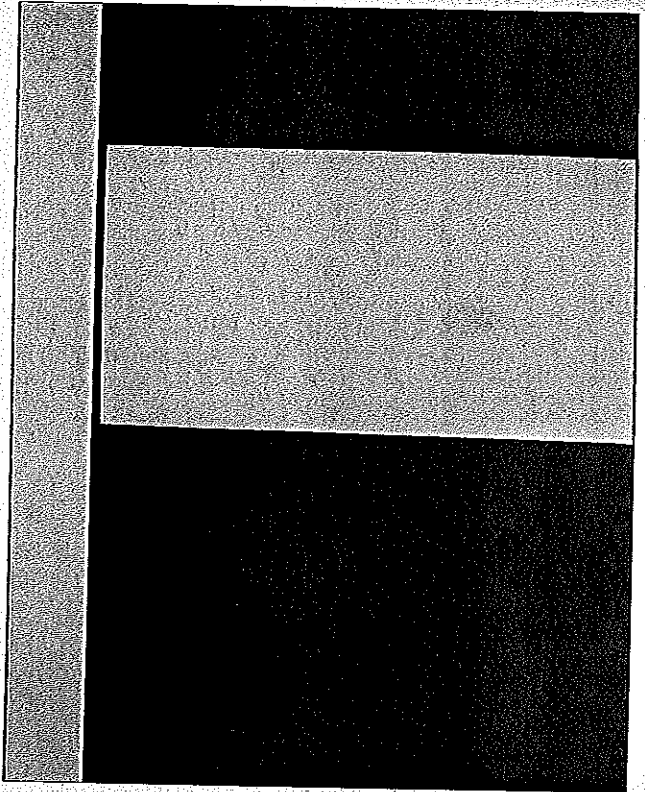
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When the attacker and the victim are spaced far apart, I, as the victim, have more time to be scared. There are at least two seconds now before I'll be attacked, rather than the finest split second that I had before. We might be cornered in this picture, but there is more possibility of escape with the larger amount of space-time between victim and attacker. To put it in purely formal terms, there is more tension in the picture because the objects are "on edge" at the two poles of the page, separated from each other by the vast, diagonal empty space cutting through the center, but associated and drawn together by color.

Wide space can create tension between the divided objects.

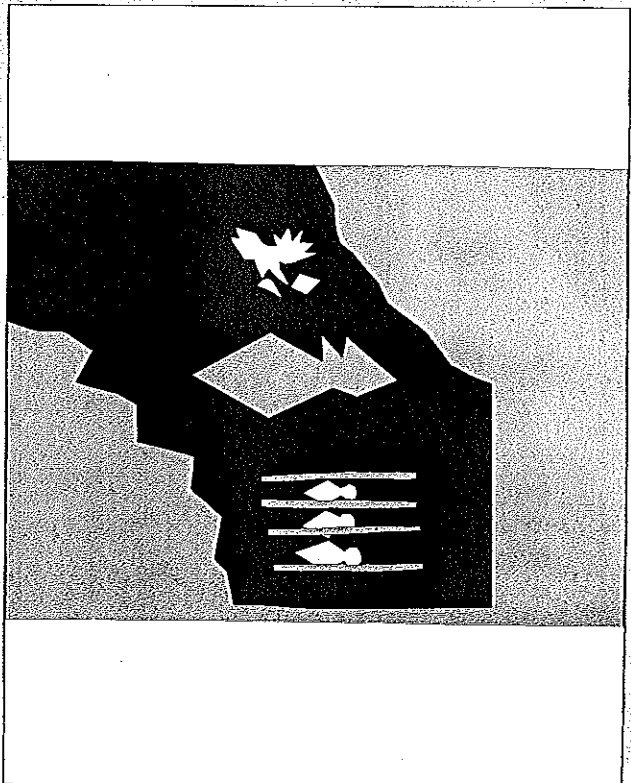
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but so can a sliver of space.

As space enables us to move, so space gives movement and life to a picture.

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This is a rather remarkable illustration by Sue Jensen, who was an eighth grader when she made it. Notice how before we even have any idea of what the picture is about, the white objects jump out at us from the rich background, and the pale figures are immediately associated with each other.

The picture shows a girl giving two treasures to an evil sorcerer who is holding her three brothers captive. Notice how the two white pieces immediately catch our attention, small though they are, and how readily their whiteness also gives them a jewel-like quality. The girl is associated with her three brothers because they are all the same color, even though (as a student pointed out to me maybe a year after I had shown this illustration to various classes) the shape of the brothers is almost the same as that of the sorcerer. Notice also how the sharp red central sorcerer is associated by color with the bars of the prison and with the walls of the jagged rock cave in which he lives. The picture is extremely simple, and extremely effective.

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