

GESTALT PERCEPTION

Gestalt psychology was founded in Austria and Germany in the early 20th century, and while some of its ideas (such as that objects seen form similarly shaped traces in the brain) have long been abandoned, it has had an important revival in its approach to visual recognition.

Modern Gestalt theory takes a holistic approach to perception, on the basic principle that the whole is greater than the sum of its parts, and that in viewing an entire scene or image, the mind takes a sudden leap from recognizing the individual elements to understanding the scene in its entirety. These two concepts—appreciating the greater meaning of the entire image and grasping it suddenly and intuitively—may at first seem at odds with what is known about how we look at images. (The principle that we build up a picture from a series of rapid eye movements to points of interest is explored more thoroughly on pages 80-81.) However, in reality, Gestalt theory has adapted to experimental research, and, despite its sometimes vague assertions, offers some valid explanations about the complex process of perception. Its importance for photography lies mainly in its laws of organization, which underpin most of the principles of composing images, particularly in this and the next chapter.

The word “Gestalt” has no perfect English translation, but refers to the way in which something has been *gestellt*, that is, “placed” or “put together,” with obvious relevance to composition. As a way of understanding perception, it offers an alternative to the atomistic, iterative way in which computers and digital imaging work, step-by-step, and stresses the value of insight. Another principle from Gestalt is “optimization,” favoring clarity and simplicity. Allied to this is the concept of *pragnanz* (precision), which states that when understanding takes place as a whole (“grasping the image”), it involves minimal effort.

The Gestalt laws of organization, listed in the box, go a long way toward explaining the ways in which graphic elements in photographs, such as potential lines, points, shapes, and vectors, are

“completed” in viewers’ minds and understood to animate and give balance to an image. One of the most important and easy-to-grasp laws is that of Closure, usually illustrated by the well-known Kanizsa triangle (illustrated opposite). We can see this principle time and again in photography, where certain parts of a composition suggest a shape, and this perceived shape then helps to give structure to the image. In other words, an implied shape tends to strengthen a composition. It helps the viewer make sense of it. Triangles are among the most potent of “closure-induced” shapes in photography, but the example illustrated opposite is the somewhat more unusual one of a double circle.

As we’ll see in more detail when we come to the process of shooting (in Chapter 6), creating and reading a photograph heavily involves the principle of making sense of a scene or an image, of taking the visual input and attempting to fit it to some hypothesis that explains the way it looks. Gestalt theory introduces the idea of regrouping and restructuring the visual elements so that they make sense as an entire image—also known as the “phi-phenomenon.” However, whereas Gestalt theory is used in instructional design—for example, to eliminate confusion and speed up recognition (diagrams, keyboards, plans, and so on)—in photography it can play an equally valuable opposite role.

As we’ll see when we come to Chapter 6, Intent, there are many advantages in slowing down the way people view a photograph, so as to deliver a surprise or to involve them more deeply in the image (Gombrich’s “beholder’s share,” page 140). For example, the principle of Emergence (see box) is valuable in explaining how, in a sudden moment, the mind comprehends something in a photograph that was visually “hidden” (pages 144-145, Delay, go into this in more detail). Normally, in presenting information, making the viewer’s mind work harder is not considered a good thing, but in photography and other arts it becomes part of the reward for viewing.



▲ KANISZA TRIANGLE

The most well-known demonstration of closure is this, designed by Italian psychologist Gaetano Kanizsa, in which the only shapes are three circles with wedges cut out of them, yet the eye sees a triangle.

GESTALT LAWS AND PRINCIPLES

THE GESTALT LAWS OF PERCEPTUAL ORGANIZATION:

1. Law of Proximity. Visual elements are grouped in the mind according to how close they are to each other.
2. Law of Similarity. Elements that are similar in some way, by form or content, tend to be grouped.
3. Law of Closure. Elements roughly arranged together are seen to complete an outline shape. The mind seeks completeness.
4. Law of Simplicity. The mind tends towards visual explanations that are simple; simple lines, curves, and shapes are preferred, as is symmetry and balance.
5. Law of Common Fate. Grouped elements are assumed to move together and behave as one.
6. Law of Good Continuation. Similar to the above, this states that the mind tends to continue shapes and lines beyond their ending points.
7. Law of Segregation. In order for a figure to be perceived, it must stand out from its background. Figure-ground images (see page 48) exploit the uncertainty of deciding which is the figure and which is the background, for creative interest.

Grouping plays a large part in Gestalt thinking, and this is known as “chunking.”

GESTALT PRINCIPLES INCLUDE:

1. Emergence. Parts of an image that do not contain sufficient information to explain them suddenly pop out as a result of looking long enough and finally grasping the sense.
2. Reification. The mind fills in a shape or area due to inadequate visual input. This includes closure (above).
3. Multistability. In some instances, when there are insufficient depth clues, objects can be seen to invert spontaneously. This has been exploited more in art (M. C. Escher, Salvador Dali) than in photography.
4. Invariance. Objects can be recognized regardless of orientation, rotation, aspect, scale, or other factors.



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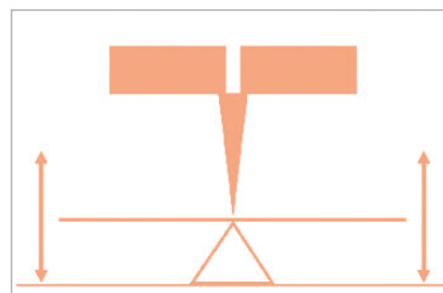


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▲ > CLOSURE TO CIRCLES

The Gestalt Law of Closure governs many of the compositional techniques that help give structure to images. In this photograph of ceremonial guards at the annual Garebeg ceremony at the palace of Yogyakarta, Java, the eye sees two approximate circles left and right, and this helps order the image. Yet these are entirely notional. In [1], applying a median filter to simplify the view, the shapes stand out more. In [2], the actual curved sections are marked, and can be seen to be very far from completed circles, yet as highlighted in [3], the implied circles work to concentrate the attention on the uniformed soldiers inside them. This is essentially the mechanism demonstrated on pages 84-93 (which cover the theme of shapes).

BALANCE



At the heart of composition lies the concept of balance. Balance is the resolution of tension, opposing forces that are matched to provide equilibrium and a sense of harmony. It is a fundamental principle of visual perception that the eye seeks to balance one force with another. Balance is harmony, resolution, a condition that intuitively seems aesthetically pleasing. In this context, balance can refer to any of the graphic elements in a picture (in Chapter 3 we will review each of these in turn).

If we consider two strong points in a picture, for example, the center of the frame becomes a reference against which we see their position. If one diagonal line in another image creates a strong sense of movement in one direction, the eye is aware of the need for an opposite sense of movement. In color relationships, successive and simultaneous contrasts demonstrate that the eye will seek to provide its own complementary hues.

When talking about the balance of forces in a picture, the usual analogies tend to be ones drawn from the physical world: gravity, levers, weights, and fulcrums. These are quite reasonable

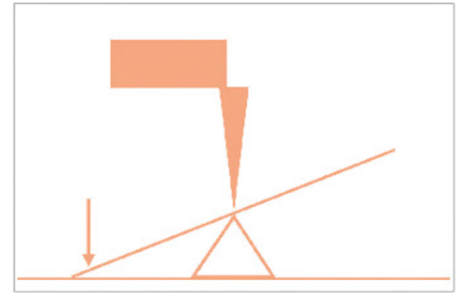
analogies to use, because the eye and mind have a real, objective response to balance that works in a very similar way to the laws of mechanics. We can develop the physical analogies more literally by thinking of an image as a surface balanced at one point, rather like a weighing scale. If we add anything to one side of the image—that is, off-center—it becomes unbalanced, and we feel the need to correct this. It does not matter whether we are talking about masses of tone, color, an arrangement of points, or whatever. The aim is to find the visual “center of gravity.”

Considered in this way, there are two distinct kinds of balance. One is symmetrical or static; the other is dynamic. In symmetrical balance, the arrangement of forces is centered—everything falls equally away from the middle of the picture. We can create this by placing the subject of a photograph right in the middle of the frame. In our weighing-scale analogy, it sits right over the fulcrum, the point of balance. Another way of achieving the same static balance is to place two equal weights on either side of the center, at equal distances. Adding a dimension to this, several

graphic elements equally arranged around the center have the same effect.

The second kind of visual balance opposes weights and forces that are unequal, and in doing so enlivens the image. On the weighing scale, a large object can be balanced by a small one, as long as the latter is placed far enough away from the fulcrum. Similarly, a small graphic element can successfully oppose a dominant one, as long as it is placed toward the edge of the frame. Mutual opposition is the mechanism by which most balance is achieved. It is, of course, a type of contrast (see Contrast, on pages 34–37).

These are the ground rules of visual balance, but they need to be treated with some caution. All we have done so far is to describe the way the balance works in simple circumstances. In many pictures, a variety of elements interact, and the question of balance can only be resolved intuitively, according to what feels right. The weighing scale analogy is fine as far as it goes—to explain the fundamentals—but I would certainly not recommend actually using it as an aid to composition.



Apart from this, a more crucial consideration is whether or not balance is even desirable. Certainly, the eye and brain need equilibrium, but providing it is not necessarily the job of art or photography. Georges Seurat, the neo-Impressionist painter, claimed that “Art is harmony,” but as Itten pointed out, he was mistaking a means of art for its end. If we accepted a definition of good photography as the creation of images that produce a calm, satisfying sensation, the results would be very dull indeed. An expressive picture is by no means always harmonious, as you can see time and again throughout this book. We will keep returning to this issue, and it underlines many design decisions, not just in an obvious way—where to place the center of interest, for example—but in the sense of how much tension or harmony to create. Ultimately, the choice is a personal one, and not determined by the view or the subject.

In composing the image, the poles are symmetry and eccentricity. Symmetry is a special, perfect case of balance, not necessarily satisfying, and very rigid. In the natural run of

views that a photographer is likely to come across, it is not particularly common. You would have to specialize in a group of things that embody symmetrical principles, such as architecture or seashells, to make much use of it. For this reason, it can be appealing if used occasionally. On the subject of a mirrored composition in Sequoia National Park, the landscape photographer Galen Rowell wrote, “When I photographed Big Bird

▲ ▲ STATIC BALANCE VS IMBALANCE

Using the analogy of a weighing scale, think of a picture as balanced at its center. In this close-up of the eyes on the Buddhist stupa at Swayambunath in Nepal, the simple arrangement is symmetrical. The arrangement is balanced exactly over the fulcrum; the forces are evenly balanced. However, if we remove one element, done here digitally for the exercise, the visual center of gravity is shifted to the left, and the balance is upset. The natural tendency would be to shift the view to the left.

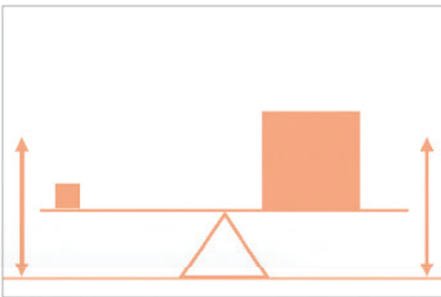
RATIOS, HARMONY, AND BALANCE

The belief that there are naturally ideal proportions goes back to the Pythagoreans, whose thought was dominated by mathematics, yet was also mystical. A core belief was that reality was numerically ordered. In arguing the creation of the universe, Stobaeus wrote: “Things that were alike and of the same kind had no need of harmony, but those that were unlike and not of the same kind and of unequal order—it was necessary for such things to have been locked together by harmony, if they are to be held together in an ordered universe.” In music, for example, a scale that produces harmonic (pleasing) sounds must have pitches that are in a consistent ratio. The idea of natural harmony can be extended to other fields, such as visual proportions. The Greek Aristides (530-468 BC) wrote about painting that, “we shall find that it does nothing without the help of numbers and proportions: it is through numbers that it hunts for the proportionate measures of bodies and mixtures of colors, and from these it gives the pictures their beauty.” Nevertheless, at many times in the history of art there has been conflict between those who sought inspiration from mathematical, harmonic order and those who found it dry, sterile, and stifling to the imagination—the painter William Blake, for example. (See also pages 118-121.)



< DYNAMIC BALANCE

Dynamic equilibrium opposes two unequal subjects or areas. Just as a small weight can balance a larger mass by being placed further from the fulcrum, large and small elements in an image can be balanced by placing them carefully in the frame. Note here that the content of the upper right area—Chinese characters—increases its visual importance (see pages 98-99 for more on visual weight).



Lake with a fine reflective surface on the water, I intuitively broke traditional rules of composition and split my image 50-50 to strengthen the patterns and emphasize the similarity between the two halves of my image.” To succeed, symmetrical composition must be absolutely precise. Few images look sloppier than an almost symmetrical view that did not quite make it.

We ought now to consider how tension actually works in an unbalanced composition. The mechanics are considerably more subtle than the balancing-scale analogy can show. While the eye and brain search for balance, it would be wrong to assume that it is satisfying to have it handed on a plate. Interest in any image is in direct proportion to the amount of work the viewer has to do, and too perfect a balance leaves less for the eye to work at. Hence, dynamic balance tends to be more interesting than static balance. Not only this, but in the absence of equilibrium, the eye tries

to produce it independently. In color theory, this is the process involved in successive and simultaneous contrast (see pages 118-121).

This can be seen in action in any eccentrically composed picture. In the photograph of a farmer in a rice field on page 69, according to the weighing-scale analogy the equilibrium is completely upset, yet the image is not at all uncomfortable in appearance. What happens is that the eye and brain want to find something closer to the center to balance the figure in the top-right corner, and so keep coming back to the lower-left center of the frame. Of course, the only thing there is the mass of rice, so that the setting in fact gains extra attention. The green stalks of rice would be less dominant if the figure were centrally placed. As it is, it would be difficult to say whether the photograph is of a worker in a rice field or of a rice field with, incidentally, a figure working in it. This process of trying to compensate for an obvious asymmetry in an image is what creates

visual tension, and it can be very useful indeed in making a picture more dynamic. It can help draw attention to an area of a scene that would normally be too bland to be noticed.

A second factor involved in eccentrically composed images is that of logic. The more extreme the asymmetry, the more the viewer expects a reason for it. Theoretically, at least, someone looking at such an image will be more prepared to examine it carefully for the justification. Be warned, however, that eccentric composition can as easily be seen as contrived.

Finally, all considerations of balance must take into account the sheer graphic complexity of many images. In order to study the design of photographs, we are doing our best in this book to isolate each of the graphic elements we look at. Many of the examples, such as the rice field picture, are deliberately uncomplicated. In reality, most photographs contain several layers of graphic effect.



A BILATERAL SYMMETRY

Certain classes of subject are naturally symmetrical around one axis, as with this Greek fishing boat seen from the front. Architecture also often falls into this category, as do head-on views of many living things (such as a human face). Precision is particularly important with a symmetrical composition, because the smallest misalignment will stand out immediately and may simply look like a failure.

BALANCE AND GRAVITY

There is a natural tendency to apply our experience of gravity to images and image frames. As we'll see in Chapter 3, verticals express a gravitational pull downwards, while horizontal bases provide a supporting flatness. This is probably why the placement of a dominant element in a frame tends to be lower, particularly with a vertical frame (see page 26). As the painter and teacher Maurice De Sausmarez wrote about a vertical above a horizontal: "The two together produce a deeply satisfying resolved feeling, perhaps because together they symbolize the human experience of absolute balance, of standing erect on level ground."

DYNAMIC TENSION

We have already seen how certain of the basic graphic elements have more energy than others: diagonals, for instance. Some design constructions are also more dynamic; rhythm creates momentum and activity, and eccentric placement of objects induces tension as the eye attempts to create its own balance. However, rather than think of an image as balanced or unbalanced, we can consider it in terms of its dynamic tension. This is essentially making use of the energy inherent in various structures, and using it to keep the eye alert and moving outward from the center of the picture. It is the opposite of the static character of formal compositions.

Some caution is necessary, simply because introducing dynamic tension into a picture seems such an easy and immediate way of attracting attention. Just as the use of rich, vibrant colors is instantly effective in an individual photograph but can become mannered if used constantly, so this kind of activation can also become wearing after a while. As with any design technique that

is strong and obvious when first seen, it tends to lack staying power. Its effect is usually spent very quickly, and the eye moves on to the next image.

The techniques for achieving dynamic tension are, however, fairly straightforward, as the examples here show. While not trying to reduce it to a formula, the ideal combination is a variety of diagonals in different directions, opposed lines, and any structural device that leads the eye outward, preferably in competing directions. This argues against, for example, using circular enclosing structures, and suggests that good use can be made of a powerful standby, eye-lines (see pages 82-83).

► ▲ BELL FOUNDRY

Eye-lines and the direction in which things appear to face are responsible here for the diverging lines of view. The man faces left, and the line of his stance contributes to this. The hopper full of molten metal faces forward and to the right. The two pull against each other visually.



◀ ▼ OAK ALLEY PLANTATION

Diverging lines and movement are the key to dynamic tension. Here, the branches of a tree and its strong curving shadow have powerful outward movement, exaggerated by the 20 mm efl (equivalent focal length) wide-angle lens. The distortion and placement of the building make it seem to move left, out of frame.





< A HILL OF COTTON

Sorting and tramping down freshly picked cotton south of Khartoum, two Sudanese women move deftly and gracefully. A wide-angle lens exaggerates the geometry of the image close to the edges of the frame, and from a sequence of shots the one chosen here has the most energy and movement—the lines and gestures pull the attention outward at both left and right.

FIGURE AND GROUND

We are conditioned to accepting the idea of a background. In other words, from our normal visual experience, we assume that in most scenes that is something that we look at (the subject), and there is a setting against which it stands or lies (the background). One stands forward, the other recedes. One is important, and the reason for taking a photograph; the other is just there because something has to occupy the rest of the frame. As we saw, this is an essential principle of Gestalt theory.

In most picture situations, that is essentially true. We select something as the purpose of the image, and it is more often than not a discrete object or group of objects. It may be a person, a still-life, a group of buildings, a part of something. What is behind the focus of interest is the background, and in many well-designed and satisfying images, it complements the subject. Often, we already know what the subject is before the photography begins. The main point of interest has been decided on: a human figure, perhaps, or a horse, or a car. If it is possible to control the circumstances of the picture, the

next decision may well be to choose the background: that is, to decide which of the locally available settings will show off the subject to its best advantage. This occurs so often, as you can see from a casual glance at most of the pictures in this book, that it scarcely even merits mention.

There are, however, circumstances when the photographer can choose which of two components in a view is to be the figure and which is to be the ground against which the figure is seen. This opportunity occurs when there is some ambiguity in the image, and it helps to have a minimum of realistic detail. In this respect, photography is at an initial disadvantage to illustration, because it is hard to remove the inherent realism in a photograph. In particular, the viewer knows that the image is of something real, and so the eye searches for clues.

Some of the purest examples of ambiguous figure/ground relationships are in Japanese and Chinese calligraphy, in which the white spaces between the brush strokes are just as active and coherent as the black characters. When

the ambiguity is greatest, an alternation of perception occurs. At one moment the dark tones advance, at another they recede. Two interlinked images fluctuate backwards and forwards. The preconditions for this are fairly simple. There should be two tones in the image, and they should contrast as much as possible. The two areas should be as equal as possible. Finally, there should be limited clues in the content of the picture as to what is in front of what.

The point of importance here is not how to make illusory photographs, but how to use or remove ambiguity in the relationship between subject and background. The two examples shown here, both silhouettes, use the same technique as the calligraphy: the real background is lighter than the real subject, which tends to make it move forward; the areas are nearly equal; the shapes are not completely obvious at first glance. The shapes are, however, recognizable, even if only after a moment's study. The figure/ground ambiguity is used, not as an attempt to create an abstract illusion, but to add some optical tension and interest to the images.



◀ WINDOWS

The view across the courtyard of a Nubian house in northern Sudan is through two rammed-earth open window frames. In the harsh sunlight, the contrast between light and shade is extreme, and cropping the frame carefully so that the areas of light and dark are equal creates a figure-ground ambiguity—the more so because light is normally expected to stand forward from dark.

BURMESE MONK

In this sequence of shots closing in on the subject, the subject is a monk praying at the side of a Burmese stupa, silhouetted against the golden wall of a large pagoda. The sequence from left to right moves from straightforward and obvious towards some ambiguity, and the final crop is designed to make the light and dark areas equal in size. As the background is light, this creates a visual alternation, increasing its abstraction.



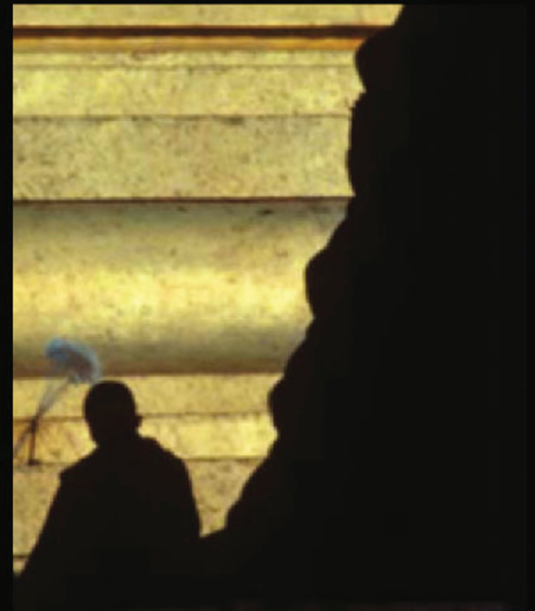
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RHYTHM

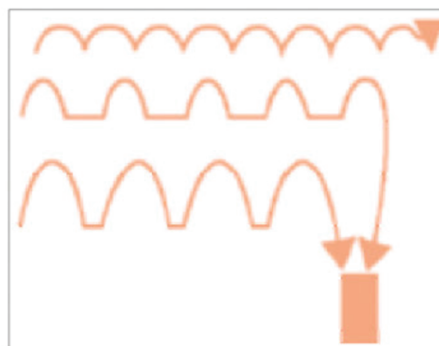
When there are several similar elements in a scene, their arrangement may, under special conditions, set up a rhythmic visual structure. Repetition is a necessary ingredient, but this alone does not guarantee a sense of rhythm. There is an obvious musical analogy, and it makes considerable sense. Like the beat in a piece of music, the optical beat in a picture can vary from being completely regular to variations similar to, for instance, syncopation.

Rhythm in a picture needs time and the movement of the eye to be appreciated. The dimensions of the frame, therefore, set some limits, so that what can be seen is not much more than a rhythmical phrase. However, the eye and mind are naturally adept at extending what they see (the Gestalt Law of Good Continuation), and—in a photograph such as that of the row of soldiers on page 183—readily assume the continuation of the rhythm. In this way, a repeating flow of images is perceived as being longer than can actually be seen.

Rhythm is a feature of the way the eye scans the picture as much as of the repetition. It is strongest when each cycle in the beat encourages the eye to move (just as in the example to the right). The natural tendency of the eye to move from side to side (see pages 12-15) is particularly evident here, as rhythm needs direction and flow in order to come alive. The rhythmical movement is therefore usually up and down, as vertical rhythm is much less easily perceived. Rhythm produces considerable strength in an image, as it does in music. It has momentum, and because of this, a sense of continuation. Once the eye has recognized the repetition, the viewer assumes that the repetition will continue beyond the frame.

Rhythm is also a feature of repetitive action, and this has real practical significance in photographing work and similar activity. In the main picture opposite, of Indian farmers in the countryside near Madras winnowing rice, the potential soon became apparent. The first picture in the sequence is uninteresting but shows the situation. The individual action was to scoop rice into the basket and hold it high, tipping it gently

so that the breeze would separate the rice from the chaff. Each person worked independently, but inevitably two or more would be in the same position at the same time. It was then a matter of waiting for the moment in which three were in unison, and finding a viewpoint that would align them so that the rhythm has maximum graphic effect. These things are never certain—someone could simply stop work—but the possibility in a situation like this is high.



◀ ▲ RHYTHM AND STOP

When the rhythm is predictable, as in this palace façade in Jaipur, India, the repetition is frequently boring. In this case, an anomaly that interrupts the rhythm can make the image more dynamic. Here, a man sweeping provides the necessary break. Note that, as the eye naturally follows a rhythmical structure from left to right, it works better to place the figure on the far right, so that the eye has time to establish the rhythm.

THE DYNAMICS

In line, shot with a wide-angle lens, the action is graphically strongly directional, and for this reason the figures are placed left of center so that the direction is into frame. The stance of the woman closest the camera adds to the curved flow. Typical of such a situation, in which the basics are known but there is no control by the photographer, are the many distractions and small happenings that do not (of course) conform to what the photographer would like. This sequence shows things gradually getting closer to what the photographer had in mind.



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PATTERN, TEXTURE, MANY

Like rhythm, pattern is built on repetition, but unlike rhythm it is associated with area, not direction. A pattern does not encourage the eye to move in a particular way, but rather to roam across the surface of the picture. It has at least an element of homogeneity, and, as a result, something of a static nature.

The prime quality of a pattern is that it covers an area, thus the photographs that show the strongest pattern are those in which it extends right to the edges of the frame. Then, as with an edge-to-edge rhythm, the phenomenon of continuation occurs, and the eye assumes that the pattern extends beyond. The photograph of the bicycle saddles illustrates this. In other words, showing any border at all to the pattern establishes limits; if none can be seen, the image is taken to be a part of a larger area.

At the same time, the larger the number of elements that can be seen in the picture, the more there is a sense of pattern than of a group of individual objects. This operates up to a quantity at which the individual elements become difficult to distinguish and so become more of a texture. In terms of the number of elements, the effective limits lie between about ten and several hundred, and a useful exercise when faced with a mass of similar objects is to start at a distance (or with a focal length) that takes in the entire group, making sure that they reach the frame edges, and then take successive photographs, closing in, ending with just four or five of the units. Within this sequence of images there will be one or two in which the pattern effect is strongest. Pattern, in other words, also depends on scale.

A pattern seen at a sufficiently large scale takes on the appearance of texture. Texture is the primary quality of a surface. The structure of an object is its form, whereas the structure of the material from which it is made is its texture. Like pattern, it is determined by scale. The texture of a piece of sandstone is the roughness of the individual compacted grains, a fraction of a millimeter across. Then think of the same sandstone as part of a cliff; the cliff face is now



the surface, and the texture is on a much larger scale, the cracks and ridges of the rock. Finally, think of a chain of mountains that contains this cliff face. A satellite picture shows even the largest mountains as wrinkles on the surface of the earth: its texture. This kind of repeating scale of texture is related to fractal geometry.

Texture is a quality of structure rather than of tone or color, and so appeals principally to the sense of touch. Even if we cannot physically reach out and touch it, its appearance works through this sensory channel. This explains why texture is revealed through lighting—at a small scale, only this throws up relief. Specifically, the direction and quality of the lighting are therefore important. Relief, and thus texture, appears strongest when the lighting is oblique, and when the light is hard rather than soft and diffuse. These conditions combine to create the sharpest shadows thrown by each element in the texture, whether it is the weave in a fabric, the wrinkles in leather, or the grain in wood. As a rule, the finer the texture, the more oblique and hard the lighting it needs to be seen clearly—except that

A MANY

The massing of subjects has its own appeal, both graphic and in the sense of wonder at sheer unexpected quantity. Filling, or nearly filling, the frame is more or less essential for this kind of image to work. In this case, even though the angle of view is low, a 600 mm telephoto lens compresses the mass.

the smoothest of all surfaces are reflective, such as polished metal, and texture is replaced by reflection (see page 124).

Related to pattern and texture, but with content playing a stronger role, is the idea of many, as in a crowd of people or a large shoal of fish. The appeal of huge numbers of similar things lies often in the surprise of seeing so many of them in one place and at one time. The view of the Kaaba in Mecca, seen from one of the minarets, for example, is said to take in at least a million people, and this fact is itself remarkable. Large numbers congregating usually constitutes an event. Framing to within the edges of the mass allows the eye to believe that it continues indefinitely.



< REGULAR PATTERN

Ordered rows and other geometric arrangements of large numbers of things make regular patterns. The alignment in an example like this is not particularly attractive, and the interest of the photograph depends very much on the nature of the object: bottle tops would be less appealing than these small religious plaques. Note that the sense of pattern depends on scale and number; a crop would lose it.



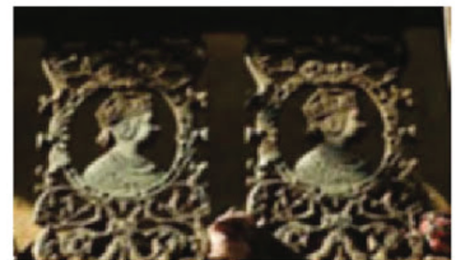
< IRREGULAR PATTERN

To be irregular and yet still appear as a pattern, objects must still be grouped closely; the irregularity is not quite so disordered as it may seem. The effectiveness of a pattern also depends on how much area it covers. If the elements reach the borders of the frame all round, as in this photograph, the eye assumes that they continue beyond.



< BREAKING THE PATTERN

Patterns tend to be directionless, and so often make better backgrounds than subjects in themselves. In this example, however, the mass of pearls, freshly extracted at a Thai pearl farm, is the subject. To show quantity, they were arranged to reach beyond the four edges, but to make an image out of the arrangement, a contrasting visual element was included—a discoloured baroque pearl—which breaks the pattern in order to emphasize it.



▲ OBLIQUE DIRECT LIGHTING

The classic lighting condition for revealing texture at its strongest is at an active angle and with a direct, undiffused source. The sun in a clear sky is the hardest source available, and here, almost parallel to this wrought-iron grill, it makes texture dominate the image.