Consider the oval drawn here. Simplicity makes it easy to identify as one of the basic geometric shapes—along with circles, squares, triangles, and so forth—in our visual vocabulary. It is related to but unique from all other shapes.

Not only do we recognize the flat shape as an oval, however. Human beings can also easily imagine real things found in the visible world that in some sense correspond to an oval. An egg is an obvious correspondence, of course, since our word for oval comes from the Latin word for egg (ovum), so that oval literally means egg-shaped.

At the same time it should also be obvious that an egg is a three-dimensional object. It occupies real space. It deflects light and casts a shadow. It has a front we can see, sides or edges we can partly see, and a back we cannot see at all, since the object is opaque rather than transparent. True, we could turn the egg or walk around the egg and eventually see the whole egg. On the other hand, the oval is a flat, two-dimensional shape. It has no back hidden from our view. What we see of the oval is all there is to see. In plain terms, then, the oval is a shape, while the egg has form, specifically an ovoid form. The same distinction applies to circles and spheres and to squares and cubes: in other words, the distinction made between two-dimensional shape and three-dimensional form.

Since this page itself is a flat, two-dimensional surface, everything in it or on it must also be flat and two-dimensional. The egg on this page, for instance, is not an egg at all, but rather the image of an egg. It has no form. It is simply a shape—specifically, an oval. Yet the image of the egg looks much more like a real object than the image of the oval. If we compare the two images side by side, we see some differences.

- The image of the oval is perfectly symmetrical, while the image of the egg tapers somewhat at the top and bulges a bit at the bottom.

- The oval consists of a single outline of consistent width and texture. The egg appears rounded by the application of darker and lighter colors; this kind of shading or gradation is known as modeling.

- Just as important, the image of the egg includes a small blob of purplish blue under the bottom edge that stands for a shadow on a surface below it.
In Western art, these three differences play an essential role in convincing us to accept an image rendered in only two dimensions as naturalistic—that is to say, visually legitimate or convincing as corresponding to or depicting a three-dimensional object as such an object would appear in our world. The lack of perfect symmetry in the image accurately reflects visual experience in our own imperfect world. The modeling of light and dark not only helps define the particular three-dimensional form (in this case, the egg) represented by the two-dimensional shape (the oval), but does so by implying the existence and location of a source of light, which also conforms to our visual experience. Finally, an accompanying shadow—equally indicative of the presence of light—makes the shape appear to float above a surface and in front of other shapes, implying the occupation of three-dimensional physical space.

We, the viewer, process these visual cues—shape, modeling, shadow—and accept or reject the image as visually valid; that is, as conforming to our own visual experience in a convincing way. The image may be relatively complex, such as the egg above, or rather crude, like a stick figure with a shadow (pictured at left). In the instructions that come with “easy-to-assemble” kits, such as bookcases and children’s bicycles, we often find schematic drawings that sacrifice the illusion of three dimensions for the sake of clarity. But even here we often see lines and shapes rendered in perspective to suggest depth—to suggest the occupation of space.
Part 2
There is no intrinsic reason for painters to concern themselves with the interplay of light and dark on the surface of an object. Why is the exterior the most crucial aspect of anything? Is this not, quite literally, a superficial way of looking? And are we not essentially interior beings? Along these lines, certain cultures developed what we may call an “X-ray” style of depiction, as seen in this rock painting of an emu (at right). These artists want to render the all-important innards of animals, the organs and systems that linked them to the world of the living. Note the articulated neck bones and spinal column, the dense breast muscles, the heart lungs, liver, and guts. Look closely at the pelvic bone above the legs, rendered as a pale diagonal line that holds in place an incubating egg (at left). These features appear in contrasting zones of dark and light, with minimal color shift. No attempt has been made to trick the eye of the viewer, but rather to account for all the vital facts a viewer in that culture would deem necessary to an accurate depiction of an emu. To us the painting may lie somewhere between fossil and road kill because we don’t know how to read it.

If we come across an image of the insides of a body, like this drawing done by Leonardo da Vinci (at right), we want to read it as an illustration or schematic or textual aid in anatomy, biology, or other field of study. The use of such an image is, in this culture, practical rather than gratifying; in other words, the image does not particularly want us to like it. It did not come into existence and is not there to be looked at as an interesting whole, but rather for what its cross-section reveals of the normally invisible stuff inside. It is informational (like a roadmap) rather than aesthetic (like art) or symbolic (like a religious image), conceptual not perceptual, existing to be utilized, not contemplated.

Part 3
Like many cultures, we prefer to look at images that show the outside of people and things. Yet our own particular way of looking at the outside is far from the only way. Painters in ancient Egypt, for example, adhered to visual principles that eschewed the illusion of lifelike appearance in favor of clarity and significance. The figure of a hunter at left presents us with an anatomical impossibility. The head is shown in profile, since that is the most readily identifiable aspect of a head: we see the face on one side, the ear in the middle, and the fall of hair on the other side. No one could mistake it. The eye, however, is always shown as if from the front, since the eye in profile shows less of itself. The man’s shoulders and torso are likewise shown from the front, where each part reveals a characteristic shape, while the legs and feet are seen in profile for the same reason. The viewer must be able to count all the fingers on each hand; each foot must show all the toes. The result is a stable, balanced unit identifiable as a human being with all its parts, impossible to confuse with a deformed, crippled, or mutilated body. The painter has succeeded beautifully. At the same
time, the image strikes us as odd, foreign to our tastes and our experience. Just as unnatural, at least to us, are the differences in scale between the figures. To these Egyptians it makes perfect sense that the more important a person is, the larger and more detailed he or she should appear in a picture. This man is obviously larger than life. His wife is much smaller, his daughter even smaller, and the slave or servant smallest of all. As noted briefly in our discussion of the Spanish film *Calle Mayor*, size is key to judging depth in our visual language. When confronted with the hieratic scale of an Egyptian painting, our eye wants to read the smaller figures as really more distant. When the eye cannot do so, we consider the image flawed or disturbing.

We should make every attempt to enjoy any image on its own terms, to “see” what it means to show us through visual cues or cultural conventions. However, it is important to understand first and foremost that the eye is dealing with a two-dimensional object on a flat piece of paper, canvas, or monitor screen. The visual cues trick us, in a sense, into seeing what is not there: into seeing what in fact we do not and cannot really see. And we are only too willing to be tricked. We are wired in such a way as to use visual cues to impose interpretations that are patently false. This is the basis of optical illusions.

Focus on the dot in the figure on the right, and then move your head toward and away from the monitor. The two concentric rings appear to spin in opposite directions. Obviously our eye and brain, not the circles, create the apparent motion. Even without moving our heads, the concentric rings present the illusion of being made up of notches or bumps in three dimensions. Such images, and there are many, intrigue and sometimes baffle us. More than a game, however, they point to some fundamental ways in which our visual reality differs from what we think it is. They are extreme examples of the techniques used by Western painters. Check out more optical illusions at Subversive Awareness, to think about what seeing really means.
Part 4

Visual cues allow us to transform the oval and other basic shapes into the illusion of forms in space, the “proof” of their existence. As suggested before, if we want to enjoy a convincing illusion of form, we should not look for perfect symmetry, a clear outline, or simplified and schematic clarity. (Actually, such approaches are counterproductive to the illusion of form, a fact that would be eagerly exploited by so-called “modern art” at the turn of the last century, as in the flat image on the right.) Rather, we should look to imperfection and even idiosyncrasy, deviation, the distortion or foreshortening of form in relation to the picture plane, as when a round coin looks more and more oval as it turns, and finally becomes little more than a straight line with only its edge facing us. In other words, we want the kind of detail that can only be revealed by the way light falls upon an object occupying real space in our visible world: modeling the surface, casting shadows, and picking out highlights like the glint of a jewel or the shiny tip of a nose.

The convincing illusion of depth in any image depends entirely on these and similar cues. Traditional art training consists largely of first recognizing and then developing skill in modeling, foreshortening, chiaroscuro, and other techniques for tricking the eye into seeing form in the round. From the Renaissance to contemporary figurative styles, painters in the Western world have concerned themselves to a greater or lesser degree with creating the illusion of objects in space, and have done so because the public likes to look at it.

Despite the simple basic shape a painter starts with, the resulting image may appear so stunning that the eye cannot resist it. The image engages us as if it were a real person, place, or thing sharing our world with us. Some writers have spoken of such images as having a presence, as holding us spellbound, and some have said that the image is even better than the real thing. It never is, of course, although it may indeed look better, since it is an object created only to be looked at.

Basic shapes also help us organize visual information into an endless variety of two-dimensional images that seem to acquire great power and meaning through such organization. Ovals, circles, triangles, squares, and rectangles—alone or in conjunction with other shapes—are the foundation of many famous and not so famous paintings in the Western tradition. Although all parts of the image form an irreducible whole, in looking at a painting we often distinguish one element from the rest, as if each had a certain independence. The image is flat, and yet we speak of background and foreground, for example; we speak of one figure in relation to another figure. The arrangement or pattern of visual information in a painting is called composition.

A composition is rarely as simple and straightforward as the oval or triangle suggest in the illustrations above. In the Niño de Vallecas (at left), one of the
masterpieces of Diego de Velázquez, an oval circumscribes the awkward heap of the blind dwarf’s twisted body, like a man formed out of a sack of potatoes. (Note the telling detail of a wooden lift glued to the sole of the shoe on his shorter leg; it repeats the oval on a smaller scale.) Yet within that oval, the arms form a cradle that lends itself to a rough triangle, the apex of which is that lock of hair atop the bulge of forehead. The odd background suggests an unfinished oval that in tandem with the tilting body creates a parabola.

In the Virgin of the Rocks by the great Leonardo da Vinci (at right), the eerie parabolic background vies for our attention; it almost seems to be staring back at us with hollow, owl-like eyes. Surprisingly, nearly half the painting consists of desolate landscape. At the same time, the disposition of the holy figures in an equilateral triangle provides the group with stability and an almost hieratic gravitas. Despite the obvious and, yes, visually satisfying triangular composition, other forces may be at work here. Consider the nearly perfect circle near the center of the image, formed by the sight lines of Mary, the infant Jesus, and the infant St. John the Baptist, while the angel gazes into space (below left). This circle mirrors a much larger circle formed by the arch at the top of the painting and extending to the curve of Mary’s lap.

A smaller circle appears in the space between the figures, and an even smaller circle occupies the mysterious space between Mary’s left hand and the angel’s pointing finger (at left). A scholar of religious symbolism may note instead the stately cruciform implied by the four figures (above center), or may even detect—as we will soon discover in the novel The Da Vinci Code—a five-pointed star called a pentacle (above right). Aside from the sheer pleasure of playing with compositional elements, the point here is that all these organizing and unifying patterns arise from the way we read a particular image at a particular time. Patterns of light and dark as well as patterns of certain colors are other common unifying elements of composition.
Part 5
Experience and cultural awareness—who we are, what we have done, and what we know—are unifying elements that exist in us rather than in the image, and as such, they are often overlooked in discussions like this. Whatever we learn in history, religion, geography, and every other sphere of interest adds to what we bring to a painting. For instance, religious art replete with Christian figures and symbolism may well baffle viewers without a background in Christianity. The viewers may not even recognize the work as a religious painting. It is like trying to read a magnificent poem in an unfamiliar language: however beautiful the original text, we get little or nothing out of it.

Painters compose their work thoughtfully or intuitively or both, forging an image from nothing more than daubs of paint and veils of glazes affixed to a flat surface, whether paper, canvas, wood, or plaster. But the creation of the image does not stop with the artist. The work depends on us to read it. Interpretations seem limitless as we impose visual order on the Virgin of the Rocks or any other painting. Multiple readings are always possible, provided that the analysis presents a coherent and defensible viewpoint of the whole image based concretely on elements seen in that image.

Just as we get better and smarter at reading the more we read word texts, we get better at reading painted texts the more we look at, study, and think about them. Images begin to relate one to the other: painters respond to other painters; the same painter quotes himself now and again, or changes his mind and rejects earlier works; and we ourselves, as the living, breathing museum of images, constantly stroll through an ever-growing exhibit, grouping and regrouping the art we have picked up for nothing but a little thought and effort.

Every verbal and written language, from English and Spanish to Russian and Chinese—has rules and principles that govern its use and clarify its meaning. Painting is no exception. We may think of aesthetics as the grammar of visual language.