

Language of Photography

—How Photographs Communicate—

By

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Chapter Three: Composition

The task of the photographer is to find light unique to a moment of time that creates relationships of two-dimensional form that communicate the very qualities of experience that were the reason for wanting to make the photograph in the first place.

Each culture produces a visual design language that suits the needs of that culture. No one system is better than another in the same way that one can't say that French is better than German or English is better than !Kung (the language of South African Bushmen). In the Inupiaq dialect of Wales, Alaska, anthropologists have documented about 70 terms for sea ice because survival in that environment requires the ability to make such fine distinctions. Eskimo languages can be said to be more useful for discussing "snow" than, say, Arabic, but neither language is inherently better than the other. In the same way, different cultures have produced different visual languages, none inherently better than the other, only better adapted to their collective needs of expression. To this end, the Egyptians structured visual space differently than the Greeks, who organized it differently again from the Japanese.



Johannes Vermeer, *Woman with Wine Glass*, 1660

The visual language of modern photography was the outgrowth of developments that started with artists of the Italian Renaissance. Painters such as Leonardo da Vinci in Italy and Vermeer in Holland utilized the *camera obscura* to construct the perspective of their paintings. Their compositions were based on design principles that evolved as a result of the growing importance of the sciences, and particularly mathematics, to both the daily secular and religious life of the period.

Nineteenth-century art photographers sought to have

Different cultures produce different graphic systems for describing the three-dimensional world on a two-dimensional surface depending on the needs of that particular culture. The Egyptians used a flat calligraphic space, while traditional Japanese artists used a system of orthographic projection in which all receding lines are parallel.

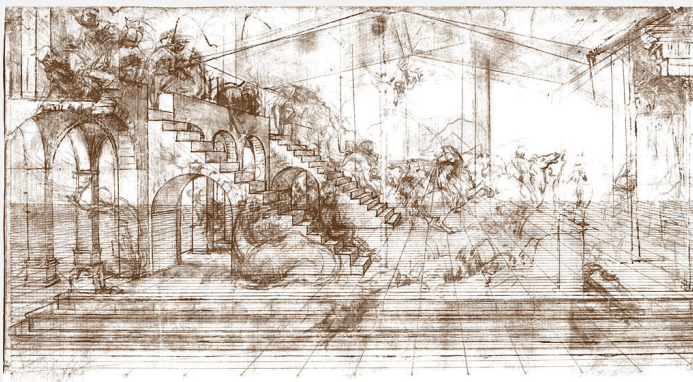


Katsukawa Shunsho, *Women Reading and Writing*, 18th Century



King Tutankhamen with gods Anubis and Andnephthys, 1333 BCE

The Middle Ages gave rise to a concept of vanishing point and a coherent receding space, but it wasn't until the Renaissance that a mathematically consistent spatial system was developed. This system was inspired, and often actually created, by the images produced by lenses. Our contemporary culture still embraces many of the values developed in the Renaissance including the authority of the Linear Perspective system. At the same time, the technology on which photography is based was embedded in the imperatives and innovations of the Industrial Revolution, with the result that a perspective-based image created automatically and without the intervention of the fallible hand of the artist grew, in the West, to be particularly esteemed.

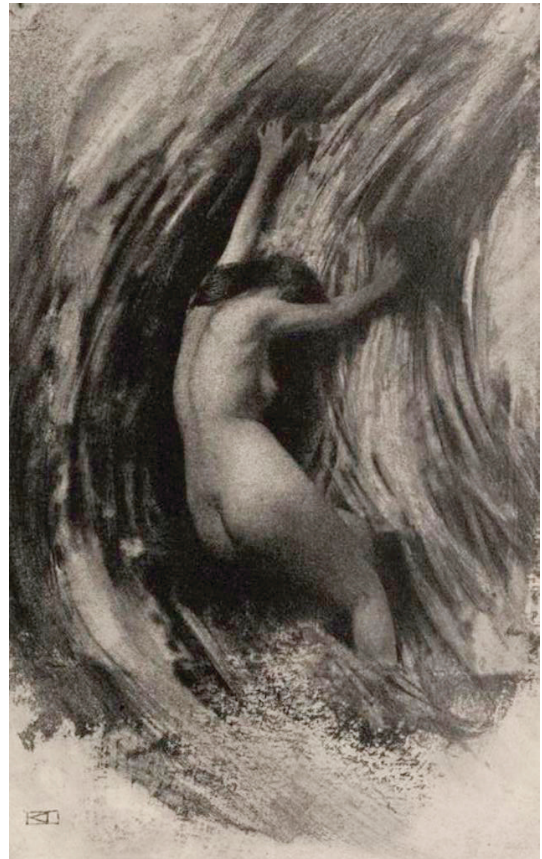


Leonardo da Vinci, *Study for the Adoration of the Magi*, c.1481

their work recognized as a legitimate art form by the established art institutions comprised of critics, collectors, and art schools of the time. As part of their strategy, they continued to utilize the traditional rules of composition as the basis for their imagery, emulating not only the stylistic appearance but the design principles of contemporary and historic easel painters.

Naturally, as the whole point of the invention of photography was to capture the exquisite renderings of the *camera obscura* automatically through chemical emulsion, photography was inherently tied to the kind of imagery that the lens produces, and to that extent nineteenth-century photographers were unable to follow painters into non-representational approaches (e.g., Jackson Pollock's action paintings or Cubism's radical rearrangement of physical reality). As a result, classic design principles continued to be the cornerstone for much art-photography compositions. Despite the technical advances made in cameras, emulsions and in the modern era digital sensors, contemporary photography has more in common with the vision of Renaissance masters such as Leonardo and Raphael than painters such as Picasso or Kandinsky, whose work pointedly sought to break from those traditions.

Therefore, to understand the language of photography, one must understand the design principles that artists developed in the Renaissance and were subsequently inherited by photographers when they automated the tools that representational painters had used to create their spatial compositions. Although in the last centuries, photographers have modified and expanded on this original vocabulary, the basic principles are as applicable today as they were in the nineteenth century or even the fifteenth. A complete analysis of this aspect of photography's visual language is beyond the scope of this chapter; however, it is possible to lay out some of the basic principles and their application to photography today.



Robert Demachy, *Struggle (Gumbichromate)*, 1903

Positive/Negative space

Like paintings, photographs are composed of shape, form, and line. Where a painter knows that they have to construct the arrangement, placement and character of the design elements of their painting, it is not always so obvious to photographers that they must do the same for their imagery. A beginning photographer's focus is, by its nature, initially on the three-dimensional world on the other side of the lens. The fact that this world will be transformed into a flat, two-dimensional image is often a secondary concern. One negative consequence of that focus can be seen in the otherwise wonderful portrait in which the subject has an unfortunately placed tree or lamppost growing out of the top of their head. That object may have been in the far distance in real space, but when the scene is projected by the lens onto the flat surface of the film, it acquires an immediate and striking visual presence. Even though the objects being photographed are recognizable as representing real objects in the three-dimensional world, and our attention is usually on this representation, once objects are photographed and placed on a flat image surface, these



The colored image on the right shows the positive (blue) and negative (yellow) space in Eugene Atget's photograph of St. Cloud in Paris (1925). Although the empty sky has little relationship to the trees for an observer of the actual scene, a viewer of the photograph is affected by the shape, size, placement, angles, and proportion of the design the sky creates when it is placed within the flat rectangular space of the print. A photographer needs to consider not only the subject of the photograph, but also what happens around it and its potential impact on the final, two-dimensional space. Note how the placement of the statues against the black trees makes them leap out to the eye. The sweep of the light-grey ground carries the eye from left to right, but the rhythm of that passage is interrupted by the placement of the statues. Note too, the slight asymmetry of the overall design.

representations take on additional significance as design elements, or elements of the picture's overall compositional structure.

Positive and negative space refers to the flat shapes that are formed by the different visual elements in the picture. The positive space is created by the objects or elements themselves; the negative space is the space created by the remaining surface area around these objects. Like the distant lamppost, negative space is not always apparent to the casual observer looking at the original scene unless they are thinking of the finished photograph as a two-dimensional work. It is important to note that from a design point of view, negative space is visually just as significant as the positive space created by the actual subject.

Visual Pathways

An observer does not stare fixedly at a photograph. Their eyes are in constant motion as they take in different parts of the image. The eye does not see like a camera. In the human eye, there is only a small area in the entire field of view that is sharp; this is called the fovea. The rest is blurry. When we observe the world we pass this area of sharpness over the entire scene, taking in one small area of detail after another. The rest of the scene is indistinct, and although we are aware of it, and can readily detect motion within it, it is on the

periphery to the fovea. When we read a page, we only see a few words sharply at any given time and in order to see all the words we pass the fovea over the page in a systematic, left-to-right, top-to-bottom sequence. We view two-dimensional works of art in a similar fashion. We scan the image continuously, moving the fovea around the surface, taking in one small area of detail at a time.



Frances Benjamin Johnston, Stairway of Treasurer's Residence, Hampton Institute, Students at Work, 1900

The camera, on the other hand, has the potential to take in the entire scene with great clarity and sharpness throughout the entire visual field. The detail the photograph contains, and the experience of that detail by the actively roving eye of a viewer, are two completely different things. By using a shallow depth-of-field, it is possible to focus our attention



Bob Rogers, Photo Shoot, Paris, 2015

on a certain portion of the photograph. This does not duplicate the actual experience of the real-world observer whose eye is also in constant motion. It simply draws that eye to the area of greatest information and clarity in the image.

If structured properly, the placement of forms, shapes, and lines in a photograph can create a visual pathway that leads the eye around the image in a controlled and predictable fashion. The viewer's eye will travel along this pathway over time, moving from shape to shape, as lines, colors, and tones draw our attention to the next stage of the visual journey. It is important to note that this process takes place over time, and the experience



Roy DeCarava, Lingerie, New York, 1950

of a static, two-dimensional work of art unfolds like a piece of music or a work of literature. It is this extended experience that comprises one of the means by which we appreciate works of art. Additionally, the Western mind is trained to retrieve information from a two-dimensional surface by reading from left to right. It is here that the visual unfolding of the “compositions” begins.

If the visual pathway is non-existent, and there is no route for the eye to follow naturally, the picture will be experienced as either static or chaotic, the result of either too few visual signposts or too much unstructured information that gives no “direction” to the viewer’s gaze. The placement and arrangement of the elements of this visual



Bob Rogers, No One's Vault But Your Own, 2007

journey, like musical harmonies and rhythms, form aesthetic relationships, which can also, like music, be expressed mathematically. In the visual arts, these relationships are known as “proportions.” If we think of images as



David Douglas Duncan, Turkish cavalry on Russian border, General Kara Avni Mizvak, 1948

musical compositions, then the key to creating effective two-dimensional imagery is to include only the visual “notes” that carry or harmonize with the “melody,” and eliminate all other objects, lines, shapes, or forms that do not, what could be termed visual “noise.”



Dorothea Lange, All Tractored Out (A), 1938



Dorothea Lange, All Tractored Out (B), 1938

center where we are visually "trapped." This visual experience translates directly into an emotional response. In "B" (we again read from left to right), our eye is drawn away from the house to the open edge of the frame and ultimately out of the picture. Our eye, as it travels around the image, like listening to a musical passage, will evoke an emotional response over and above, and independent of the factual content of the image.

If you look at *Tractored Out "A"*, for a while and then *Tractored Out "B"* you will notice that you experience each image slightly differently. Although "B" is simply "A" flipped laterally, the content is identical in both images: a house on barren, furrowed farmland. However, the emotions that each image evoke in the observer are subtly but significantly different. In "A" there is a greater sense of oppression, of darkness, and a sense of feeling trapped. "B," on the other hand, communicates a more optimistic feeling. The light on the side of the house seems brighter and the house itself less isolated and oppressive. Even the sky seems brighter in "B."

This difference in feeling can be explained by the difference in the "visual pathways" that results from flipping the original image over. In "A" the eye is led from the edge of the frame to the house. No matter where our eye travels in the picture, our focus is drawn to the house. As a result, the pathway travels towards the



In Spanish Wake by W. Eugene Smith (1951), the visual pathway of the image leads us to the man in the upper right-hand corner (dotted line). We follow his gaze back to the face of the corpse, and our eye begins to travel the path again. If this pathway is the "melody," then the man's gaze functions as a "repeat sign," telling us to return to the beginning and play the phrase again. But this is not what was occurring in the original scene. In the initial shot, two of the mourners



were originally looking toward the camera (circled in red). Smith printed their eyes almost completely black in the darkroom, and then carefully bleached in new whites with a fine brush so that their gaze was redirected downward and toward the body of the deceased.

Smith's intent was to change where the viewer's eye went and by that, how the scene feels. In Smith's words, "The photograph is a synthesis of what the photographer sees, feels, and thinks. The final print is the real photograph — it must express the truth as I feel it, not just record facts."



Balance and Tension

The human mind appears to naturally seek out balance and equilibrium. As a consequence, when creating a two-dimensional design, it is important to be aware that we have a strong emotional response to balance and harmony in visual arrangements. If we view an image as a scale with the centerline as the fulcrum, then what is on the right is visually weighed against what is on the left. A dead-centered composition in which everything is mathematically aligned will be perceived as static. The eye, as we have seen, enjoys moving around the image, and a static image offers only limited opportunity for such meanderings. The best-designed compositions are traditionally both balanced *and* asymmetrical; there is a sense of both equilibrium and tension. At first blush, this seems to be self-contradictory, but in reality, it is not.



In the same way a pound of feathers weighs as much as a pound of lead, a large light area can have as much visual weight as a small dark one (or vice versa). “Balance” does not necessarily mean “static”; a “static” composition can be thought of as a composition with balance, but without tension, a bullseye, for example. In Eugene Smith’s image of a wake, the structure of the image is keenly balanced by two strong diagonal elements and the visual pathway created by the faces and arms that draw our eye inexorably back to the face of the deceased.

But there is also an asymmetrical tension. The face of the corpse, both visually and, just as importantly, emotionally, “weighs” as much in death as all the living faces engaged with it, even though the latter dominate the greater part of the overall design.

The relationship of these shapes within the frame establishes the sense of balance in an image as well as the tension. However, more than one shape can form a part of a group that works as a small visual unit, i.e., two half-pound pieces of lead will also balance a pound of feathers if placed close enough



Bob Rogers, Vizcaya, 1977

together on the same side of the scale. For purposes of balance, the two figures in the photograph at left form a single visual unit. Although they are central to the composition, as a unit, they are not centered in the frame, which creates a subtle visual tension.

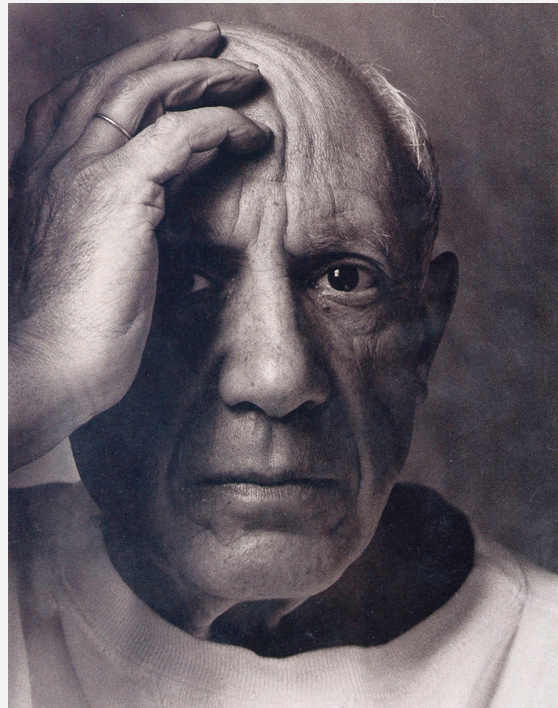
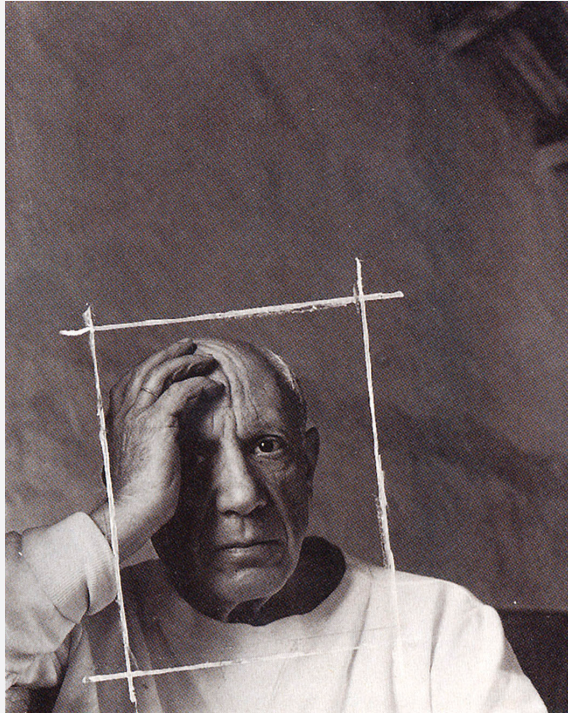
Cropping

Technically, cropping refers to physically

trimming back the edges of a photograph to create a satisfactory composition. Although many photographers focus their attention on what is occurring at the center of the frame when they are composing a photograph, the composition of a photograph, the relationship of the formal elements within the frame, is defined by the edges of the image, not by the center. Changing the edges of an image in subtle ways can dramatically alter the composition. Cropping a photograph by adjusting the edges is like tuning a radio station. Moving the edge line in and out, one can determine the perfect spot where the internal harmonies of composition fall into place. Part of the “tuning” process is to eliminate visual “static,” unwanted visual elements that detract from the overall effect of the picture. When this visual static has been eliminated and the strongest visual “signal” established, the picture will have a noticeable integrity, where all the parts work together like an orchestral performance. In a strong composition there is no element There There is no element that creates a jarring line, tone, or shape, that doesn’t harmonize with everything else in the frame.

Cropping the photograph can take place at several points:

- **When the image is framed in the camera’s viewfinder.**
- **On the easel during enlarging, or in the digital editing program.**
- **After the print is completed, when being readied for mounting or framing.**



Arnold Newman took this portrait of Picasso in 1954 in Picasso's studio. "I wanted to have space," Newman said, "Because you would have this powerful man coming out of space. I felt it worked, except the more I looked at he photos, I kept saying, what a fantastic expression..." As a result of this perception, Newman cropped out much of the original image. As he worked with a large-format camera, he had sufficient negative area to maintain detail and tonal range in the final print.

Cropping in the viewfinder is the most desirable because it results in the largest possible usable film area for the final image. The larger the surface area of the negative, the more detail and tonal range the final print will have. Naturally, the larger the format, the less critical this initial framing is, since large negatives can be cropped to a certain extent without an immediately apparent loss of image quality. But when working in 35mm, there is little excess film area that can be sacrificed without a rapid deterioration of the image quality.

To the extent that photographs are recordings of objects or events in the real world, the photographer's attention is naturally drawn to the center of the viewfinder, to the things that will become the "focus" of the photograph. His or her attention tends to be tuned to specific details such as expression or lighting, a moment, or a gesture. However, framing the image compositionally requires an *unfocused* view, where the overall layout of shapes, lines, and tones

is measured and balanced, and the edge of the camera's frame is adjusted to create the perfect relationship of the formal elements within. Painters can rearrange these elements on a canvas, but for photographers, they must fall into place at the time of exposure. Photographers can sometimes physically rearrange the placement of objects they see in their viewfinder, or shift their own physical location, height, or angle to obtain just the right relationships of form. It also requires that one view the scene not with the rapidly moving fovea, the area of the eye that sees a small area sharply, but rather with one's peripheral vision, so that the overall scene is taken in, and no particular object is singled out for attention. To be able to frame an image's composition at the time the exposure is made requires that the photographer shift back and forth between these two modes of perception, making adjustments to the composition, while at the same time being alert to the elements of detail that will trigger the snap of the shutter.

Proportion

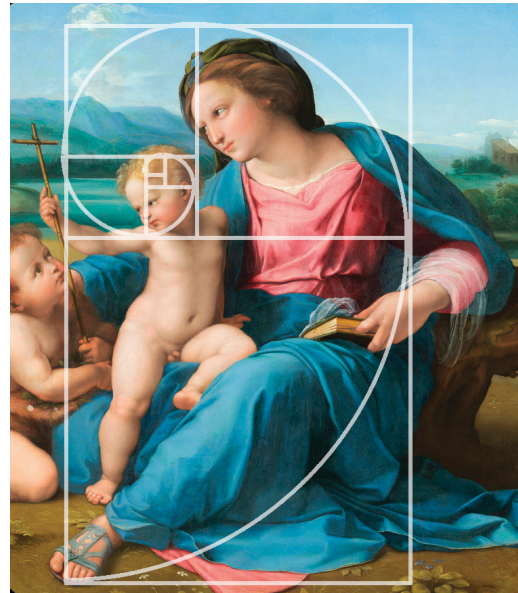
Baptista Alberti (1404–1472), who pioneered the use of perspective as a tool for creating a coherent, mathematical, two-dimensional space in painting, defined beauty as “a harmony of all the Parts in whatsoever Subject it appears, fitted together with such Proportion and Connection, that nothing could be added, diminished, or altered but for the Worse.”

In an attempt to bring a rationalist understanding of the “harmony of all Parts” to the visual arts, Renaissance artists explored a broad variety of mathematical relationships as the basis for the arrangement of the elements within their artworks, from the simple square to more complex mathematical

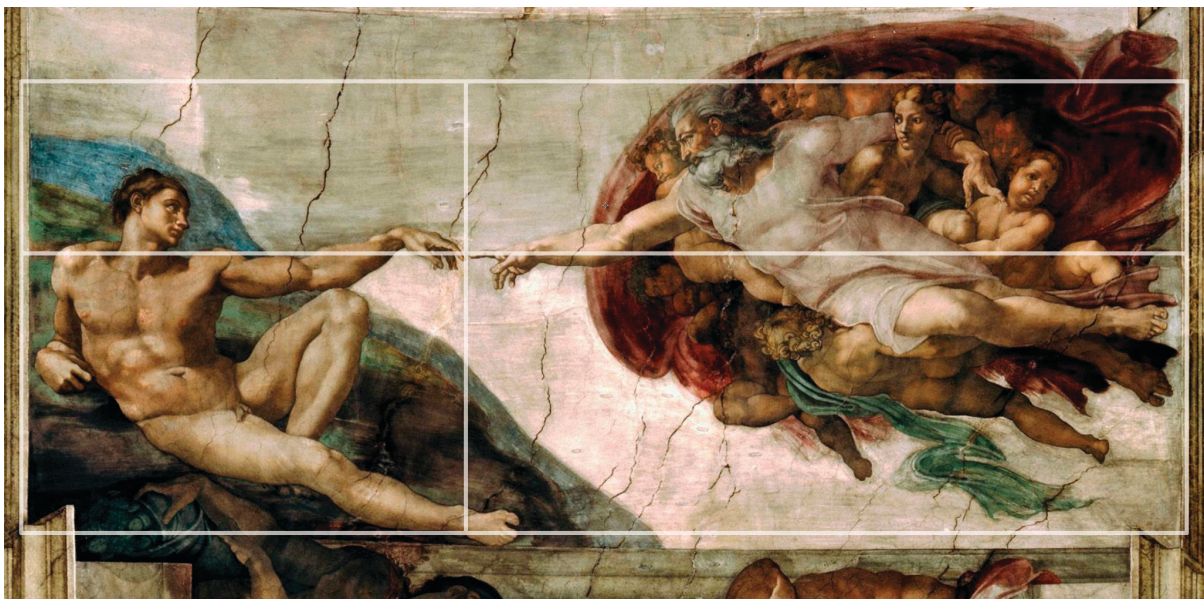
Before the invention of photography, painterly composition was generally based on the idea that the main elements of the design should be contained and organized within the frame as if the borders of the image created a window through which the viewer looked out into the world. The development of photography changed that radically, as the randomness of the camera's framing broke the formality of that prescription.

Some painters in the nineteenth century, such as Edgar Degas, experimented with photography, and discovered that inherent in photographic seeing was the possibility that the world could be arbitrarily truncated, but that those detached elements could form the basis of a successful design and composition nonetheless. As with the Before the invention of photography, painterly composition was generally based on the idea that the main elements of the design should be contained and organized within the frame as if the borders of

relationships as the basis for the arrangement of the elements within their artworks, from the simple square to more complex mathematical proportions. The Golden Section (1:1.6180339...) one of the best-known proportions in art, was a favorite among Renaissance artists. Michelangelo, for example, utilized the Golden Section within his compositions. In the case of the Creation of Adam, the overlay of the Golden Section and its associated proportion, the square, is clearly visible. Proportion in visual art is intrinsic to the internal structure of any composition, although a “harmony of all the parts” is not; that must be sought, identified, and consciously embedded in the design by the artist.

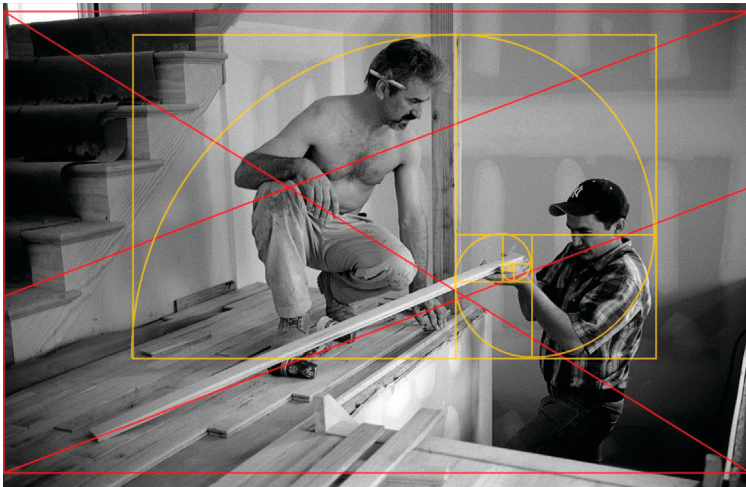
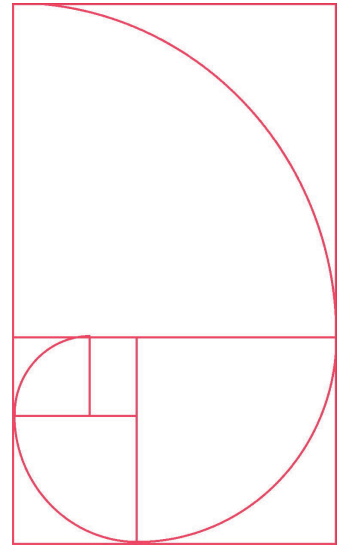


*Raphael, Alba Madonna (detail),
c. 1510*



Michelangelo, Creation of Adam, Sistine Chapel ceiling, 1511-1512

*Edward Weston,
Chambered Nautilus,
1927, and Five Golden
Sections with Equiangular
Spiral*



Bob Rogers, On Board, 2002

Bob Rogers, Leah at Paul's, 2005



the image created a theoretical window, as it were, through which the viewer looked out into the world. The development of photography changed that radically, as the randomness of the camera's framing broke the formality of that prescription. discovery of a visual vocabulary for movement and motion, here, too, the camera changed the traditional grammar of painters.



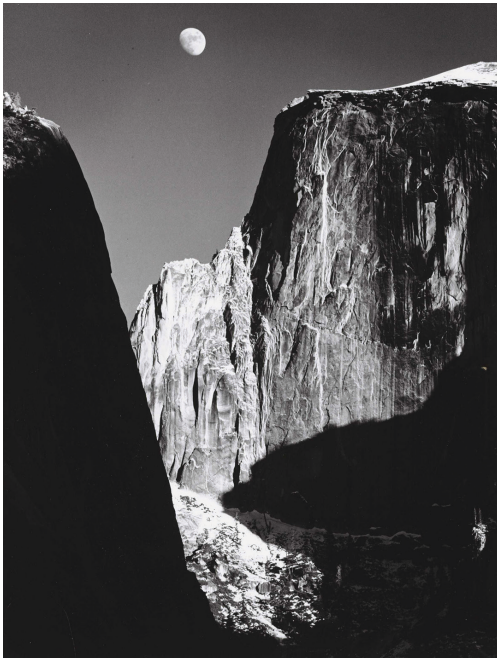
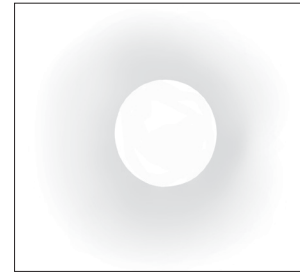
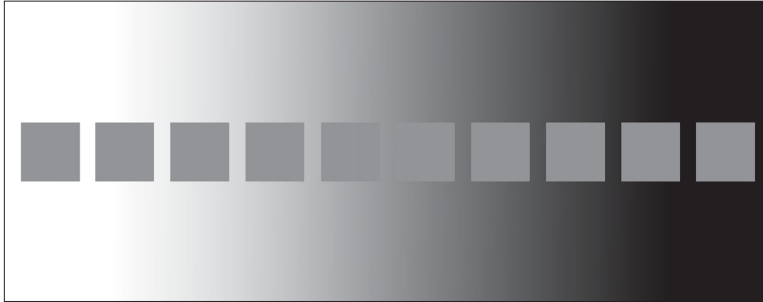
Jacques-Henri Lartigue, Paris, Avenue du Bois de Boulogne, 1911



Edgar Degas, Rehearsal in the Studio, 1878-1879

Contrast and tonality

The world within the frame of the photograph is a world unto itself. All connection to the three-dimensional world is limited to a vague resemblance of familiar patterns of black, white, and grey that we have come to associate with certain phenomena. The qualities of lightness and darkness, the appearance of shadows and illumination, are all relative to each other only within the frame, and may bear no actual correspondence to the original scene.

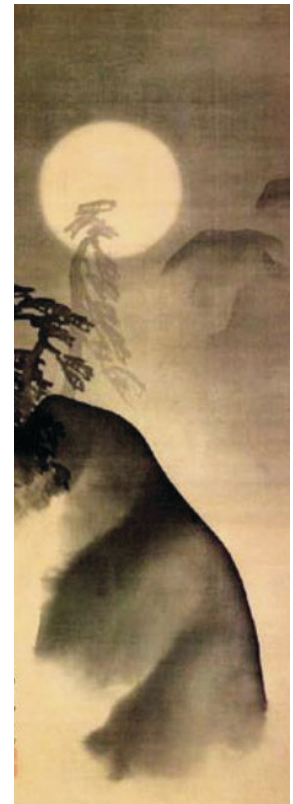


Ansel Adams, Moon and Half Dome, Yosemite National Park, California, 1960

Compare the grey squares. The ones on the left appear darker than the ones on the right. However, they are the identical shade of grey. Our eyes see them not as absolute values, but as relative to their surroundings. Even though we know intellectually that they are the same value, we cannot override this internal programming, and continue to see them as different.

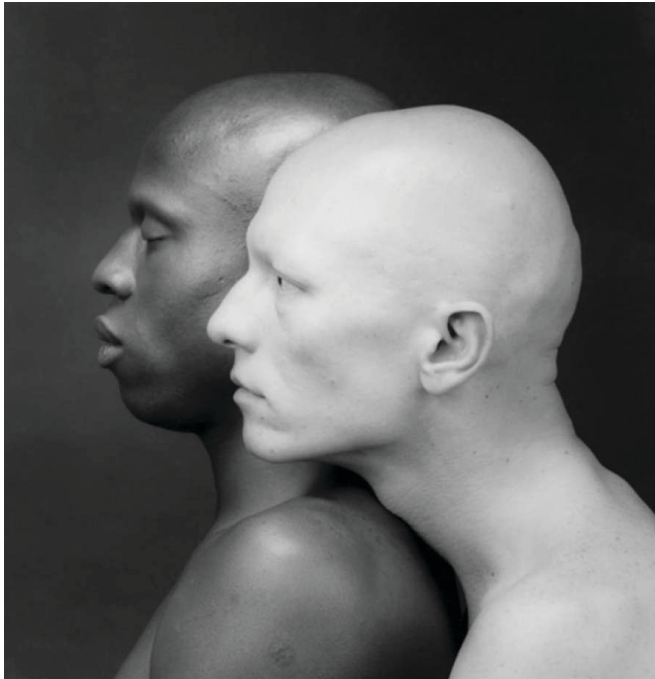
Classical Chinese and Japanese painters understood the

phenomena of relative tonality and used it to subtle, and beautiful effect. In the image (above right), the white circle has been surrounded by a halo of grey that creates the



Nagasawa Rosetsu, Landscape in the Moonlight, ca.1794

illusion that the circle is brighter than the edges of the space. This is, of course, not true, but the effect is quite stunning. In the landscape by *Nagasawa Rosetsu*, the bright moon is created by exactly such a technique, as similarly in Ansel Adams' *Moon and Half Dome*.



Robert Mapplethorpe, Ken Moody and Robert Sherman, 1984

The highlights on the head of Ken Moody in Mapplethorpe's double portrait are technically lighter than the skin tones of Robert Sherman, but these tones are not about the underlying reality of skin color. Rather, black and white and grey tones are used to create a mood and a sense of surface — of softness and sensuality. The effect relies not on our knowledge of what was in front of the camera at the time the image was made, but rather the relationships within the image and the tonal range of the areas adjacent to each other, including the deep black of the background.



Frederick H. Evans, Kelmscott Manor: Attics, 1896

Local color is the true color of an object or a surface as seen in daylight, rather than its color as viewed through atmosphere or represented by the artist. The wooden beams in Evans' attic are all the same color, but the camera creates patterns from the volume of light reflected off the wood, and subsequently the tonal relationships that result from the juxtaposition of shapes and forms within the frame.

Scale

Most human experience is perceived in relative terms. A hot day is hot in relation only to days that are cooler. A “hot day” for an Eskimo is not the same as a “hot day” for a Trinidadian. The world within the frame of the photograph is isolated from references external to it. Things are large or small only as they relate to other objects within the frame. Redwood trees that can grow to over 300 feet tall would appear no bigger than ordinary pine trees without some visual clue to their actual size within the frame of the picture, as in Ansel Adams’ photograph; it could be a pine forest anywhere.



Ansel Adams, Redwoods, Bull Flat Creek, California, 1960



Photographer Unknown, Horse-drawn wagon driving through the Wawona Tunnel Tree, 1902



Bob Rogers, Wheelie, 2008

However, when a familiar-sized object or person is included within the frame, the sense of scale is instantly and dramatically apparent. Objects in photographs are only large in relation to something small. Similarly, are only experienced as “light” when compared to something darker.

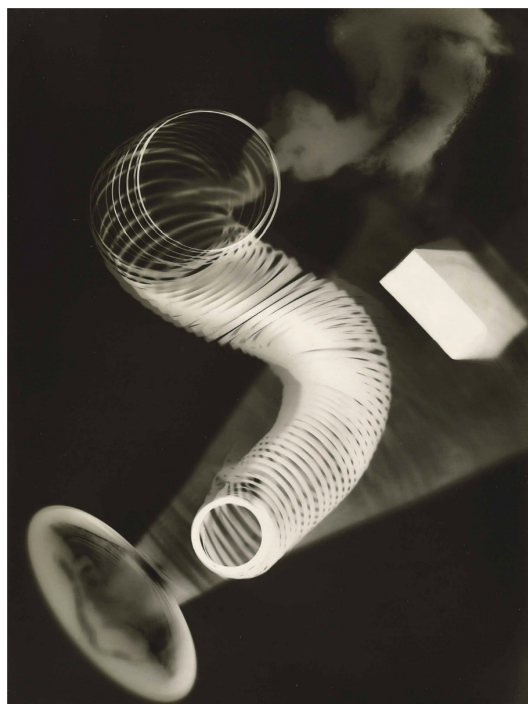
Visual patois

Although painters and graphic artists have taken design into areas of expression that cameras have difficulty following (in part for just that very reason), not all photographers have limited themselves to using the older, formal design conventions. Instead, they sought out other possibilities, even within the limitations imposed by the optical characteristics of lenses. In the 1920s, for example, photographers such as Alexandr Rodchenko were drawn to the design-based art forms of the Constructivists, Cubists, and Abstract Expressionists.



Alexandr Rodchenko, Stairway, 1930

Although they could not use the lens to create the kinds of images with which these painters were experimenting, they could frame their subjects in such a way that the design itself became the subject of photographs. The fact that there was an identifiable object in front of the lens when the exposure was made became less important for them than the arrangement of shape and form that resulted.



Man Ray, Untitled Rayograph, 1922

With the opportunity for viewers to identify the content of a photograph all but completely removed, the photograph came as close as it could get to the pure abstraction of painting. Artists such as Man Ray realized they could even dispense with the camera entirely, using just the photographic emulsion as a graphic printing surface. They placed objects on photographic paper, exposed it to light, and processed it. The resulting abstract designs were variably called (depending on who made them) photograms, Rayograms, or Vortographs. This leap lends support

to the argument that the defining characteristic of photography is, in fact, not camera and lens, but emulsion, the chemical amber that traps and holds the lens' ephemeral image.

Although all good photographs incorporate elements of design into their visual structure no matter what their content, some photographers construct images that are principally, or even entirely, works of design, even to the point that the subject of the image is no more than the design itself. Such images can border on complete abstraction, with almost no recognizable subject matter.



Harry Callahan, Grasses in Snow, Detroit, 1943

The traditions of Western easel painting were not the only design traditions being explored by photographers in the twentieth century. Some photographers rejected the “fine art” approach altogether and instead turned to other conventions, like those found in modern “folk arts” such as snapshot photography, where simple symmetries and “static” compositions are the rule.



Walker Evans. Post Office, Sprott, Alabama. 1936.

Diane Arbus, for example, clearly referenced these traditions in her work, creating a “family photo album” of misfits and freaks. Walker Evans looked to postcards as an aesthetic reference. Like postcard photographers, Evans sought an approach to his subject matter that was universal rather than personal, creating images that are so emotionally neutral that virtually anyone can recognize in them a common, shared reality.