2.6 "The photographs in NextNature are inextricably linked to the plants and forests from which they came. I present these materials life size, emphasizing the primary physical reality in a format that references the magnitude of the forest floor. The works are composed on a large lightbox and then photographed straight down using a high-resolution scanning back in the place of film, enabling me to show an astonishing visual clarity at large scale. This allows me to make images that are less metaphorical in their representation and more direct, which in turn supports a sense of 'matter-of-fact-ness' in the work."

0 Stephen Galloway. Scatter from the series NextNature, 2004. 40 × 76-1/4 inches. Chromogenic color print.



DESIGN PRINCIPLES

Unity and Variety

Unity and variety are visual twins. Unity, also known as harmony, is a state of forming a complete, consistent, and pleasing whole that is planned and controlled by the imagemaker. Variety refers to a similar class of subject that is somehow diverse or different. A composition devoid of a unifying principle will generate a chaotic or haphazard response to what has been photographically represented. A completely unified composition without variety is often boring and monotonous. Unity controls variety, but variety provides the diverse visual pull within unity that keeps things visually intriguing. Effective compositions usually have a balance between these two qualities — a variety of elements held together by a unifying device.

The repetition of pattern, shape, or size plus the harmony of color and texture are visual ways of creating unity. The more complex a composition is, the greater the need for a unifying device. A more subtle method is continuation, such as when a line or the edge of an, object leads a viewer's attention from one area of a composition to another. Consider a checkerboard pattern or grid that is completely unified and therefore static. Vary the color, size, or texture of the pattern and it immediately becomes dynamic. In photography, contrast is a major method of controlling variety — light against dark, large against small, smooth against rough, hard against soft. Dramatic lighting, known as chiaroscuro, emphasizes these contrasting gradations of light and dark values in two-dimensional imagery, while soft lighting minimizes these differences.

Emphasis

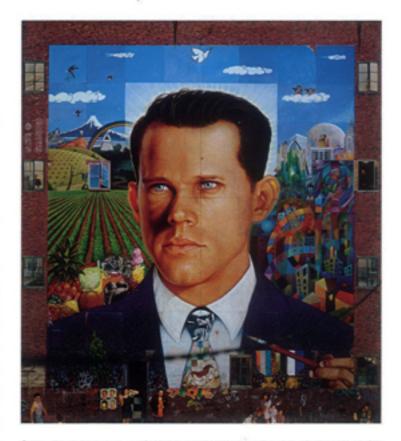
Most photographs need a focal point or points to provide visual emphasis. These are elements that attract the eye and act as a visual climax, stressing a key point or points within the composition. 2.8 By building scale models and casting himself as all the characters, Adams fabricated an elaborate parody of a grandiose political poster, featuring a mixture of clashing political and artistic themes and styles. "Rather than cover up or reject the influence of digital imaging, I suggest digital manipulation that was not done. Instead of a fake photograph of a real scene, it's a real photograph of a fake scene [made with an 8 × 10 inch view camera], in which authenticity, illusion, and apparent digital manipulation create a maze of puzzles and paradoxes. There are often clues to the illusions, such as reflections of the backs of cardboard characters and extra figures lying around the set. But their being dubious documents of illusions is fully in keeping with the other contradictions and deceptions in the piece."

© Bill Adams. Billboard 2006, 2006. 29 × 32 inches. Chromogenic color print.

Without emphasis, your eye tends to wander and is never satiated. Focal point devices to keep in mind are color, contrast, depth of field, isolation, light, placement, perspective, and size. One is often played off against another; for example, a limited depth of field may be used to isolate the primary subject. Secondary points of interest, known as accents, can direct the eye to parts of a composition that have less visual value than the primary focal point, but are still important for understanding the work. Yet sometimes an imagemaker will purposely create an ambiguous composition without a single focal point by deploying a multiplicity of points; this draws attention to the entire surface of the work instead of its individual elements.

Scale

Scale and proportion are interrelated and both refer to size. Scale indicates relative size or extent in comparison to a constant standard, that is, relative to the size something "ought to be." By showing objects larger or smaller than normal, a viewer is made to see the



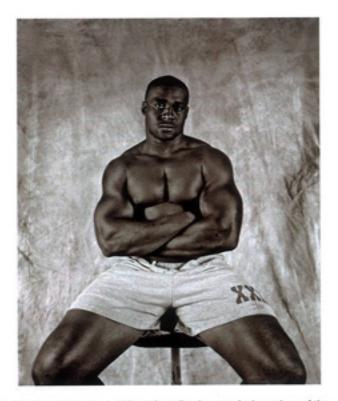
form in a new way. Such juxtapositions encourage audiences to take a fresh look at the subject. A classic example is the diminutive effect, which is visible when a human figure is arranged in conjunction with a massive natural or human-made site such as the Grand Canyon or a Gothic cathedral. Dadaist and surrealist artists often employed scale as a way to make the familiar strange and the strange familiar. Varying the focal length of your lens is a good initial way to experiment with scale.

Proportion

Proportion involves the relationship in size or shape between one thing and another or between the parts of a whole within a composition. Shapes are proportional to the area they occupy within the composition. Proportion is linked to ratio. The proportions of a subject are considered correct or normal if the ratio of one component to another is acceptable. For example, when making a portrait, if the circle formed by the head is 3 inches in diameter on a 6-inch background, it will be more disproportional than if it were placed on a 12-inch background. Correct proportion is generally based on what society considers real, normal, or ideal and can change from one generation to the next.

The Golden Mean

The ancient Greeks developed a set of ideal proportions called the Golden Mean, which they converted into ratios that could be applied to draw the perfect body or build the perfect architectural structure. The Golden Mean, AKA the Rule of Thirds is the proportion arising from the division of a straight line into two, so that the ratio of the whole line to the larger part is exactly the same as the ratio of the larger part to the smaller part. Mathematically, it is a ratio of 1 to 1/2 (\$\sqrt{5} + 1), a proportion that is considered to be particularly pleasing to the eye and can be found in natural growth patterns in nature. Its modular repetition has facilitated its use throughout the history of design. The Golden Mean can be a good starting point, but just because something is disproportional to a subjective ideal does not make it flawed. On the contrary, uniqueness is often attention getting. This means that deliberately changing a composition's proportions can be a good method for creating impact. The position of the camera and the distance of the subject from the lens are the easiest ways to



2.9 In a makeshift studio, Goldberg formally photographed members of the Dallas Cowboys during training camp. By posing the subject with his muscular legs in the foreground, Goldberg was able to make use of our innate sense of human proportion to generate viewer interest while conveying a sense of strength and athleticism.

Gary Goldberg, Ebenezer Bulban, from the series Dallas Cowboys, 2000. 18×12 inches. Inlight print.

manipulate proportion. Digital imaging software allows for extensive post-camera modifications to be made in the areas of proportion and scale. All these factors control how the meaning is constructed. Garry Winogrand observed, "Photography is about finding out what can

EXERCISE The Golden Mean: A Basic Approach to Good Composition

To concentrate more fully on the frames and its edges, we are going take on an assignment developed by Graham Revell at Cavendish College, London, and Betsy Schneider of Arizona State University which sets aside usual subject matter and instead concentrates on detritus. Detritus, from Latin detritus, from deterere "wear away," is any matter produced by erosion, such as gravel, sand, silt, or rock. It also refers to debris or waste of any kind; rubbish, litter, scrap, flotsam and jetsam, rubble; remains, remnants, fragments, scraps, dregs, leavings, sweepings, dross, scum, trash, and garbage; plus organic matter produced by the decomposition of organisms. For this assignment, you are to interpret the word detritus and make photographs following the steps below. You can be literal or metaphorical in your interpretation.

- Build an image using the principle of the Golden Mean, a rectangle whose dimensions are 1 unit × 1.62 units. If your camera permits, set its framing aspect ratio to 1 × 1.5. The aspect ratio is the relationship of the frame's width to its height. The traditional 35mm aspect ratio is about 3 units wide × 2 units high.
- 2. Use the grid pattern in your camera's viewfinder to divide your frame into thirds, which will aid in locating the "sweet spots" in which to place your center of interest. Do not divide the frame into four equal quarters as this tends to produce static compositions. Steer clear of placing your principal point of interest in the dead center of the frame.

- 3. Intentionally lead your viewer's eye through the frame by supplying a visual path that leads a viewer to your center of interest. Use a shape such as a diamond, oval, or pentagon to make your path. Make your path link the top, bottom, and sides of your composition, and provide an entrance to and an exit from the picture space. Traditionally, the entrance is at the bottom of the picture. The exit is usually an area that is less visually important. A door, window, or patch of sky can give a viewer's eye a place to stop and rest; providing a subtle exit. If your path begins to lead your eye out of the frame, adjust it, using other design elements to lead the viewers' eye back to your path.
- Simplify. Eliminate details that complicate your composition.
 Delete anything that does not express your message clearly and concisely. Keep modifying, combining, and deleting until you are satisfied.
- Pay attention to the figure/ground relationships by bringing the positive and negative space into balance.

Keep in mind that Western societies read from left to right, which tends to make the left side of the frame more prominent than the right. We also read from top to bottom, making the top of the frame more noticeable than the bottom. The corners of a rectangle act as visual anchors, which is why book page numbers are traditionally found in the lower left and right corners. The center of

EXERCISE

The Golden Mean: A Basic Approach to Good Composition-continued

the frame does not necessarily have the importance that many take for granted, especially in a printed format where the center is the gutter.

 Do the opposite. Now that you have tried this exercise, reverse all the instructions and compare and contrast the results. Apply your findings to your next picture-making opportunity. Educator Joseph Labate of the University of Arizona takes this a step further by having his students intentionally make "bad" and "good" photographs that are technically the same, and then has the class analyze the differences.

happen in the frame. When you put four edges around some facts, you change those facts."

Balance

Balance is the visual weight or equilibrium of the objects within a composition. Balance is instinctive and determined by imagining a center axis running through the picture plane with the expectation that there will be some equal distribution of visual weight on either side. Think of the axis as a fulcrum on a seesaw, where it is necessary to maintain equilibrium or crash to the ground. Perfectly balanced pictures tend to be boring, so it is usually helpful to have a certain degree of imbalance to generate visual tension and movement within a composition. Some key categories of balance to consider are:

 Asymmetrical balance: A composition that has equal visual
 weights, but whose forms are disposed unevenly. For instance, a smaller shape positioned near the composition's outer edge

- may balance a large shape near the center of a composition. Asymmetrical balance is active, dynamic, and exciting.
- Symmetrical balance: If you were to draw a line through the center of this type of composition, both sides will be an equal mirror image. Symmetrical balance tends to be calm, dignified, and stable.
- Radial balance: This occurs when a number of elements point outward from a central hub, such as the spokes of a bicycle wheel.
 It is readily seen in nature, such as in snowflakes and the outward growth pattern of flowers. Radial balance can be explosive, imply directional movement, and indicate infinity. It can often be revealed photographically through the use of close-ups.
- Balance through color and value: The weight of a color can become
 the focal point in a picture. Warm colors (red, magenta, yellow)
 tend to advance and/or have more visual weight than cool colors
 (blue, green, cyan). The majority of a landscape is composed of



2.10 in the spirit of Man Ray's surrealistic photograms, Tarver set out to create images to evoke spacescapes that could have been captured from the Hubble space telescope. "I am intrigued by the idea of creating universes from tiny objects or in the words of poet William Blake, 'See a world in a grain of sand...and hold infinity in the palm of your hand." To realize his goal, Tarver scanned detritus, transforming "grains of sand into stars, seashells into swirling galaxies, and blueberries into planets."

© Ron Turver. Dual Galaxies, 2006. 13 × 12 inches. Inkjet print. Courtesy of Sande Webser Gallery, Philadelphia.



2.11 "Placement of the image frame is the most important factor in the creation of an image; every image involves elimination [subtractive composition] to one degree or another. Most of my images are hyperconscious of the border. The border defines the images; I use it to control the visual flow in an image. I'm drawn to images that suggest the spaces that exist beyond them. In this image the mountains at the horizon were digitally eliminated by replacing them with sky, which allows the recession of space to continue indefinitely. Cracks in the earth were digitally eliminated to form the path that delivers a sense that what is left unseen is greater than what is seen."

John Paul Caponigro. Path, I. 1999. Variable dimensions: Inkjet print.

cool colors. Warm colors appear mainly as accents (birds and flowers). A small amount of red can be equal to a large area of blue or green. Much of the landscape in the American West is an exception. There are few trees and the predominant colors are the warm earth tones. During fair weather daylight hours, the amount of a cool color can be regulated by varying the proportion of sky included in the frame. The time of day and weather conditions also affect the amount of cool and warm colors, as the color of the light changes.

- Balance through contrasts in value: The contrast between dark and light also provides a resting point for the eye. A darker, smaller subject will have the visual weight of a lighter, darker one. Since a black subject against white background generates a stronger contrast than gray against white, a smaller amount of black is necessary to visually balance a larger amount of gray.
- Balance with texture: Any visual texture possessing a varied dark and light pattern has more visual attraction and weight than a smooth untextured one; thus, a small textured area can balance a large area of smooth surfaces.

EXERCISE

Balance

Once you have familiarized yourself with these categories of balance, conduct some personal tests by making different horizontal and vertical compositions of a static scene and reviewing them on your camera monitor to see which one delivers the results you are after.

Rhythm

Rhythm is a strong, regular, repeated pattern that forms a harmonious sequence or correlation of colors or elements, which usually develops from organizing the space between objects. This rhythmic flow, which is accomplished by repetition, acts as a unifying device for the composition and is often used to suggest movement. Alteration of large and small areas of negative (dark) space within a composition generates this sense of motion.

- Alternating rhythm: This sense of rhythm consists of successive patterns in which the same elements reappear in a regular order.
 A common example of this alternating theme can be seen in the columns of a classic Greek temple. Photographically, alternating light against dark areas or using complementary colors, such as green and red, is a way to create this effect.
- Progressive rhythm: This is produced through the repetition of a shape that changes in a regular manner, generating a sequential pattern. It is frequently accomplished with a progressive variation of the size of a shape, through its color, value, and/or texture.

VISUAL ELEMENTS

Once you comprehend the basic design principles and overall structure, you are ready to make use of the visual elements within this construct.

Line

Lines, per se, do not exist in nature. A line is a human abstraction invented for the simplification of visual statements to symbolize ideas.