UNDERSTANDING THE VISUAL LANGUAGE

The principles of design and visual communication have been refined and developed for thousands of years in service of artistic expression. These principles must be understood in order to make outstanding digital art. This chapter is a crash course on the principles of the visual language. Anyone of these principles could support an entire book by itself, and yet it's remarkable how easily they can be explained and understood when reduced to their bare essentials. Before we devote the rest of the book to learning specific ways in which we can create digital art in Photoshop, we'll first need to learn how artists use this universal language to communicate a quality or feeling that resonates with the viewer—in addition to producing something unique and personal. We'll even look at a few outstanding examples of traditional art to help us get the basics down. We will also address the principles of design as they apply to two-dimensional art, which include drawing, painting, and digital art. Even so-called 3D digital art creates the illusion of depth. If it is printed on a flat surface or viewed on a screen, it is still two-dimensional.
The word *design*, in its most general sense, means "on purpose." To do something by design is to do something purposefully. A successful design, then, is a design in which every element works to support the whole composition. A great teacher of mine used to tell us to "never be afraid to get rid of the best part of your painting!" What she meant was this: you may, for example, have painted the best hand that you ever painted. It's so good that you want to show everyone in the world what a great hand you painted. However, if the hand does not work to support the general composition, if it doesn't work within the overall design, then it needs to be eliminated—no matter how good it is. Every part of your composition has to work to support the whole. This does not mean that you have to have a concrete plan in advance (although you might want to). If you do have a plan, it still doesn't mean that you are required to stick to it without variation. What it does mean, though, is that by the time you're done, everything should be there for a reason. Each individual element must work to support the whole composition. How do you know what "works" and what doesn't? While there are infinite variations in human expression using the elements of visual design, they are all based on some universal constants, often related to our physical environment.

This wonderful digital composition, *Muse for Hire*, by artist Myriam Lozada-Jarvis, is not meant to be realistic. It is essentially a well-considered placement of overlapping shapes. Our method of processing visual information is so pervasive and powerful, however, that we can immediately translate these shapes into an environment containing ground, sky, and elements supported by the ground in various levels of depth. The visual language is based on the human perception of physical reality. COPYRIGHT © MYRIAM LOZADA-JARVIS
Composition

The concept of figure/ground refers broadly to the way we process and perceive visual information. We search for edges and make shapes out of them, determine depth to separate the foreground (objects) from the background (negative space), and use this information to help us decide where we need to focus our attention. This unconscious process helps us to assess and understand our immediate environment. When we process visual information, therefore, we generally organize the information according to analogous physical laws and characteristics. In order to understand this concept and its importance, let's look at figure/ground in a more literal sense. A horizontal line implies ground, the horizon, it implies stability and stillness. A vertical line, or shape on top of the horizontal line, can be regarded as a figure, in the most general sense. It is perceived as an element that has weight and which is supported by the horizontal line.

The fact that we "read" elements in a composition in reference to physical reality is significant. Elements appear to exert gravity and have visual weight. Diagonal lines are the least stable, and can be used to create a sense of motion or excitement. Diagonals are also great for moving you through a piece and directing your attention to an important part of the composition. People, often despite appearances, seek balance. People intuitively find a balanced composition more pleasing and complete. Visual weight determines balance in a composition. A simple way to understand this is to think of your picture plane (your paper or canvas) precariously balanced on a triangle. If the composition is heavier on the right or the left, the painting will tip over. Smaller elements near the top of a composition can balance out larger elements near the bottom. This is how objects work in real life, too. Darker elements usually appear to have more visual weight than lighter elements.

The easiest way to achieve balance is to create a symmetrical composition. This is a composition that is the same on both sides. If the composition is the same on both sides, it could be thought of as very stable and predictable. An asymmetrical composition is different on either side. It achieves balance by arranging elements so that they counter-balance each other in a more complex arrangement. It is much easier to create the feeling of movement in an asymmetrical composition.

![Balanced and Not Balanced Compositions](image-url)
Line

Line has an immediate and direct effect on our emotional reaction to a composition. Jagged, vigorous, bold lines that collide in an aggressive manor evoke quite a different feeling than do soft, curving, delicate lines with harmonious, upward movement.

A drawing that uses line to convey or capture the movement and general proportion of an object is called a gesture drawing. A gesture drawing, as the name implies, is usually done quickly and spontaneously.

Line can be used to define shapes. A contour drawing uses lines in a slow, deliberate effort to record the outlines and interior shapes of forms. Often the two methods of drawing are used together. You can first use gesture drawing to map out an effective composition and give it a sense of life and vitality, and then go over it with contour drawing to add observational detail, nuance, clarity, and structure. Digital drawing is much easier to do using a drawing tablet and digital pen. We'll talk about tablets in chapters two and six.
Shape

Shapes are the building blocks of design. It is extremely useful to think of compositions in terms of their general shapes and how they relate to each other. It is possible for works of very different styles, with completely different subject matters, to nonetheless have very similar compositions.

Mathematically precise shapes, such as a perfect circle or rectangle, are known as geometric shapes. Shapes with less uniform or predictable curves, such as those found in nature, are known as organic shapes. Objects themselves are referred to as positive space. The space between objects is called negative space. All are of equal importance and work together to make a successful composition, like the pieces of a puzzle.

Left: A simplified drawing based on Arrangement in Grey and Black No.1, or the Artist's Mother by James Abbott McNeill Whistler, oil on canvas, 1871

Right: The composition, further simplified into its essential shapes. A strong, balanced arrangement of visual weight.

Klimtich by Bradley Wester. The artist uses common stationery-store labels, stickers, and burst signs and redraws them as vector-based images that can be printed at any size. Bradley's works are excellent examples of how an artist rearranges shape and form to create balance and movement within a composition. Examples of Bradley's distinctive work can also be found in chapter eight.
Different elements can be placed in a way that creates an implied shape. These implied shapes can be used to direct your eye and attention to an important part of the composition. Remember, diagonal lines imply movement! Many compositions arrange elements to create at least one giant implied triangle that acts like a big arrow directing you to your focal point. Once you know to look for this, you'll be amazed at how frequently this occurs in the masterpieces of art.

An implied triangle. Composition based on Boating by Edouard Manet, 1874.

Two-dimensional, or 2D objects, contain shape, but no volume. Volume is a three-dimensional element of design. Sculpture and ceramics are examples of 3D art that contains actual depth and volume. The illusion of depth can be created in two-dimensional images by shading in a manner that records the changes in relative darkness as light falls over an object. Which brings us to ...
Value

Value is the range of possible lightness and darkness in your work, from pure white to pure black. Being able to see and render values accurately is an important tool in being able to draw and paint in a believable manner. Gradations of value create the illusion of depth. Objects are rarely pure white or pure black in physical reality. They are likely to be somewhere in between these extremes.

Light falls over an object in space, creating variations in value.

Diabolique by Davida Kidd. The limited, almost monochromatic color palette places adds emphasis on value and contributes to the distinctiveness of the piece. These seamlessly composited Photoshop images involve doll bits, real body parts, and "photographic" painting. You can see more examples of the artist's work at the beginning of chapter four.

COPYRIGHT © DAVIDA KIDD
Contrast in value is used to create focal points in design. A light figure on a dark background, or a dark figure on a light background, can clarify and direct attention to a focal point in your design. The distribution of dark and light areas throughout a composition must be considered in creating balance of visual weight in a composition. Value influences the mood or feeling of a design. A dark, somber portrait of a person in deep shadow certainly conveys a different feeling than a portrait of the same person in a brightly lit environment.
Color

Hue is the color itself, such as red, green, yellow-orange, and so on. Chroma is the intensity, or vividness, of a color. The lightness or darkness of a color, as we know, is value. In traditional color theory, the primary colors of physical paint (subtractive color) paint are considered to be red, blue, and yellow. Primary colors are the colors from which all other colors are created. Secondary colors are colors mixed from equal parts of any two primary colors. Red and blue make violet. Blue and yellow make green. Yellow and red make orange. Tertiary colors are made of equal blends between a primary and a secondary color. Blue and green make blue-green, for example. There are infinite possible variations of color.

There is a strong movement in recent years to consider cyan, magenta, and yellow (CMY) to be the primary colors in subtractive color, because this system allows for greater accuracy in the mixing of color. Red, green, and blue (RGB) are the primary colors in light (additive color) and in digital art.

Warm colors like red, yellow, and orange appear to come forward in space. Warm colors are more likely to appear vibrant, aggressive, or agitating. Cool colors—blues and greens—appear to recede in space. Being the most abundant colors in nature, they tend to be soothing, passive, and contemplative. This knowledge can be used toward clarity and emotional effect in design. Try limiting your color palette. Think of the colors in your work as themes.

Use major themes that are dominant in the composition, and minor themes that add a spark here and there for excitement or visual interest. Repetition of color throughout the composition anchors things together and gives stability and purpose to your work. Variations on the themes add tension and interest in your designs. Colors that are similar in hue are analoguous colors. Monochromatic color is a single color with variations in value.

Complementary colors are colors that contain none of the color of their complements. Red and green are complementary colors, for instance, because green is made up of blue and yellow, but contains no red. Complementary colors are very vibrant and jarring when placed next to each other. There are several ways to select or create colors in Photoshop. They’ll be covered in detail in chapter six during our introduction to digital painting.
Space

In art, such as drawing, painting, and digital art, our works have two dimensions: length and width. The third dimension is depth. There are several visual clues we use every day to judge the distance, or depth, of an object. The illusion of depth can be created in two-dimensional art by mimicking the way objects appear in real life when they recede into three-dimensional space.
Here are some basic methods you can use to create the illusion of space in a two-dimensional work:

- **OVERLAPPING ELEMENTS:** When one object partially covers another object, we feel certain that it is in front of that object.

- **VARIATION IN SIZE:** When we have two similar objects in which one is large and the other is small, we perceive the larger object as closer to us. Size is also a big factor in linear perspective.

To understand linear perspective, picture a box in front of you. The side that is parallel to our point of view appears flat, but parallel lines that recede in space appear to grow closer and closer together. If uninterrupted, these lines converge until they meet at a point on the horizon known as the **vanishing point**. Vanishing-point perspective is one of the few aspects of art that involves an exact formula with predictable results. Mastering linear perspective enables you to create believable environments from your imagination. It also makes it easier to correct inaccuracies in observation while drawing.

- **ATMOSPHERIC PERSPECTIVE:** Things that are closer have more detail and sharper focus. They have more vivid colors. They have darker darks and lighter highlights (a greater range of value). Things that are further back lose saturation in color. They lose the extremes of value, and become blurrier. Even artists that work in very abstract styles use the human perception of atmospheric perspective to separate and clarify elements in their work.

Things get smaller, blurrier, and less vivid as they recede in space.
Texture and Pattern

Texture is the surface quality of an object, rough or smooth. It's what an object feels like or looks like it would feel like. There can be actual textures, such as the texture of paint applied thickly, or the illusion of texture in a flat two-dimensional work. The textures you create in digital art will probably fall into the second category. **Pattern** is any uniform, repeated motif of visual elements. These patterns can be geometric or organic. Often the repetition of a texture or pattern, with variation, is a secondary theme in a composition. Like seasoning in cooking, it adds a little spice and variety to the design. Repetition of a texture or pattern can add structure and stability to a design as well.
The Sum Is Greater Than Its Parts

Individual elements placed near each other are perceived to relate to each other, and create a different effect than the elements would individually. Things near each other are perceived as a group. An object separated from a group of similar objects by a large amount of negative space conveys isolation.

Objects can direct the eye to an important part of the composition because of their placement in relationship to other objects. Things can appear to recede or come forward in space because of their color and value relative to the other colors and values in the picture. This is the secret to understanding the visual language. Nothing is perceived as an individual element that stands alone. Visual meaning is derived from the relationships between the elements in a composition. It can be used to communicate a quality or feeling that is discernable to the viewer, even while remaining unique to the artist.

Hula Hula Gal by Mark Mothersbaugh. What kind of feeling or quality is evoked by this symmetrical composition? Humorous? Unsettling? Somewhere in between? A skilled artist creates something unique while communicating something universal. Chapter five contains more images by this artist. COPYRIGHT © MARK MOTHERSBAUGH.