

Exploration of form simulations

[Philosophy](#)



Line is in many ways the simplest element of form: the connection between two points. It is also one of the most powerful elements of art, because it readily suggests movement and also, as a contour, can suggest solid form or mass. Lines often function as the abstract underpinnings of compositions, both in pictures and in sculptures. Line is one dimensional, and is therefore a very versatile tool in the creation of art. There are a number of different ways to use line. Drawing the outlines of an object is called contour drawing.

Line that shows emotion, movement or direction is called expressive line, and line that is simple, ordered and symmetrical is called classical line. Implied line shows the edges of things without actually outlining them, and is used to draw the viewer's eye into the plane of a picture. Line can be used to shade or add texture to a picture using cross-hatching, which is composed of parallel crossed lines. Shape becomes visible when a line or lines enclose an area, or when an apparent change in value [lightness or darkness] or texture sets an area apart from its surroundings.

Shapes are two-dimensional graphic elements like lines, but they can also suggest masses or solid objects in flattened profile. If the end of a line connects with its own beginning, it forms a shape, and the character of a shape is really determined by the kind of line that forms its outer border. There are broad categories of shape: curvilinear, angular, geometric, biomorphic and irregular. These types of shape have abstract associations that can be connected to real world objects they resemble. Color is another factor that affects the expressive impact of a shape. | Mass

Mass is the term we use to describe solid form in art. Mass is a principle characteristic of most "things" in the real world: mountains, stones, apples and the human figure. Carved and modeled sculpture works with mass, as its primary component, often connected with linear principles that suggest movement. Mass is also an important factor in flat art work, although special techniques are required in painting and drawing to make mass appear to exist on the page. Mass describes three dimensions. If an object has mass, you can walk around it or see it from both the front and the back.

Three-dimensional art forms include sculpture, ceramics, and architecture. These art forms involve creating actual mass. Drawing and painting are two-dimensional art forms, but there are techniques that can be used to represent three dimensions on a two-dimensional surface. This is called creating apparent mass. Linear The spatial relationships between three-dimensional objects in a two-dimensional picture are shown using perspective. Perspective is created using overlapping images, vertical placement of images in the picture plane, and scale, or relative size of objects.

In Western art, the most common type of perspective is linear. Linear perspective was developed in Italy during the early Renaissance. It orders the geometric depiction of objects in a picture in relation to an imaginary viewer's eye level: called the horizon line. All horizontal receding edges, such as the edges of a square table or the line of the floor in a room, will converge in the distance toward a point on the horizon line. Vectors below eye level will move up on the picture plane (or surface of the page) as they go back in

space, while vectors above eye level will move down as they recede in space.

The points where these vectors meet the horizon are called "vanishing points". Perspective applied to the human figure is called foreshortening. In foreshortened view of the figure, closer parts of the body appear very large and in front, often blocking the view of parts behind. Spatial Depth refers to the relationships of objects to the space around them. In a two-dimensional picture, the illusion of depth is created in several ways. One is linear perspective, which is explored in section A. Another is the relationship between figure [an object] and ground [its background].

Changing the value [lightness and darkness], color [chroma or hue], and scale or overlap of images can all have an effect on how we perceive spatial depth. Tonal relationships and edge can also affect the sense of spatial arrangement in a picture. Tones work to create depth in relation to a background tone. The greater the similarity of the tonal color of an object to the tone of the background, the more it will seem to recede toward the background. The more different or contrasting the object's tone, the more it will pop forward, away from the background.

Soft edges will tend to push objects back in space, mimicking the effect of a foggy atmosphere. Directional Spatial Depth refers to the relationships of objects to the space around them. In a two-dimensional picture, the illusion of depth is created in several ways. One of them is the use of light. Light is an important part of our understanding of space. Because it is so important, artists have learned ways to depict and manipulate light. Some artists, such

as architects, manipulate light directly through a series of windows, for example.

Other artists imitate the action of light as it reveals forms in three-dimensions. The way light strikes an object can affect how we perceive its mass or its depth in space. Elements of Color and Light Functions Light is essential to visual art, including most photography. The amount of light can radically change the way a photograph or painting reads. The direction of light modifies the way an object appears in a photograph, painting or drawing. In addition, light controls the colors we see. Artists manipulate and control the amount of light and color in their work to control the effect they are trying to achieve. Properties Color is an important cue for the relationship between forms in an image or in space. In a two-dimensional image, color can control the relationship between the figure and its ground. If the color of the ground is similar to the color of the figure, the figure-ground relationship can be unclear. If the contrast between the figure color and the ground color is strong, the figure and its ground will seem more separated. By changing the relationship between the figure color and the ground color, the relationship between the figure and the ground is also changed visually. | Expressive Color is also an expressive element. Different colors mean different things in different societies and cultures. Colors that mean mourning in one society mean celebration in another. In the Western world, black is associated with mourning, but in Nigeria, white signifies death. In the Maoriculture of New Zealand, there are over a hundred words that distinguish different shades of red. Even within a culture, different groups have different color vocabularies.

Women in the United States have a very sophisticated color vocabulary, due in part to the fashion, cosmetics and home decorating industries. Within individual works of art, the feeling of the artwork is strongly affected by the color choices of the artist. The way we use color to express ourselves is very personal. Some of our color choices are made by what is currently in fashion and some are more or less classical. The important thing to remember is that the use of certain colors together will imply a deep space, while others will make the space seem flatter. Optical illusions can be fun to try.

Optical The optical effects that produce colors can be divided into two media: light and pigment. The mixing of colored lights is an additive process. This means that greater or lesser amounts of colors are mixed optically. The colors are refracted. Mixing pigments, such as paints and pastels, is a subtractive process. The colors in a paint mixture cancel each other out because they show the amount of reflected color in the mixture. Unlike the additive process, in which color becomes more brilliant, in the subtractive process, a mixture of large amounts of the primary colors produces a muddy black.