

COLOR THEORY: Week 4

“Instead of trying to reproduce exactly what I see before me, I make more arbitrary use of color to express myself more forcefully ... To express the love of two lovers by the marriage of two complementary colors ... To express the thought of a brow by the radiance of a light tone against a dark background. To express hope by some star. Someone’s passion by the radiance of the setting sun.”

— Vincent van Gogh

Johannes Itten, *The Elements of Color*

Itten’s identified seven types of color contrast:

1. Contrast of hue
2. Light-dark contrast
3. Cold-warm contrast
4. Complementary contrast
5. **Simultaneous contrast**
6. **Contrast of saturation**
7. **Contrast of extension/proportion**

This week, we will study the remaining two types of contrast.

Contrast of extension/proportion or Quantity

Last week, we reviewed Itten’s theory of the contrast of extension and Goethe’s theory regarding the harmonious proportions of one complementary color to another. Yet another factor plays a role when balancing colors. While Goethe’s proportions might create a pleasing composition, changing the quantity of one of two complementary colors, can make one of them “highly active,” or, in other words, make the one color “pop” against the other.

Simultaneous contrast

When looking at one color, one will automatically see its complementary color “and generates it spontaneously if it is not already present.” (Itten, *The Elements of Color*).

Contrast of saturation

Contrast of saturation results when a composition is composed of a single color or multiple colors of varying saturation, that is, colors ranging from pure, bright hues to dull, unsaturated hues. Diluted colors may have been mixed with white, black, gray, or their complement.

Optical mixture

“Monet never mixed colors before applying them to his canvas. Instead, colors were mixed optically in his work. He either placed them side by side or he painted in layers, superimposing one color over another. Applying pure color side by side was a technique used by pointillists to create form and color blends. For example, red and blue placed side by side will visually merge

and create purple.” From *Monet: Artist and Gardener* by Sonia Uytterhoeven, New York Botanical Garden’s Gardener for Education.

“Neo-Impressionism is a term applied to an avant-garde art movement that flourished principally in France from 1886 to 1906. Led by the example of Georges Seurat, artists of the Neo-Impressionist circle renounced the random spontaneity of [Impressionism](#) in favor of a measured painting technique grounded in science and the study of optics. Encouraged by contemporary writing on color theory—the treatises of Charles Henry, Eugène Chevreul, and Odgen Rood for example—Neo-Impressionists came to believe that separate touches of interwoven pigment result in a greater vibrancy of color in the observer’s eye than is achieved by the conventional mixing of pigments on the palette. Known as *mélange optique* (optical mixture), this meticulous paint application would, they felt, realize a pulsating shimmer of light on the canvas. In the words of the artist Paul Signac, Neo-Impressionism’s greatest propagandist, “the separated elements will be reconstituted into brilliantly colored lights.” The separation of color through individual strokes of pigment came to be known as Divisionism, while the application of precise dots of paint came to be called Pointillism.” From *Georges Seurat and Neo-Impressionism* by Dita Amory, Curator, The Metropolitan Museum of Art

Bezold effect

In optical mixture, our eyes mix small amounts of color adjacent to each other creating another color(s). Wilhelm von Bezold discovered that adding certain strong colors (for example, black) throughout a design, affects perception of the overall design.