

**The (Anti-) Color System
of
Josef Albers**

Why an *anti* color system? Because Josef Albers' main concern was not with categorizing color, but with understanding how colors interact with each other.



“In visual perception, a color is almost never seen as it really is — as it physically is. This fact makes color the most relative medium in art.

In order to use color effectively, it is necessary to recognize that color deceives continually. To this end, the beginning is not a study of color systems.”

- The Interaction of Color



1888 Josef Albers born March 19th in Bottrop, Germany.

1915 Certified as an art teacher in Berlin; makes first paintings.

1920 Josef enrolls at the Bauhaus in Weimar. Takes an introductory course under Johannes Itten and pursues independent study in stained glass.

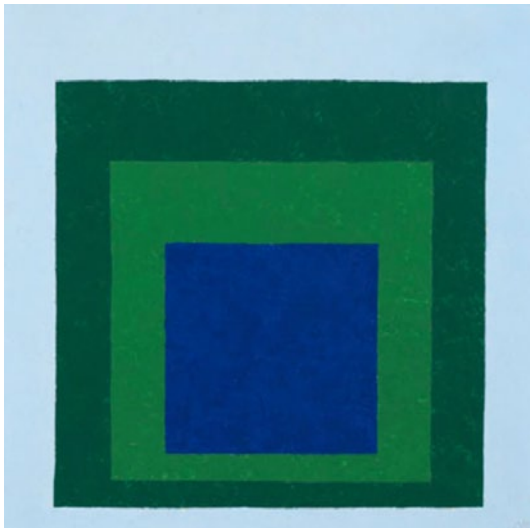
1923 Itten leaves the Bauhaus and Albers takes over teaching his course.



1925 Marries Anni Fleischmann, a painting student (and future textile designer) at the Bauhaus.

1933 The Bauhaus closes under pressure from the Nazis. Albers goes to teach at the new Black Mountain College in North Carolina.

1949 Appointed visiting professor at the Cincinnati Art Academy and Pratt Institute, where he teaches color courses. Makes his first studies—in black and white—for *Homage to the Square*.



1950 Becomes Chair of the Department of Design at Yale. Starts painting *Homage to the Square* series.

1963 His landmark book, *Interaction of Color*, with text and silk-screen plates based on his color course, is published by Yale University Press.

1971 Albers becomes the first living artist to have a retrospective exhibition at the Metropolitan Museum of Art, New York.

1976 Albers dies.

The Relativity of Color

“The same color evokes innumerable readings. Instead of mechanically applying or merely implying laws and rules of color harmony, distinct color effects are produced — through recognition of the interaction of color— by making, for instance, two very different colors look alike, or nearly alike.”

- *The Interaction of Color*

Color Effects

1. One color appears to be two different colors
2. Two different colors appear to be the same
3. The illusion of transparency

Other effects not discussed here:

Color juxtaposition & harmony

Vibrating boundaries

Vanishing boundaries

After-image

Simultaneous contrast

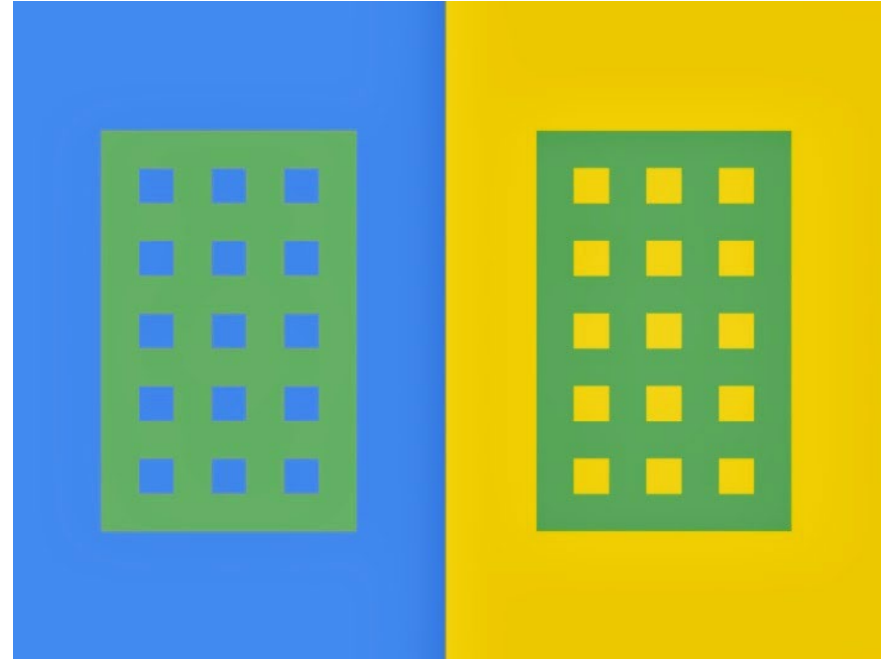


One color appears to be two different colors

Albers asks us to imagine three pots of water: in the middle one the water is lukewarm, in the left it is cold and in the right it is warm. If you place your fingers in the center pot after dipping them in the cold pot first, the water will feel like an entirely different temperature compared to what you would feel if you had placed your fingers in the warm pot first. This same principle applies to color.

In the picture to the right, the green color is the lukewarm water. The two greens are the exact same color, yet they appear to be different as a result of being directly compared to a warm yellow background versus a cool blue-gray background.

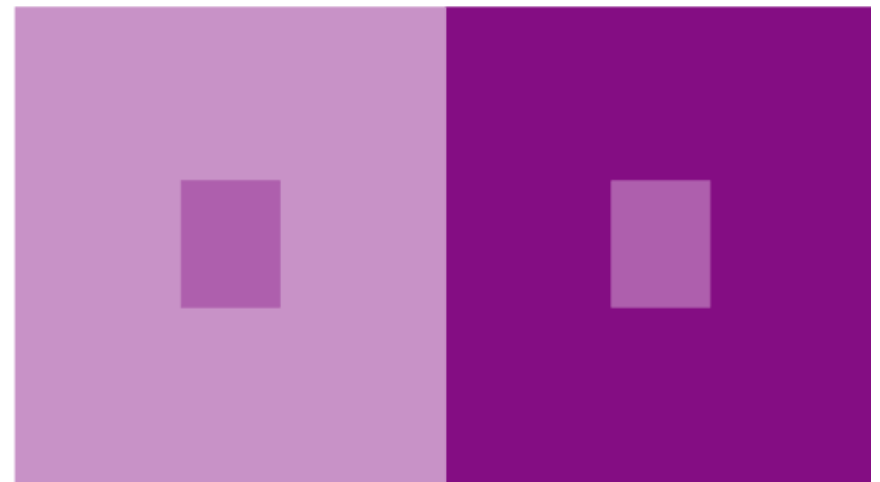
Color differences are caused by two factors: *HUE & VALUE*



"It is discovered that certain colors are hard to change," Albers writes, "and that there are others more susceptible to change. We try to find those colors which are more inclined to exert influence and to distinguish them from those which will accept influence."

Albers found that the changing influence of the background colors is strongest when (a) the third color is their exact middle mix, and (b) when the two backgrounds are as different as possible.

Note: It is easiest to find the middle mix when the two background colors are the same hue (right).



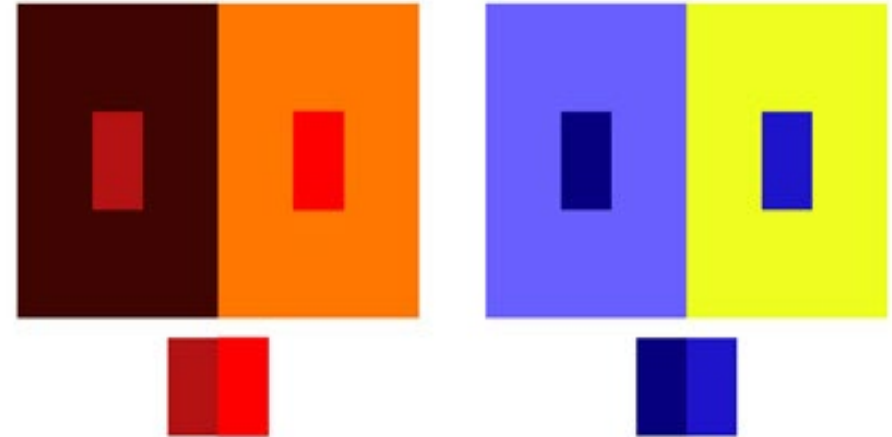
Two different colors appear to be the same

"One is able to 'push' light and/or hue, by use of contrasts, away from their first appearance toward the opposite qualities. Since this amounts virtually to adding opposite qualities, it follows that one might achieve parallel effects by subtracting those qualities not desired..."

Any ground subtracts its own hue from colors which it carries and therefore influences. Additional experiments with light colors on light grounds and dark colors on dark grounds prove that the light of a ground subtracts in the same way that its hue does.

From this, it follows that any diversion among colors in hue as well as in light-dark relationship can be reduced if not obliterated visually on grounds of equal qualities."

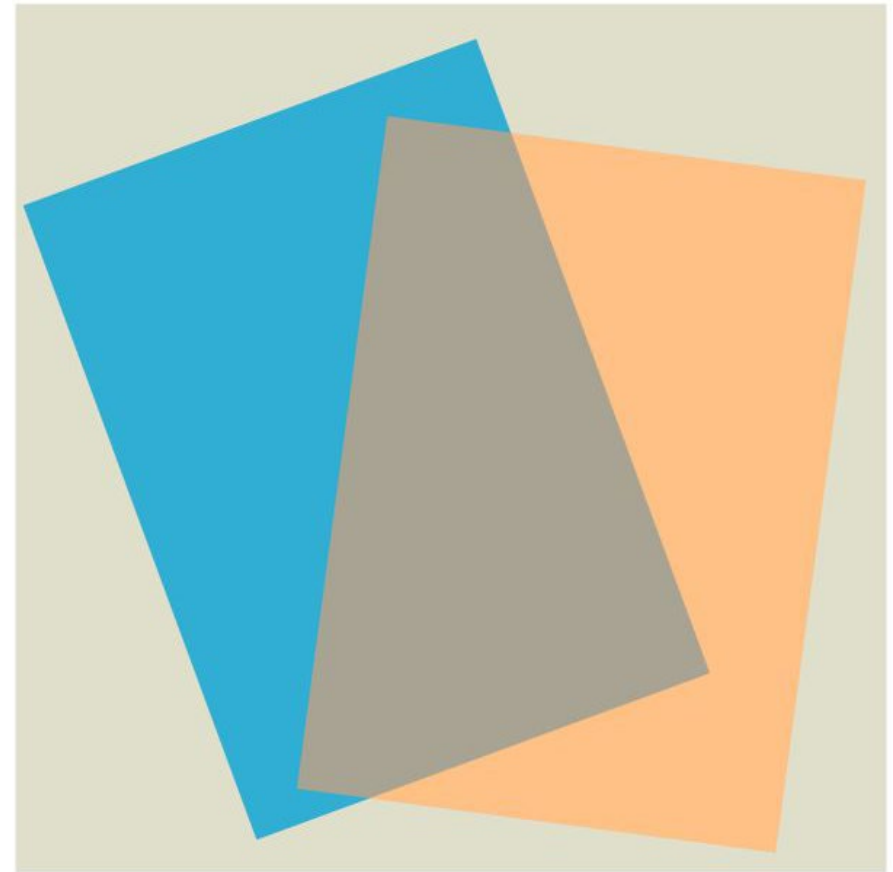
- *The Interaction of Color*



Above left: the dark red "subtracts" the darkness of the color that rests on top of it, while the bright orange "subtracts" the brightness of the red on top of it. Thus, the two middle reds are pushed toward each other so that they look like the same color. The same effect can be seen on the right.

The Illusion of Transparency

Albers conducted a series of experiments in which he attempted to create the most realistic illusions of transparency using entirely opaque pieces of colored paper. The purpose of these experiments was to explore the variety of middle mixtures between two colors. Finding the right middle mix will trick the eye into thinking that it is seeing the overlap of the two “parent” colors.



Homage to the Square

“Around the time that he joined the Yale faculty in 1950, Albers began his celebrated Homage to the Square series. This would become a body of more than a thousand works executed over a period of twenty-five years, including paintings, drawings, prints, and tapestries. The entire series was based on a mathematically determined format of several squares, which appear to be overlapping or nested within one another. This geometric abstraction was Albers' template for exploring the subjective experience of color—the effects that adjacent colors have on one another, for example, and the illusion of flat planes of color advancing or receding in space.”

“Josef Albers: Homage to the Square: With Rays” (59.160) In Heilbrunn Timeline of Art History . New York: The Metropolitan Museum of Art, 2000—. <http://www.metmuseum.org/toah/works-of-art/59.160>. (October 2006)

