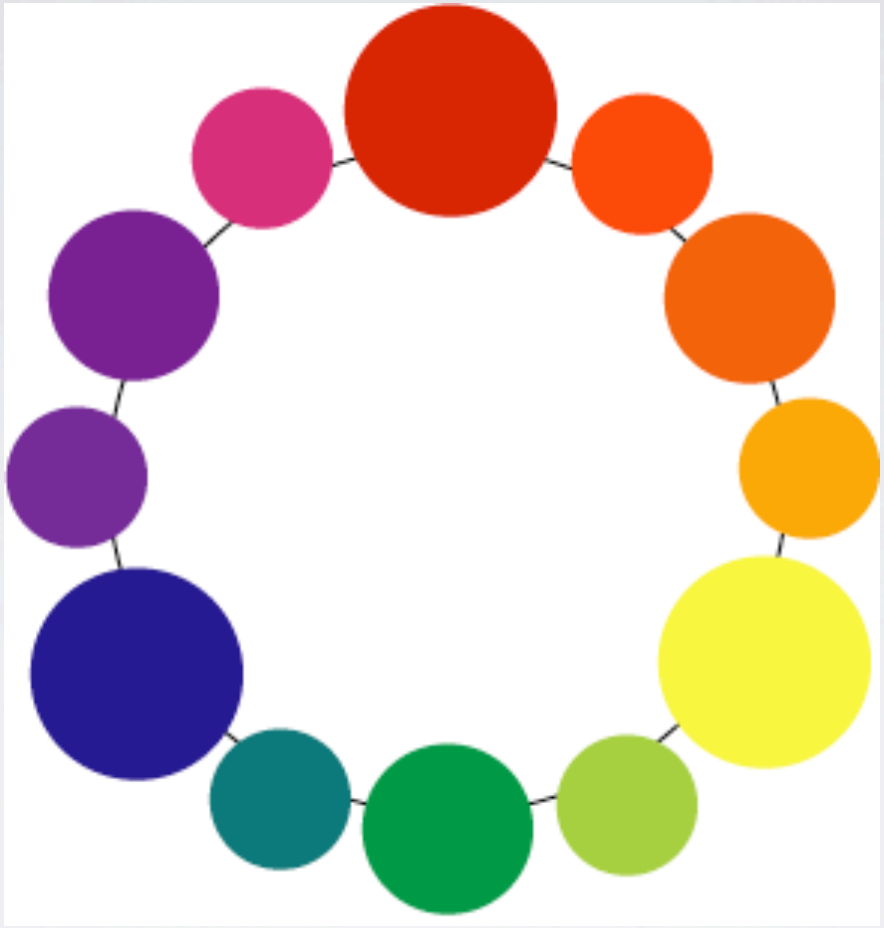
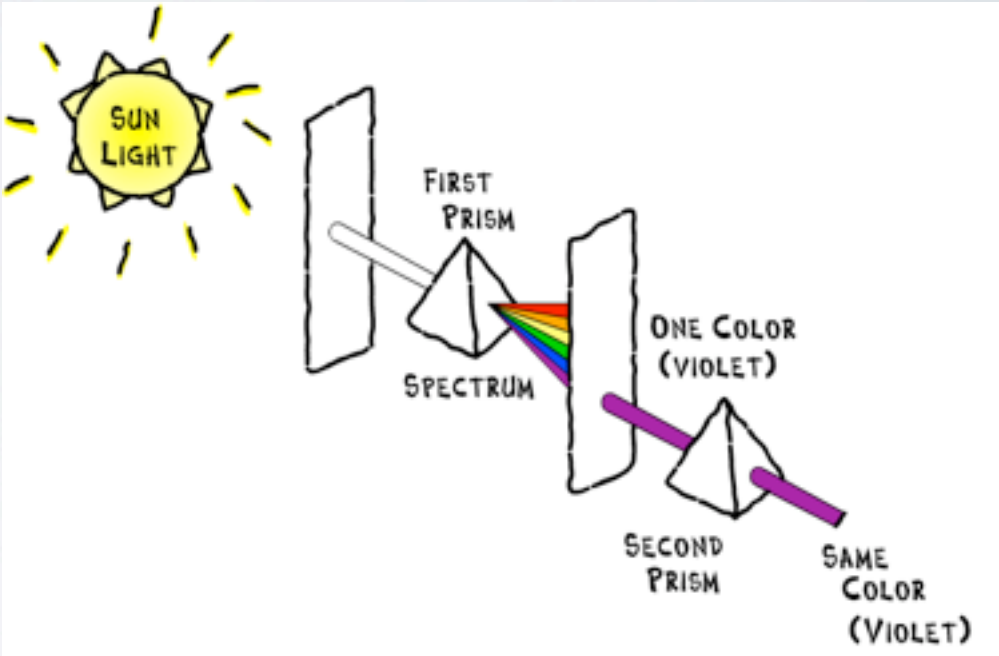


THE COLOR WHEEL

you know, for kids!

THE COLOR WHEEL

- In 1665 Sir Isaac Newton discovered that a prism separates light into a spectrum of colors.
- red, orange, yellow, green, blue, indigo, and violet.
- Newton developed the first color wheel



TYPES OF COLORS

PRIMARY COLORS

- Red, Yellow and Blue.
- Pure colors; can't be mixed.
- All other colors are created from these colors.

SECONDARY COLORS

- Orange, Purple, and Green.
- Each is the result of 2 primary colors.

TERTIARY COLORS

- AKA intermediate colors.
- Created by an uneven mix of primary and secondary colors.
- Ex: Red-orange; yellow-green; blue-violet.

WARM COLORS

- Reds, yellows, and oranges.
- Found in elements that give off heat: fire, sun and light.
- Evoke feelings of heat and warmth.

COOL COLORS

- Blues, greens and violets.
- Found in elements that cool things down; water, air, foliage.
- Evoke soothing feelings.

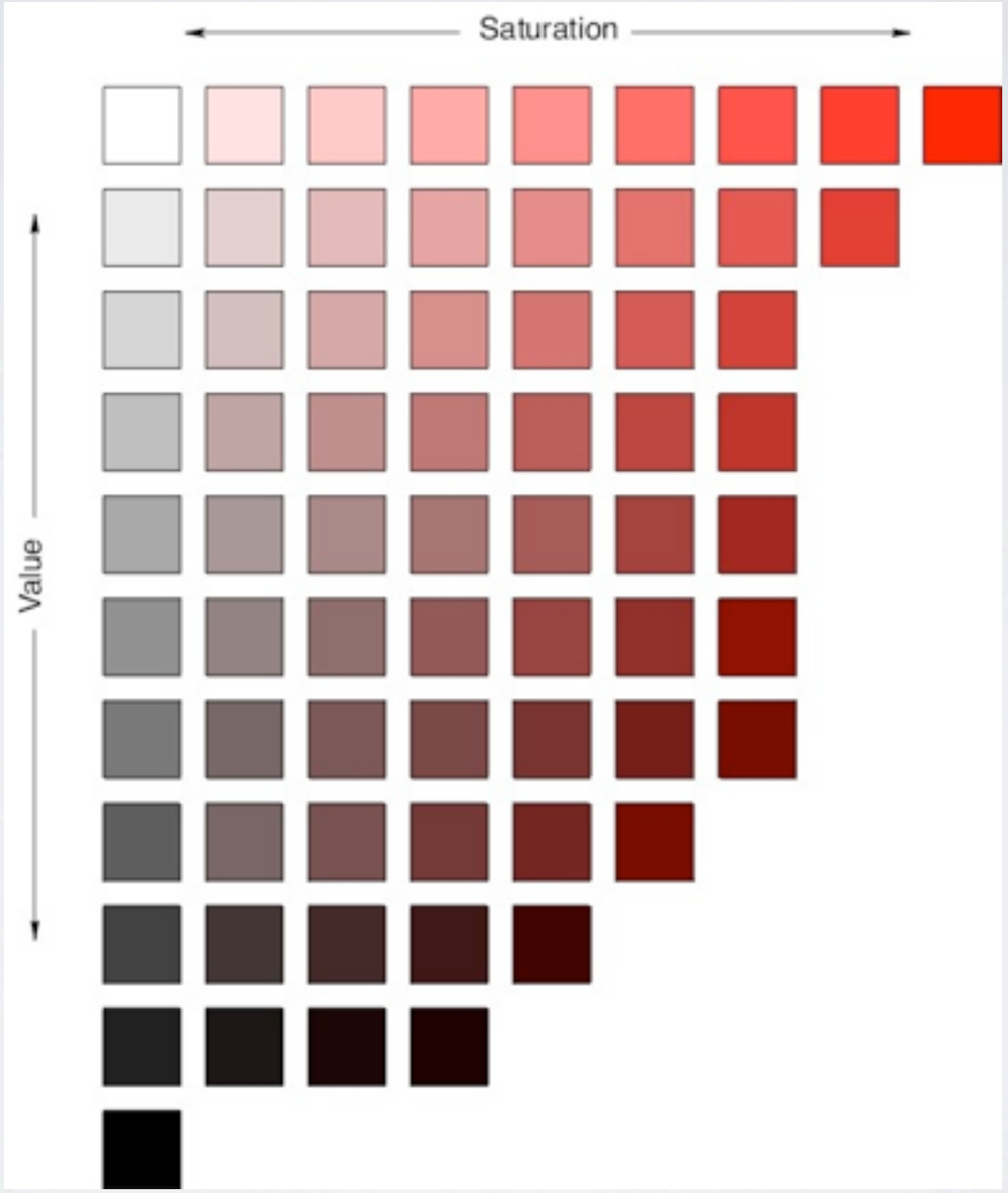
ASPECTS OF COLOR

Pure Hue

HUE= THE PLACE OF A COLOR WITHIN THE SPECTRUM.

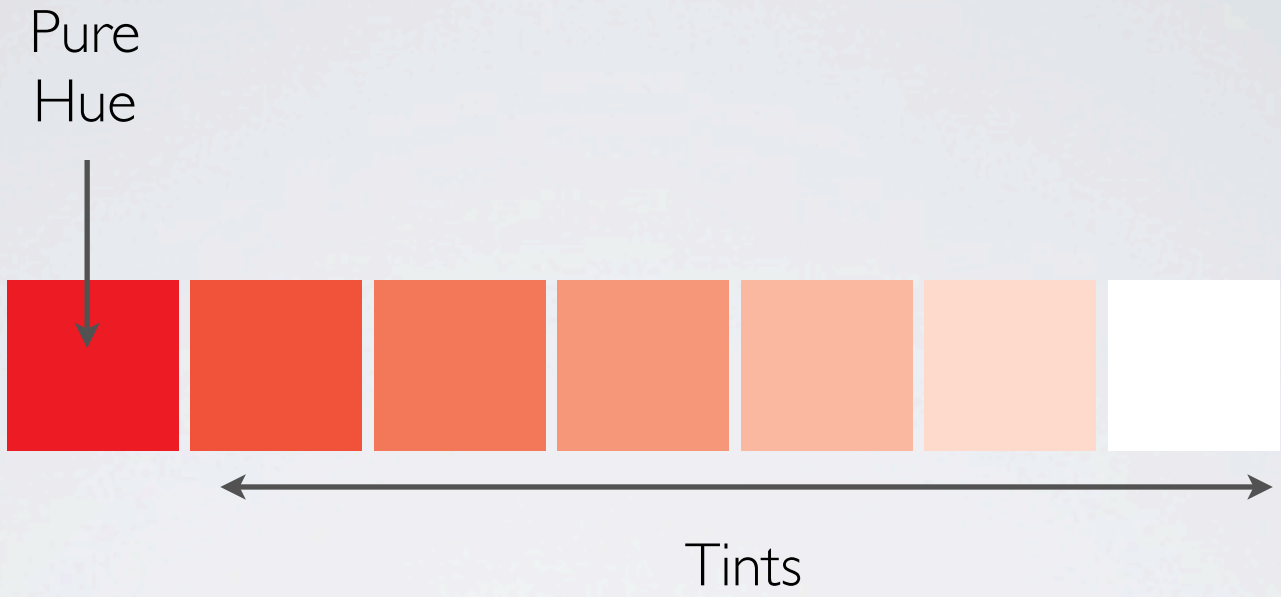
Saturation

brightness or dullness

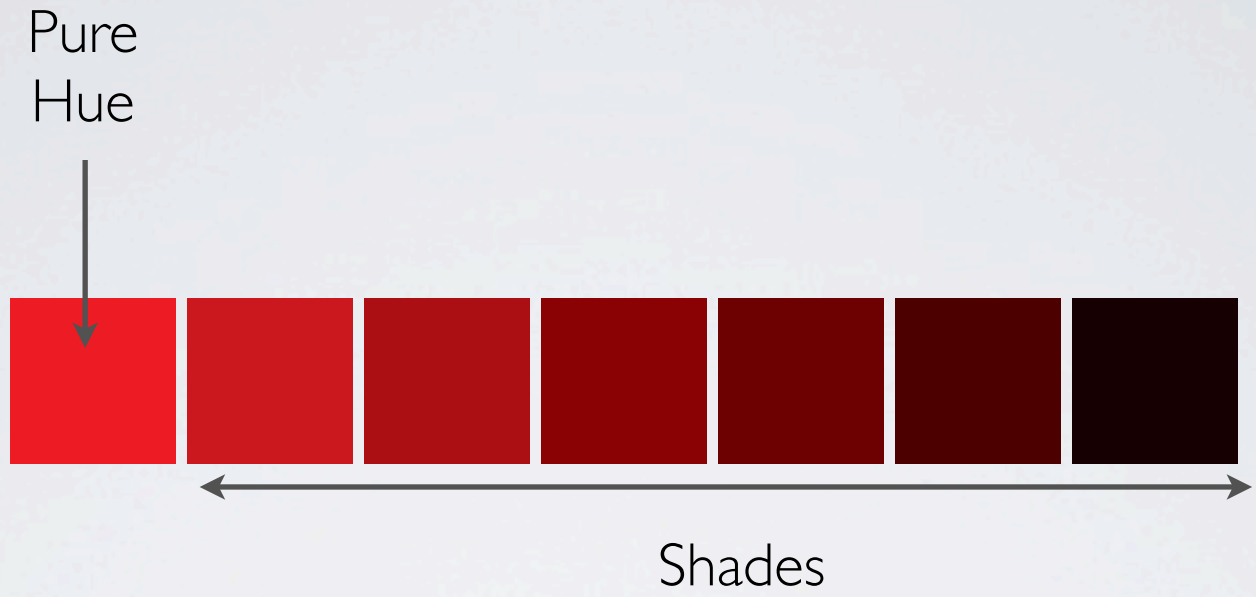


Value

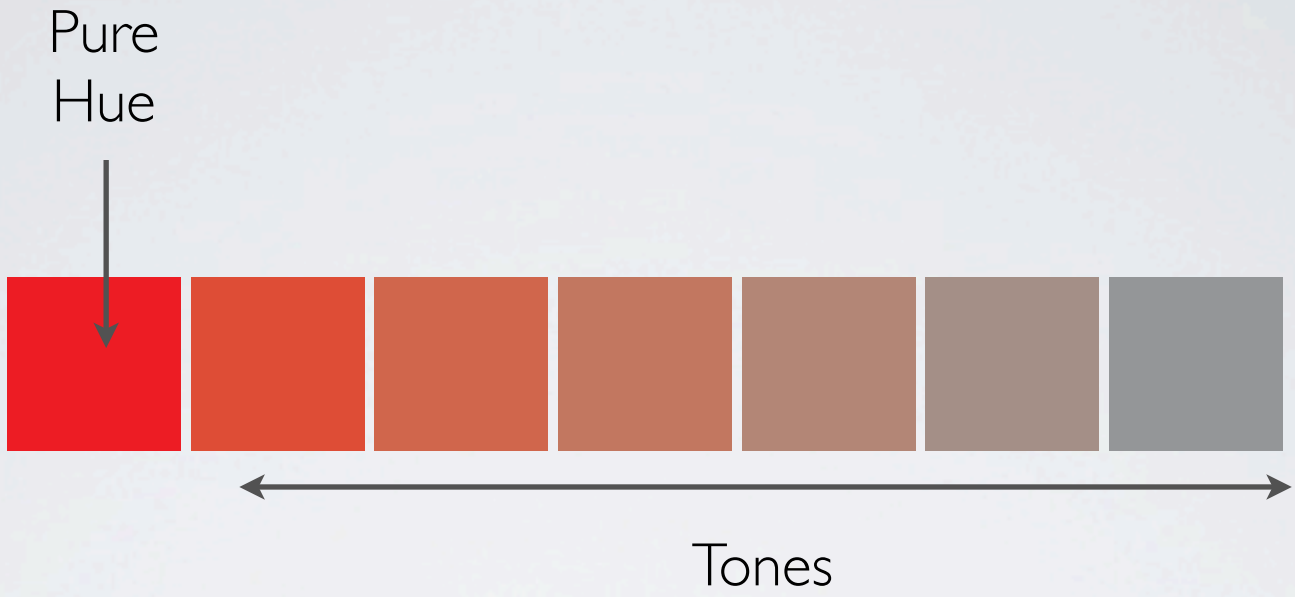
lightness or darkness



Tint= Adding white to a pure hue.



SHADES: ADDING BLACK TO A PURE HUE.



TONE: ADDING GREY TO A PURE HUE.

AHA™ MOMENT!

You can use Illustrator Blends for tints, shades, tones, and color relationships!

COLOR RELATIONSHIPS

ANALOGOUS COLORS

- Adjacent to each other on the wheel.
- Innate harmonies due to common elements.
- Minimal color contrast.
- Related color temperatures.

COMPLIMENTARY COLORS

- Two colors sitting opposite of each other on the wheel.
- Have opposing temperatures.
- Contain no element of the other.

SPLIT COMPLIMENTARY

- Base color + the 2 colors adjacent to the compliment.
- Less tension than complimentary colors.

TRIADIC COLOR

- Colors that are evenly spaced on the wheel.
- Very vibrant even if used with pale or muted colors.
- For balance, lead with one color, and accent with the other two.

RECTANGLE (TETRADIC)

- 4 colors made up of 2 complimentary pairs.
- Rich color scheme with many variations.
- For balance, pay attention to temperature and dominance.

SQUARE COLOR

- Similar to tetradic but effect a different tension.
- All four colors evenly spaced around the color wheel.

COLOR THEORIES

We'll briefly discuss the theories of three artists whose names I have just noticed, all start with J:

1. Johann Wolfgang von Goethe
2. Johannes Itten
3. Josef Albers

JOHANN WOLFGANG VON GOETHE*

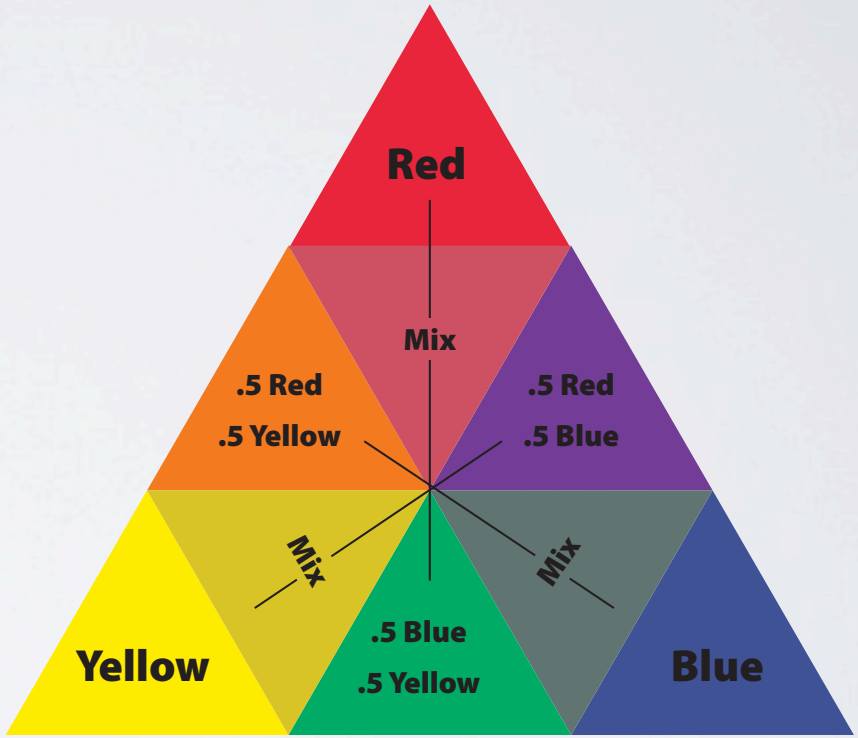
*funny story. his name is pronounced like "GER-TUh" not like "GOTH." i may or may not have once mispronounced that in front of some super fancy art people. it was good times. I cried a lot that night. (jk)

INTERESTING GOETHE BIT

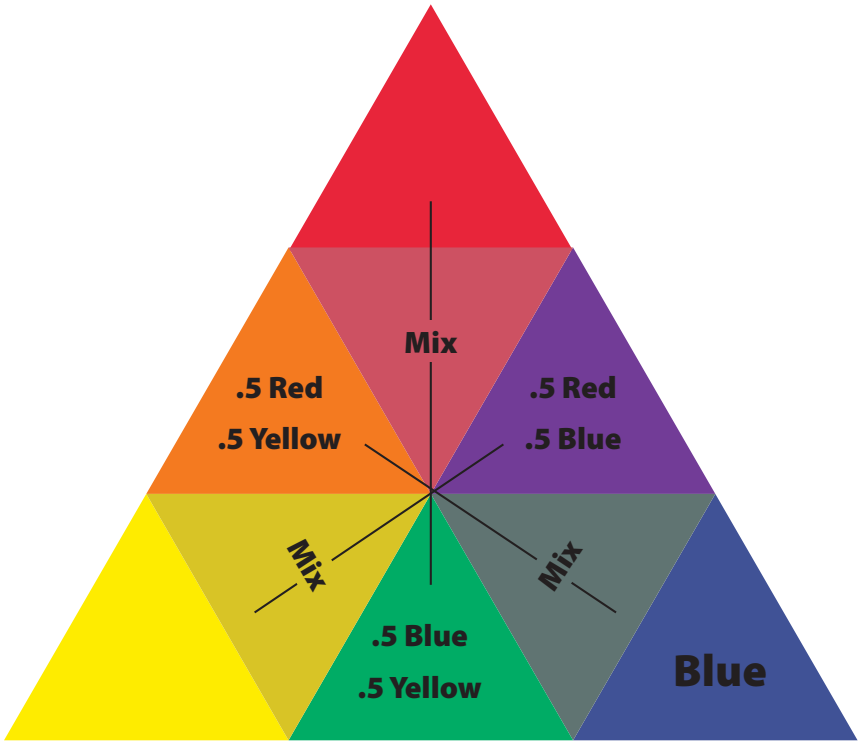
- Wrote the drama **Faust**
- Lauded as one of the most influential writers and philosophers of his time.
- Began his career as a **painter**.

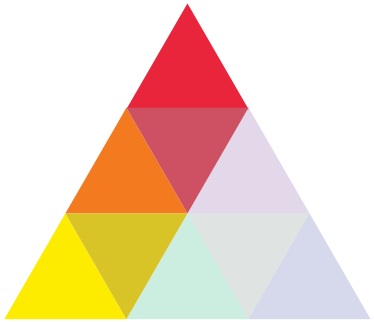
GOETHE'S TRIANGLE

- Primaries are the corners
- Secondaries the sides
- Tertiaries the mixtures of the three surrounding colors

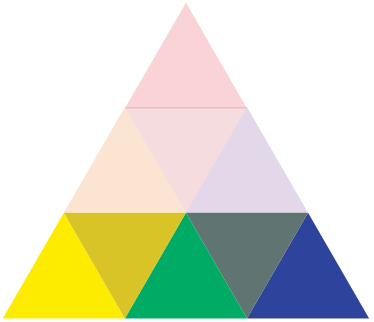


GOETHE'S EMOTIONAL TRIANGLES

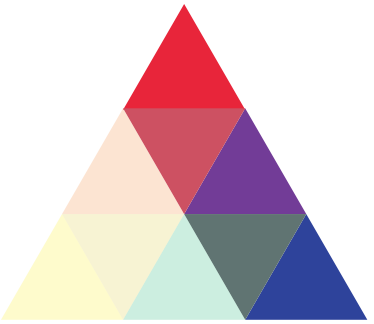




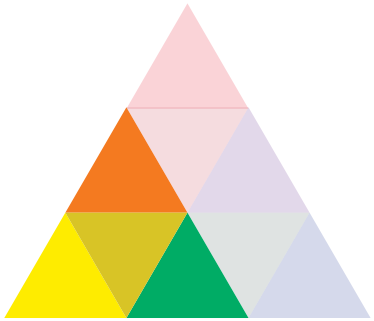
Lucid



Reflective

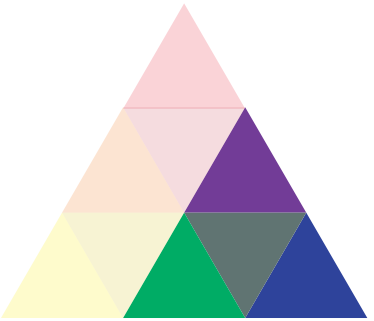


Serious



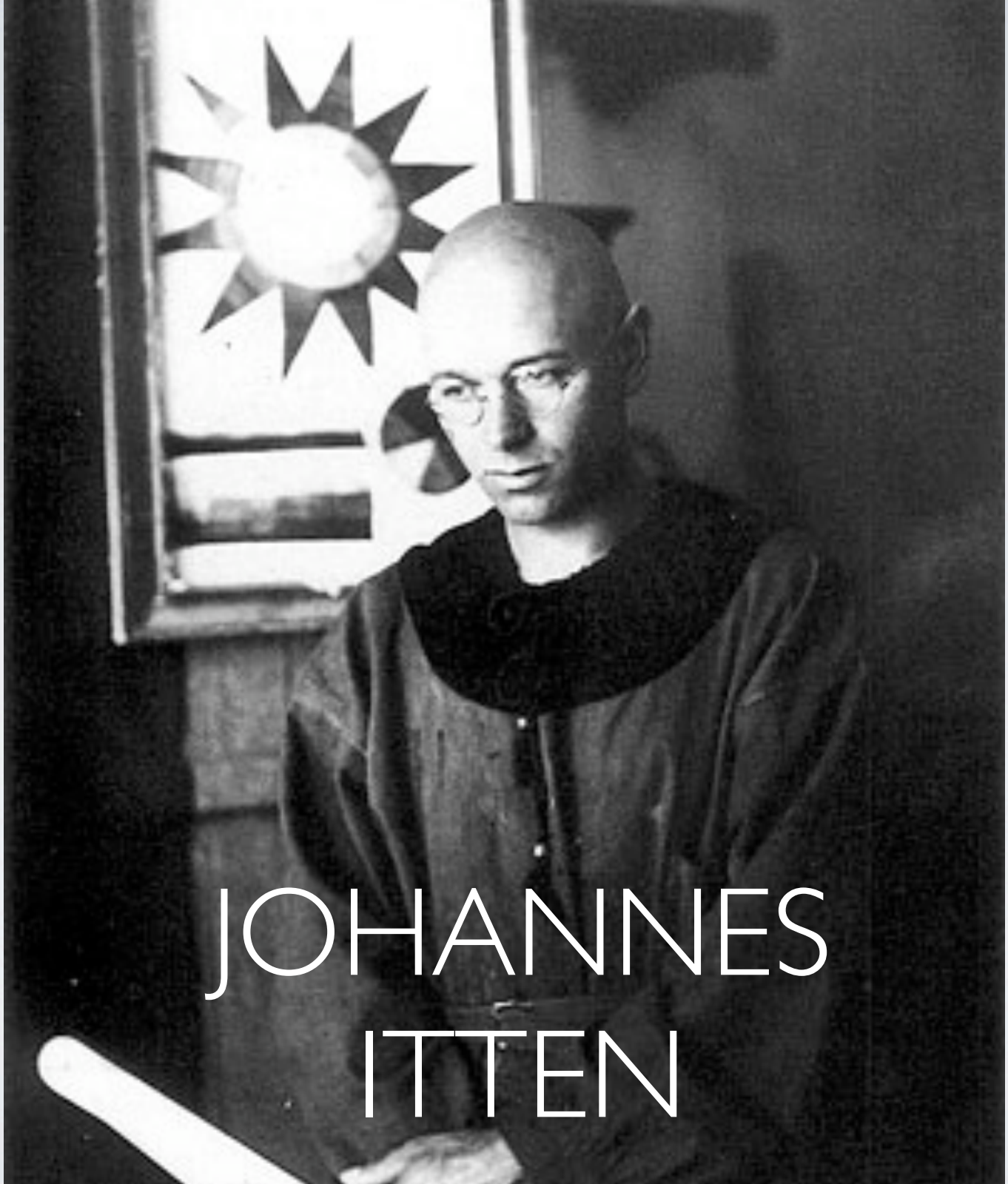
Serene

Mighty



Melancholic

Goethe opposed Newton's theories about color, seeking emotional explanations.



JOHANNES ITTEN

ITTEN'S COLOR CONTRASTS

- Itten taught at the Bauhaus.
- Itten + contrasts =♥
- Understood color by analyzing color *relationships*. Relationships to other colors, and other elements.
- Manipulating contrast effectively = stronger compositions.

Itten's 12 Hue Color Circle

ITTEN'S COLOR CONTRASTS

Contrast of Saturation

Contrast between pure, intense colors and dull, diluted colors.

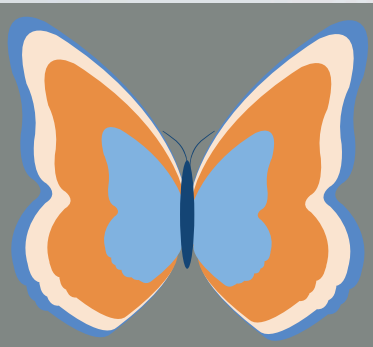
Contrast of Light and Dark

Contrast between light and dark values of colors

Contrast of Proportion

Contrast between large and small areas of color.

ITTEN'S COLOR CONTRASTS



Contrast of Complements

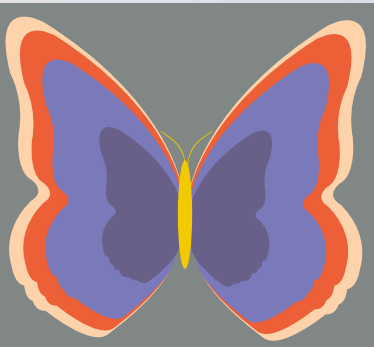
Contrast between opposite colors on wheel.

Simultaneous Contrast

Contrast when the eye automatically interprets a color's compliment even if it isn't present, causing vibration.

Contrast of Hue

Contrast between three (3) clearly differentiated hues.



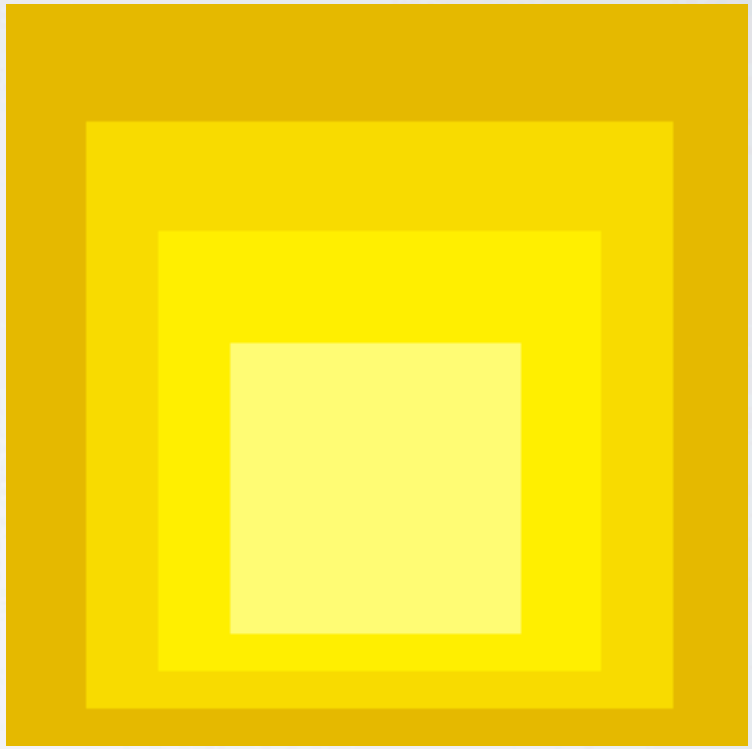
Contrast of Warm + Cool

Contrast between different color temperatures on the wheel.

JOSEF ALBERS

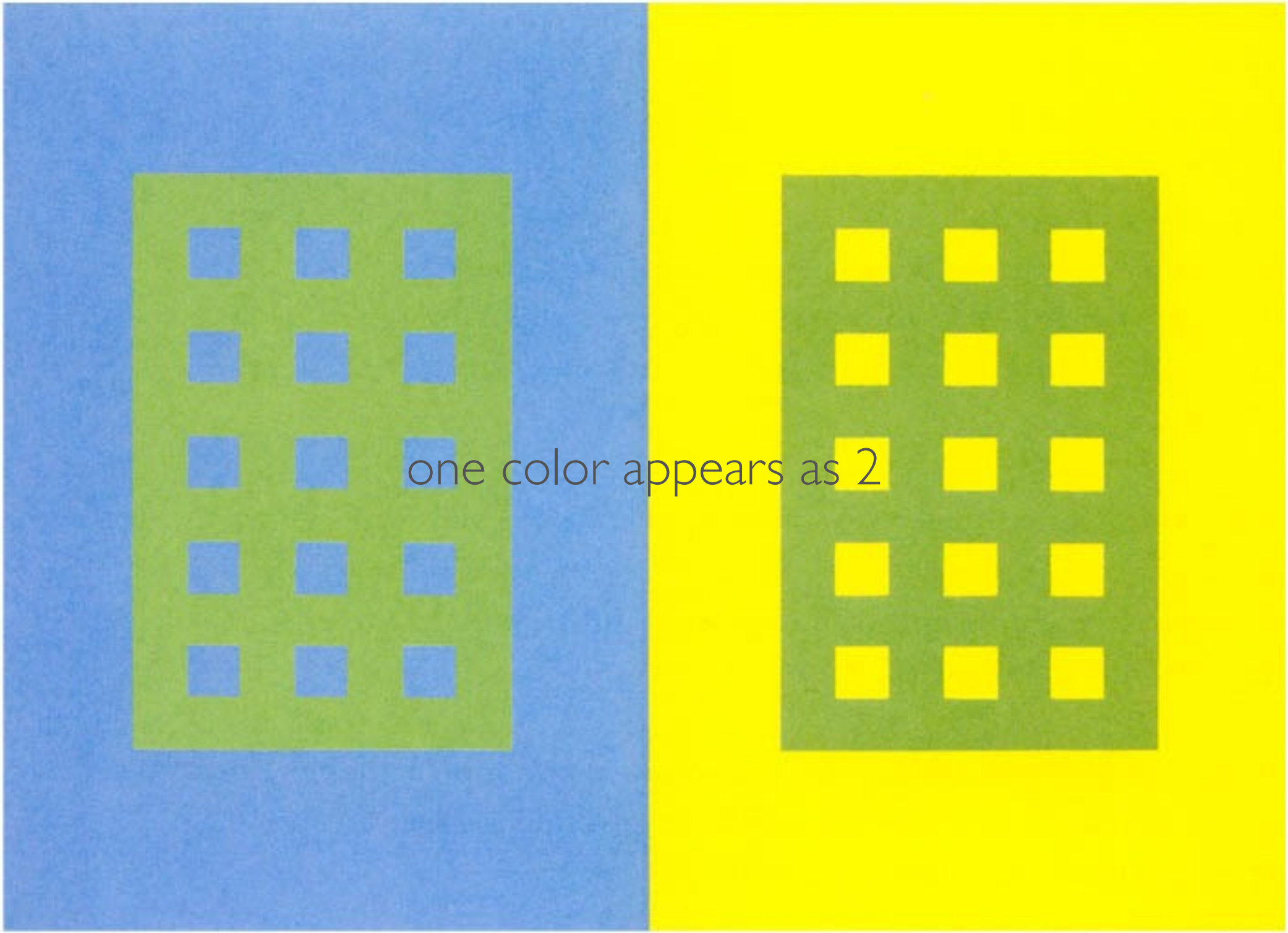
ALBERS COLOR

- Albers studied under Itten at the Bauhaus
- Studied the interaction of color
- **Big idea**: Color is relative to that which surrounds it.

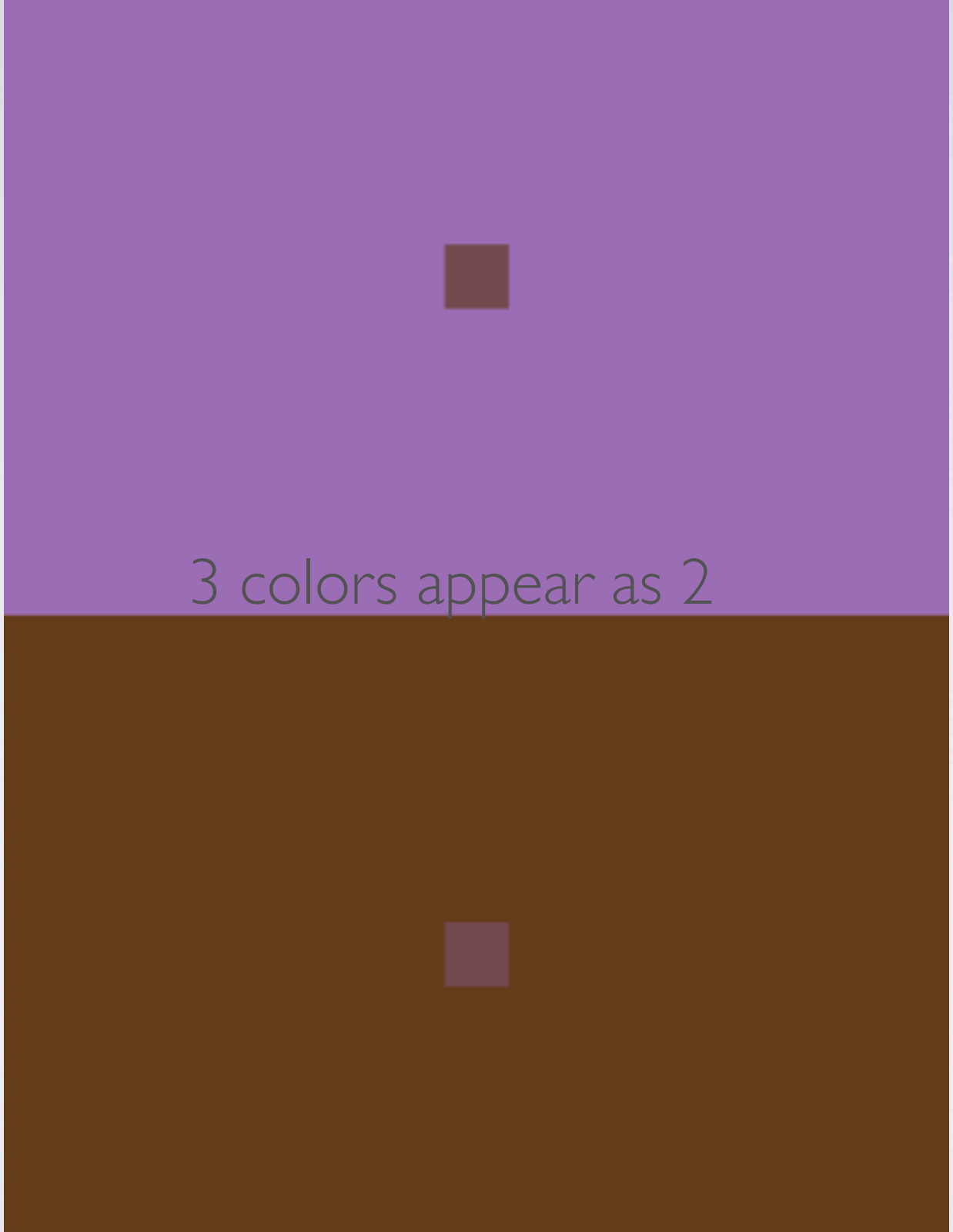


Albers "Homage to the Square" 1965

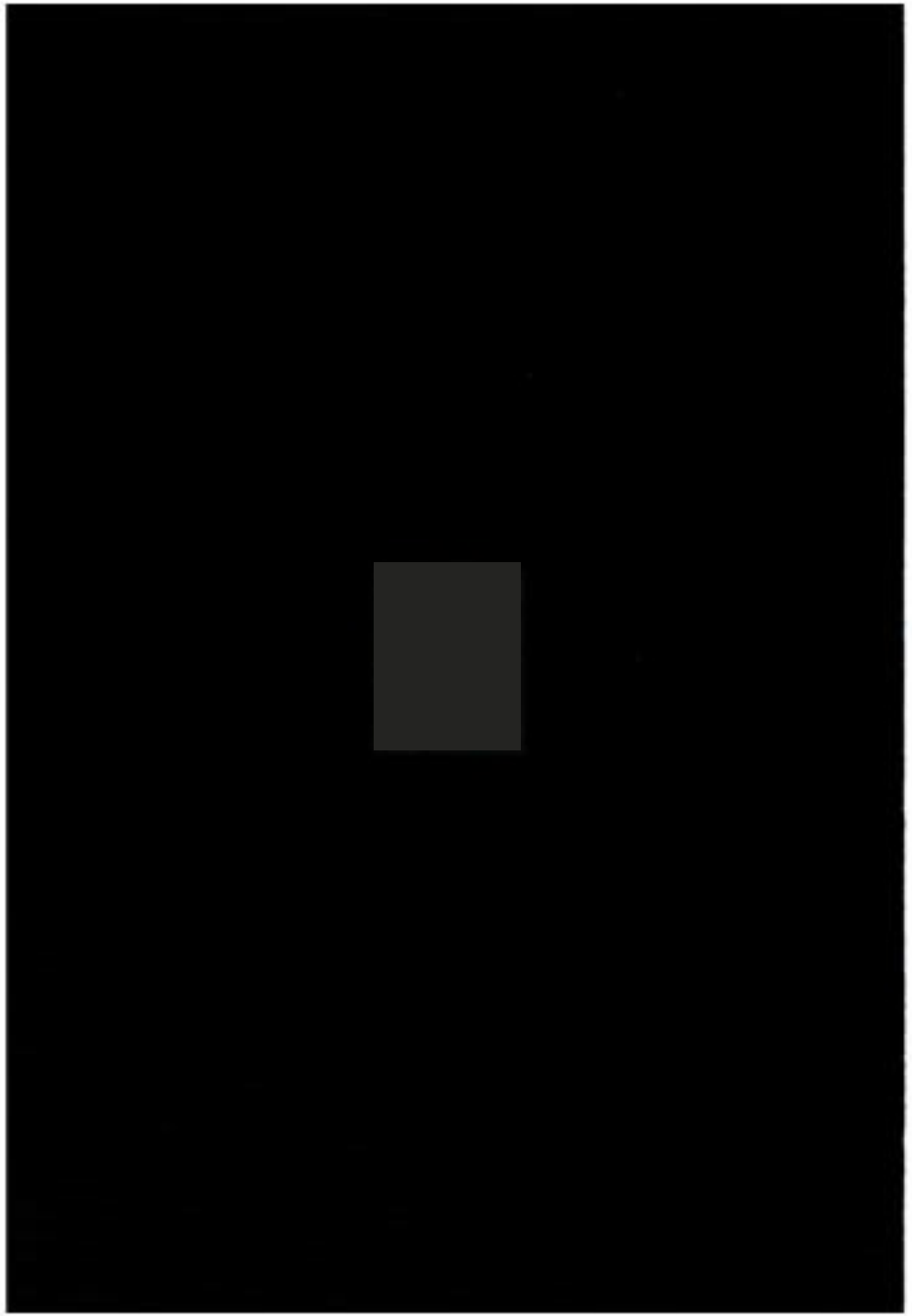

one color appears as 2


one color appears as 2

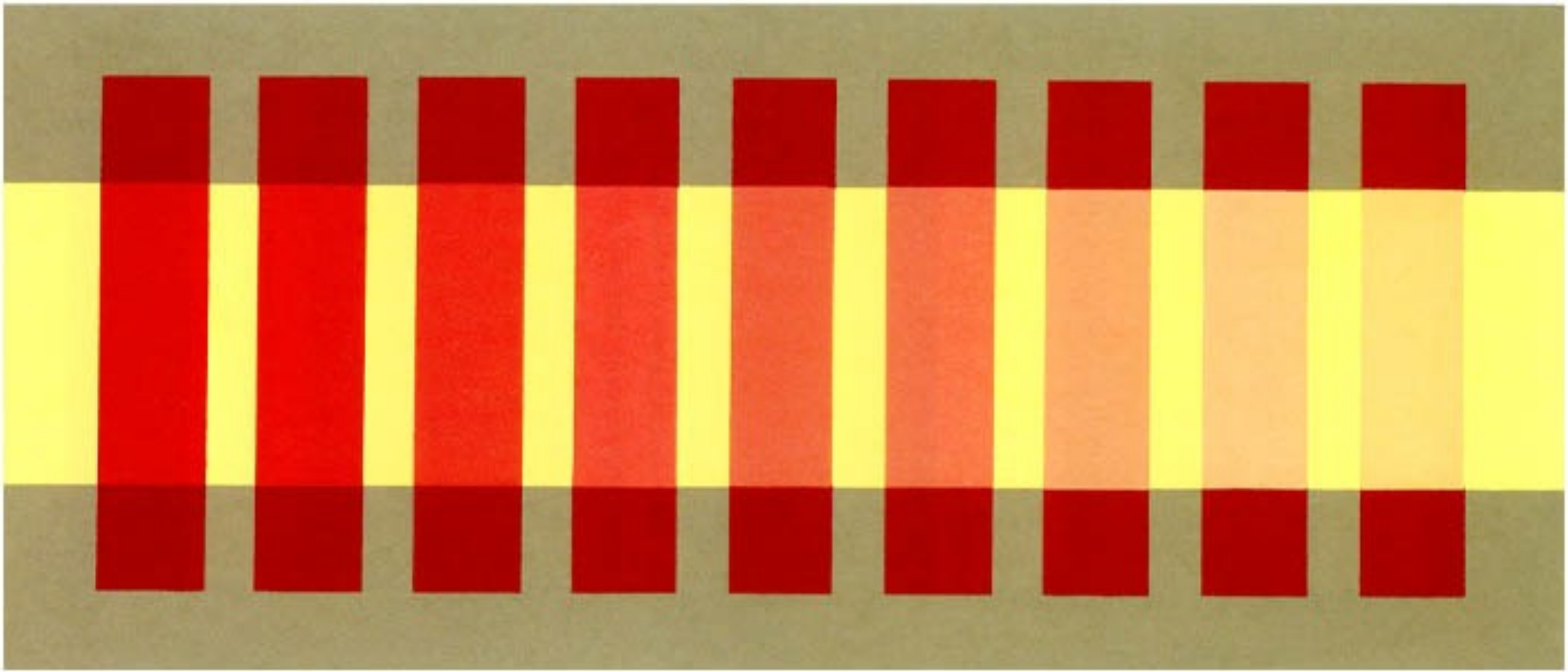

one color appears as 2


3 colors appear as 2

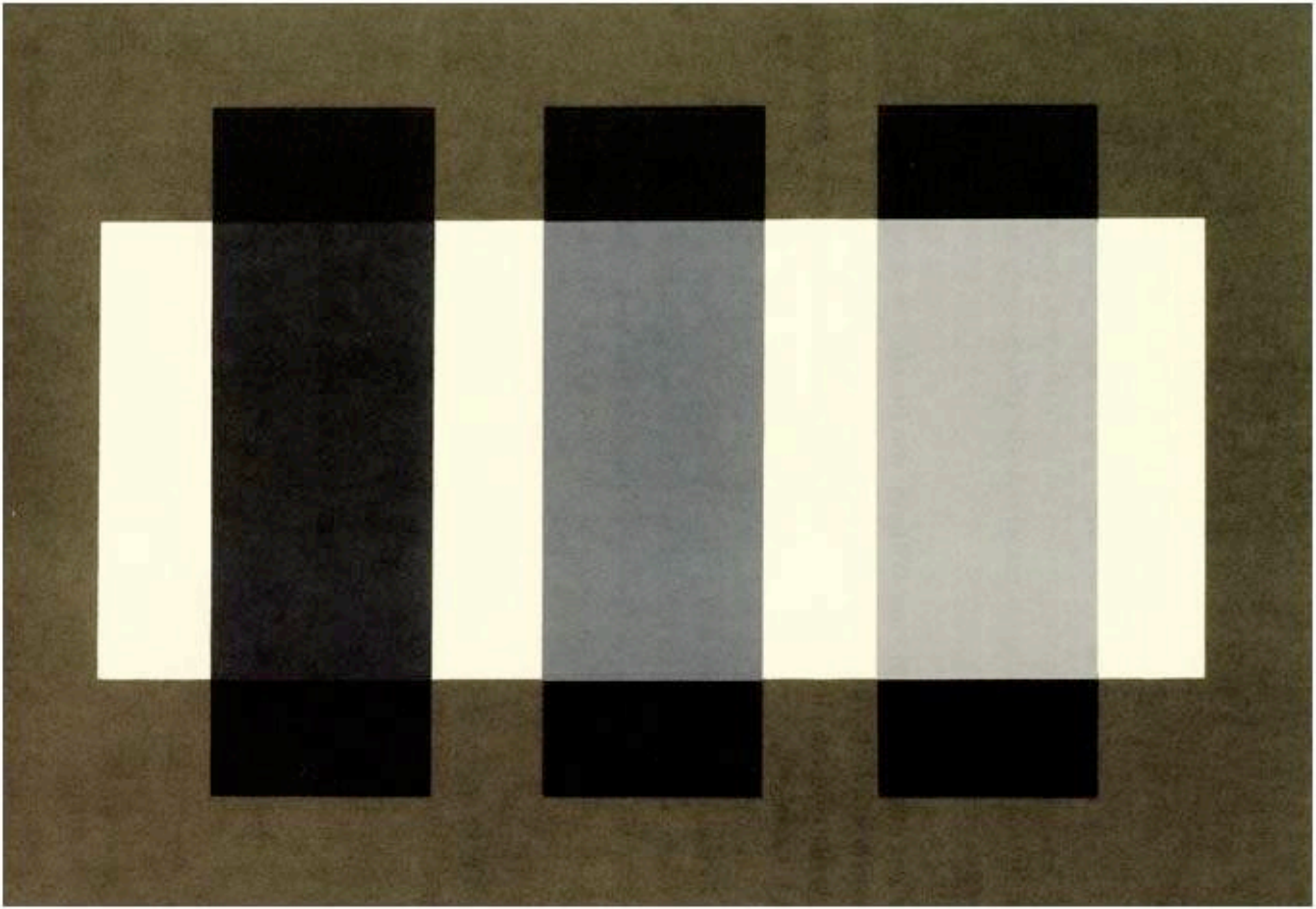
2 colors appears as 1



Grey is totally different on black or white ground



Transparency can cause spatial illusions



Transparency can cause spatial illusions

DO WHAT NOW?

- Practice applying this theory to your pattern design and color ways.
- The entire point of color theory is to help you get a hold of color and use it effectively in your work. If you're already doing that, see if any of these theories explain why?
- Do you have fear about color? If so, what's up with that? If not, why not? Either way, does a color *system* help alleviate fear?