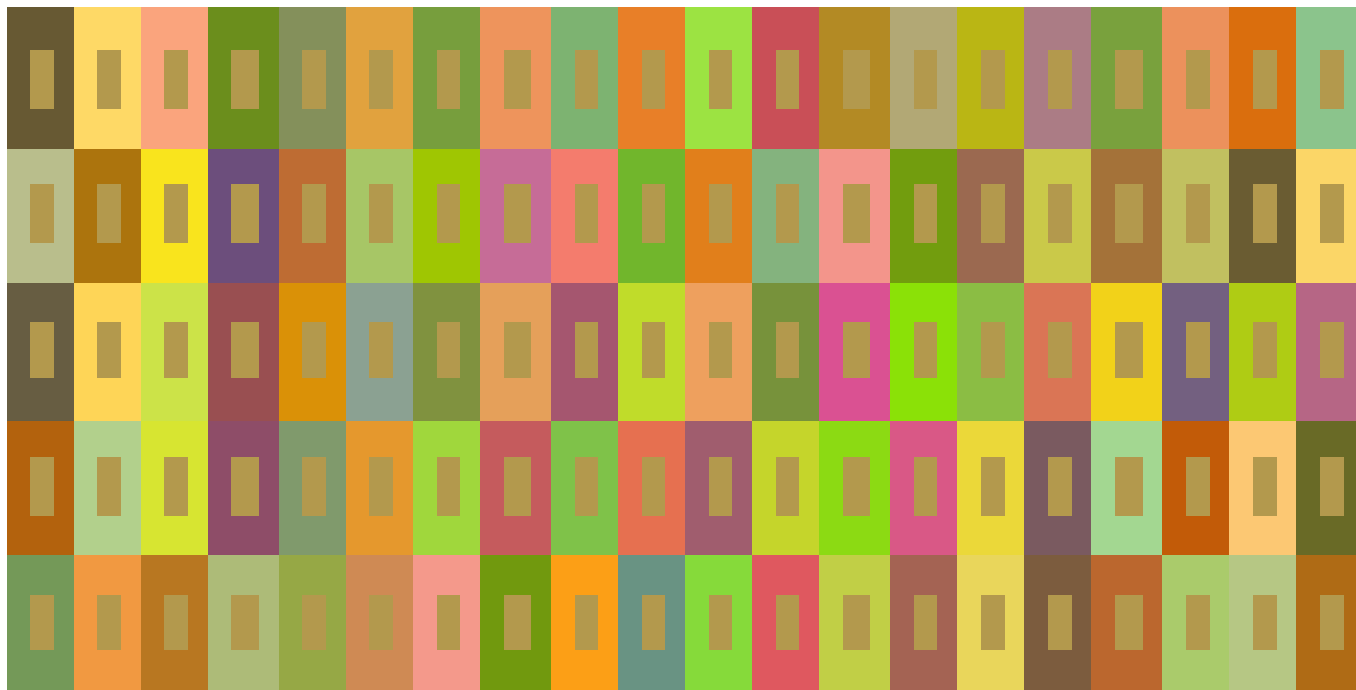
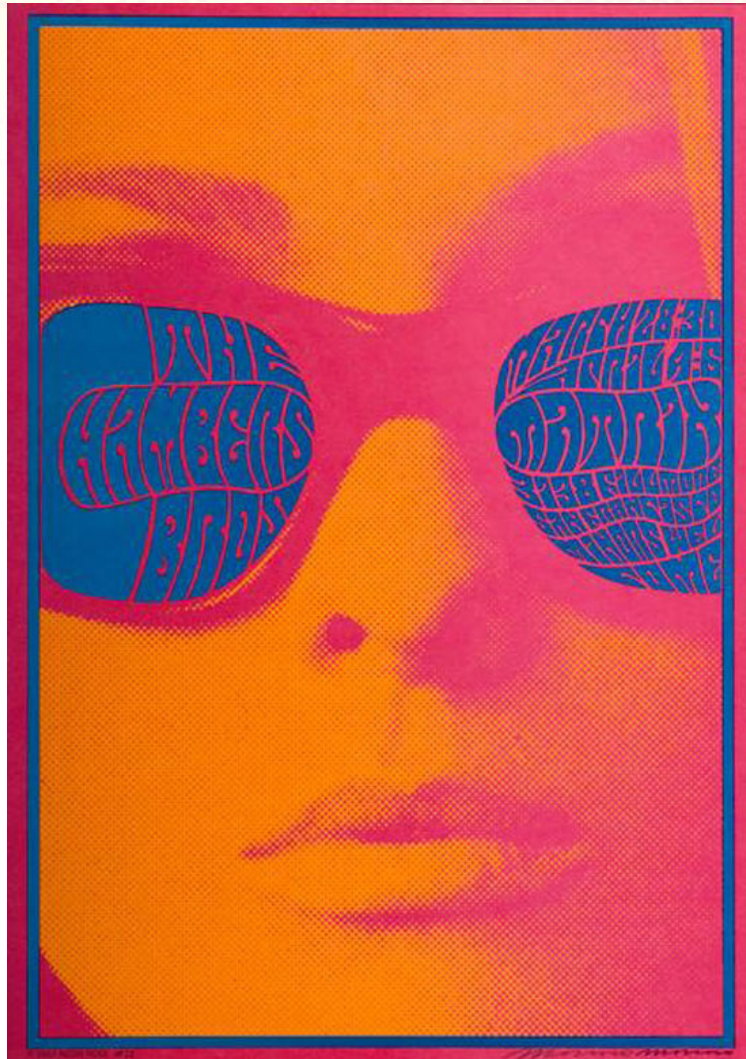


# Color Interaction



# What is color interaction?

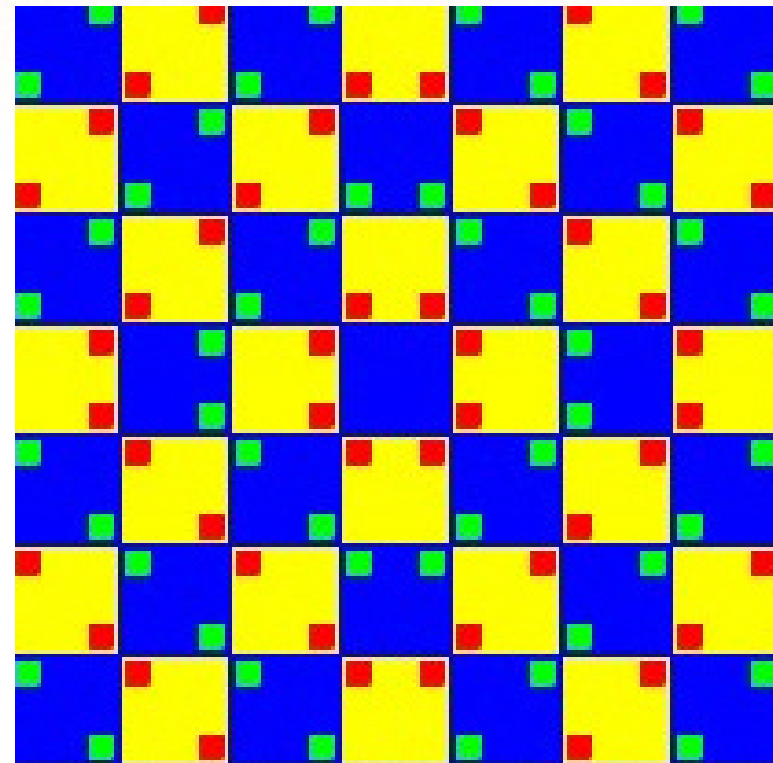
- the illusion that occurs within our perception
- this is a constant – we rarely see color in isolation



# Simultaneous Contrast

When colors interact, the appearance changes

- adjacent colors
- surfaces cause interaction



## After Image (Successive Contrast)

- Occurs when the color sensors in our eye fatigue
  - forces eye to revert to compliment
- Sometimes it works in reverse (contrast reversal)
- Can alter our perception of neutrals



# 3 Principles of Color Interaction

1. Light/Dark Value Contrast
2. Complimentary Reaction or Effect
3. Subtraction



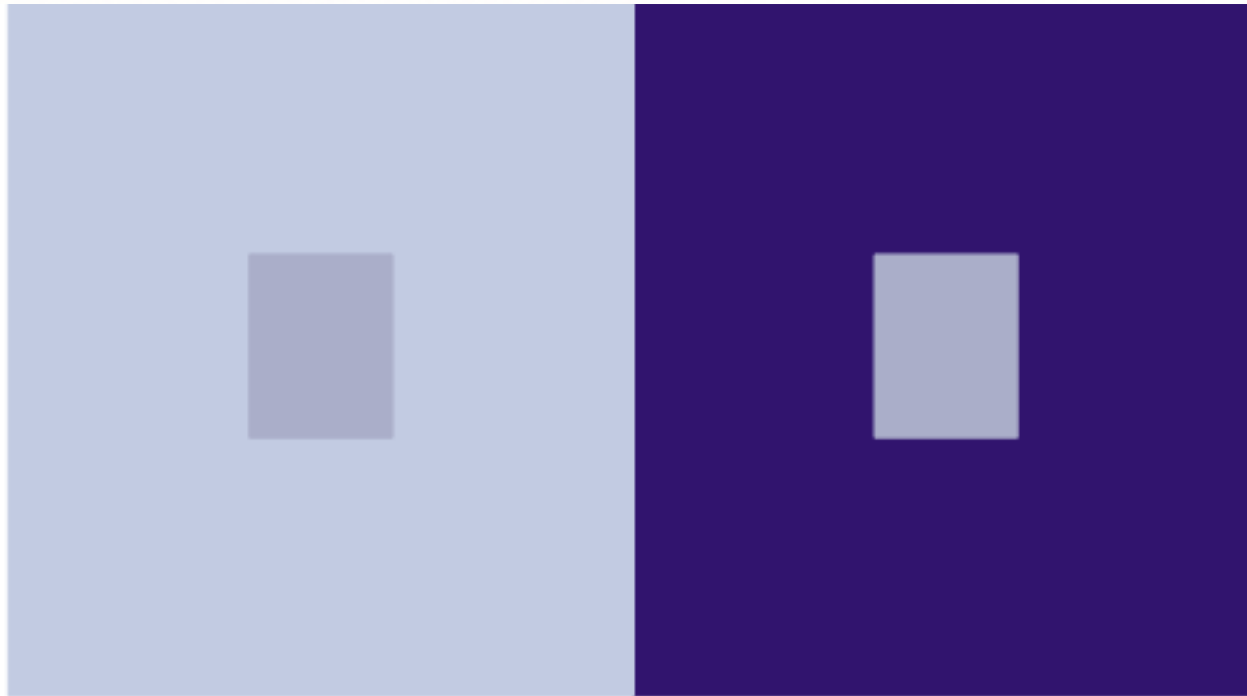
# Light/Dark Value Contrast

Color will appear lighter on a dark background

- called **comparitive relationship**

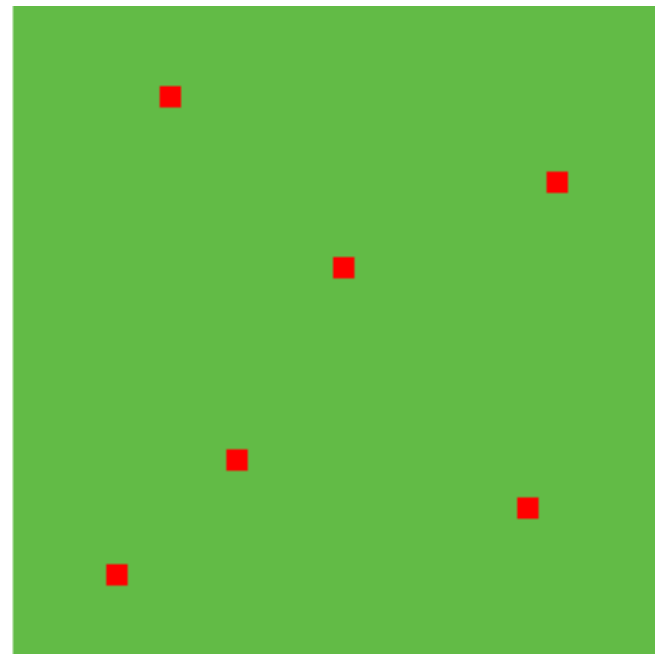
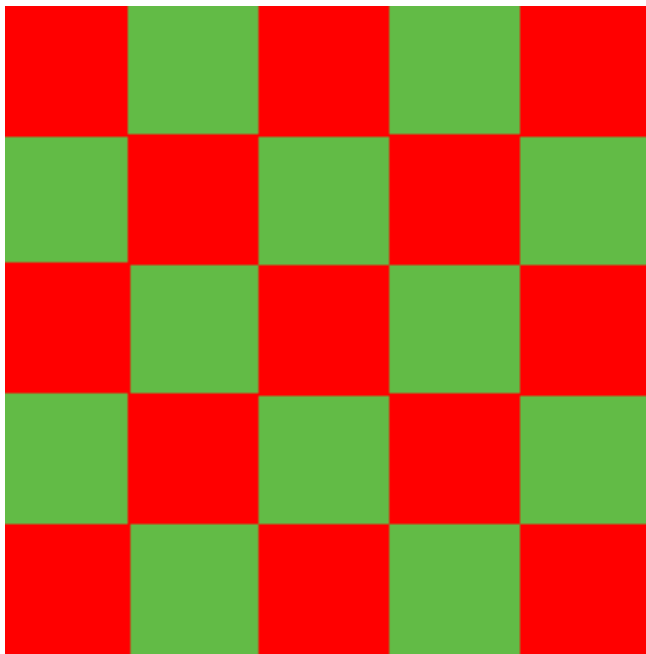
So that means what on a light background?

**(Contrasting Value Relationship)**



## Complimentary Reaction or Effect

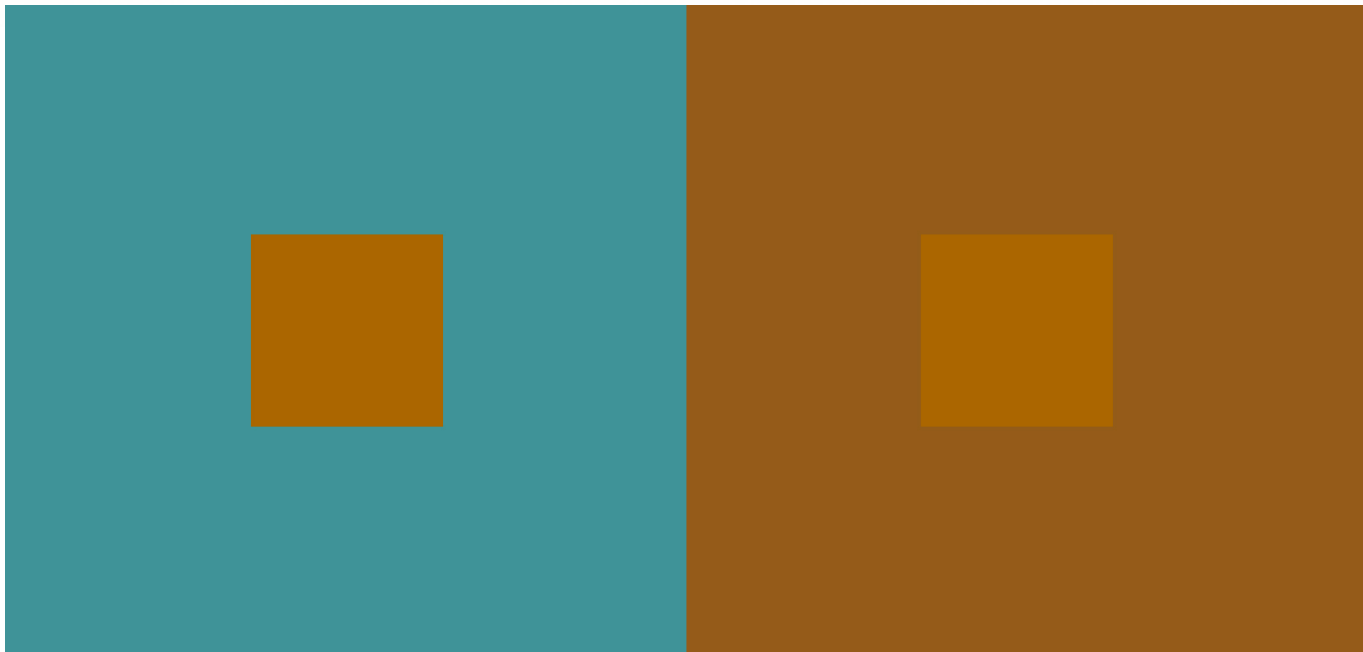
- Our eye seeks compliments – even more when color is intense
- Compliment Effect causes color to bend toward compliment (**green surrounded by red seems more green**)



# Subtraction

A strong dominant color will subtract itself from a smaller or less dominant color.

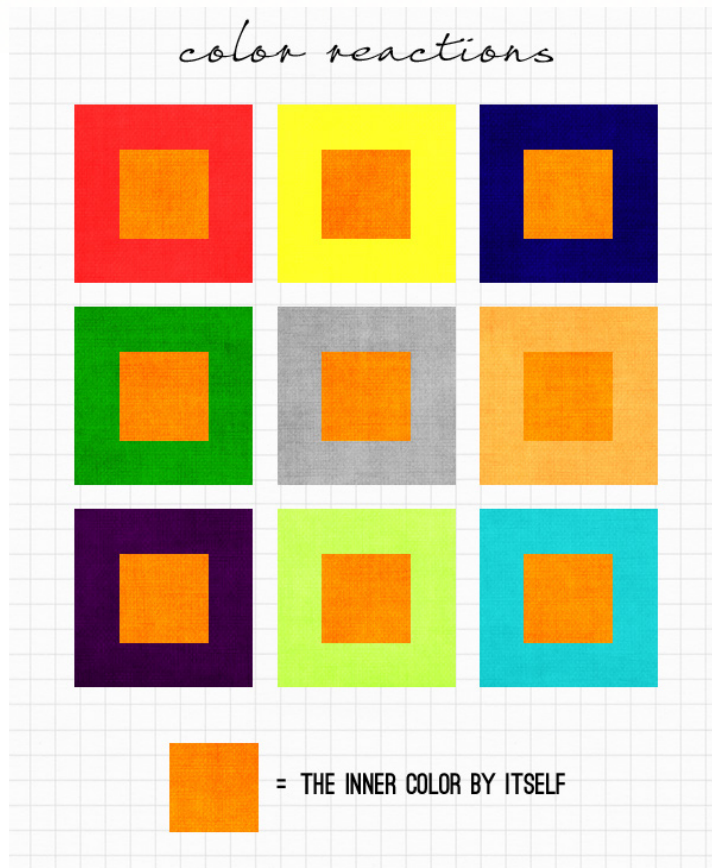
**Example:** YO on an orange background will seem less orange than it would against a neutral background





# Subtraction – continued

- Careful manipulation of surroundings can alter the base hue
- Two different colors can appear the same based on the effect of surrounding color

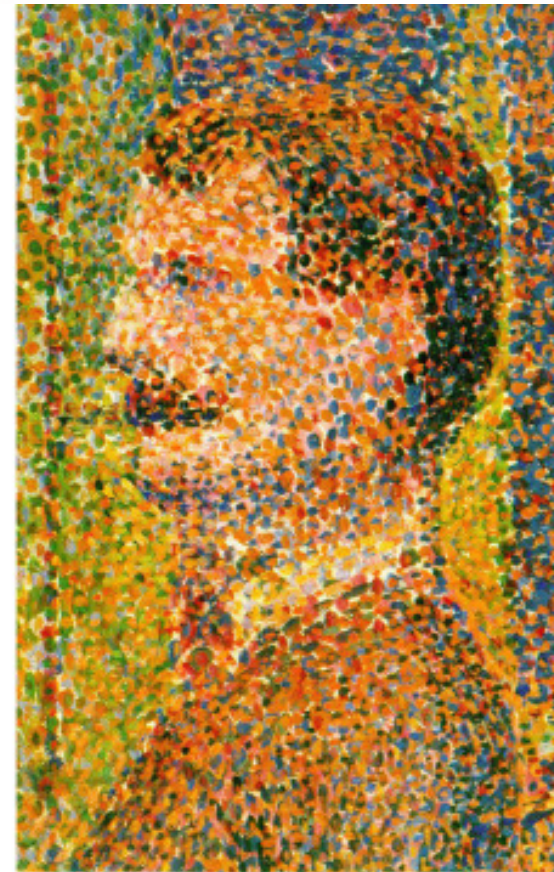
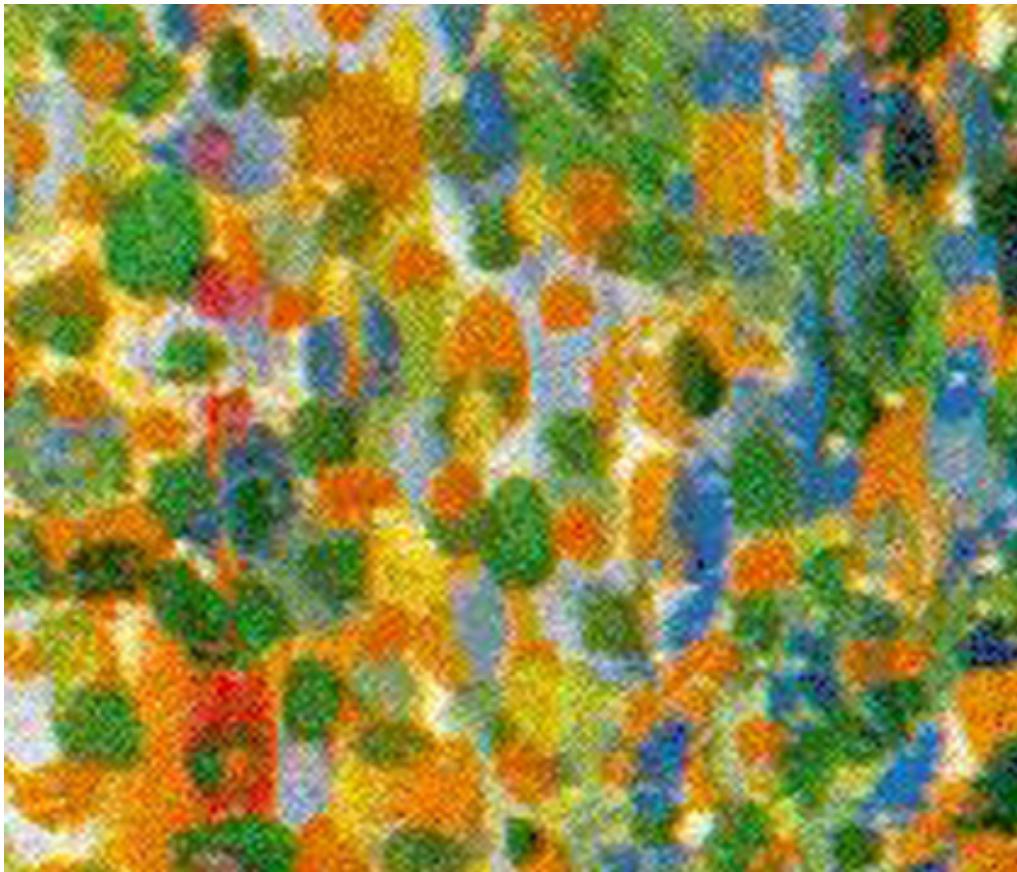


# Optical Mixtures

Types of color interactions that cause our eye to create a third color when two colors are in particular relationships.

- Two or more colors blend to create a third

**Persistence of vision** – we blend images together to create the illusion of movement or continuous color



# Broken Color

Static juxtaposition of 2 colors that produce a third

- Impressionists felt small marks of adjacent color created more vibrant sense of light than flat color or continuous tone
- Most famous example of broken color = Pointilism



# Optical Mixtures of Pigmented Color

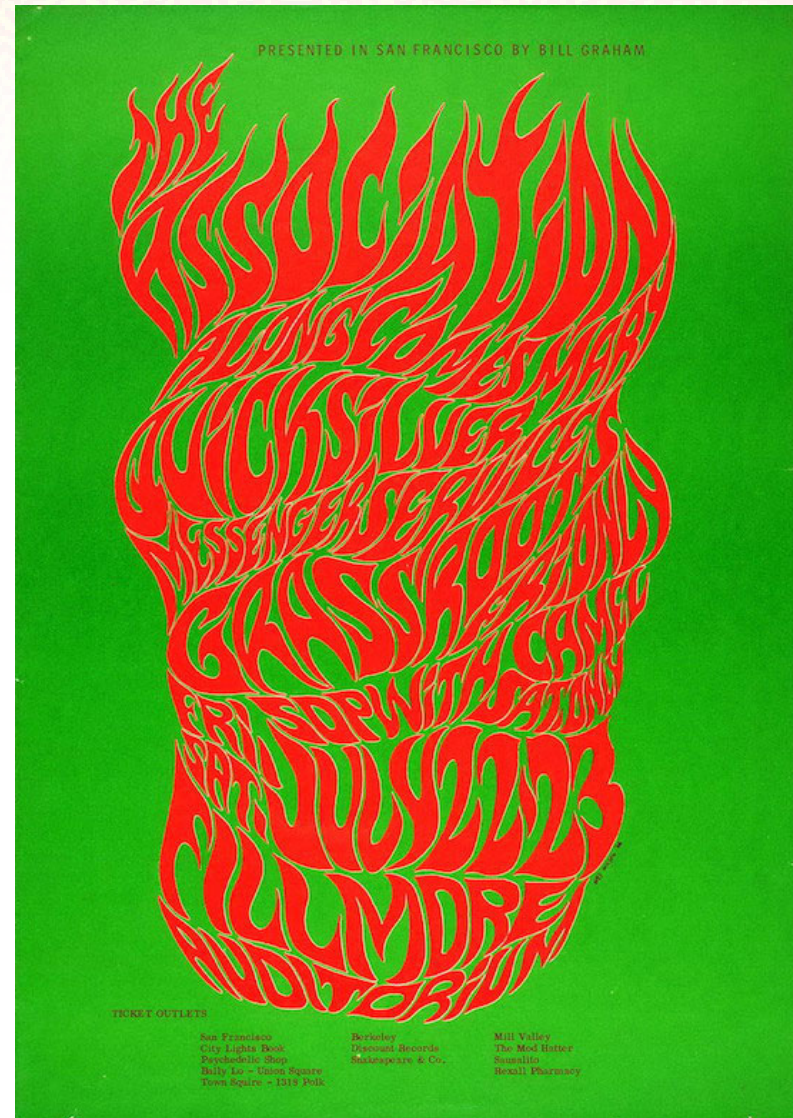
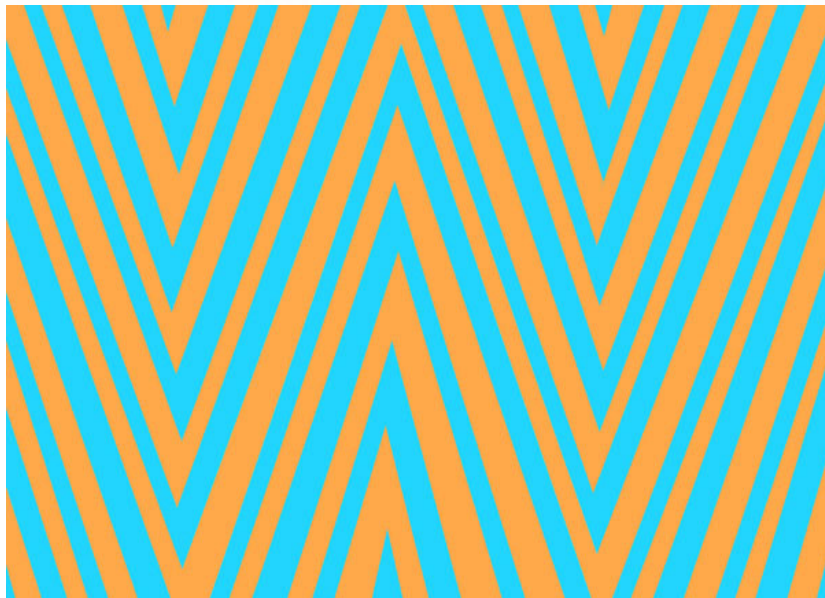
## Sympathetic Analogous Mixture

Color similarity allows for easy visual blending



# Optical Mixtures of Pigmented Color Complimentary Vibration

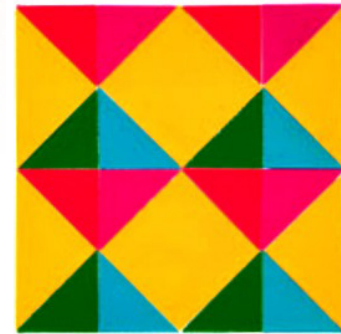
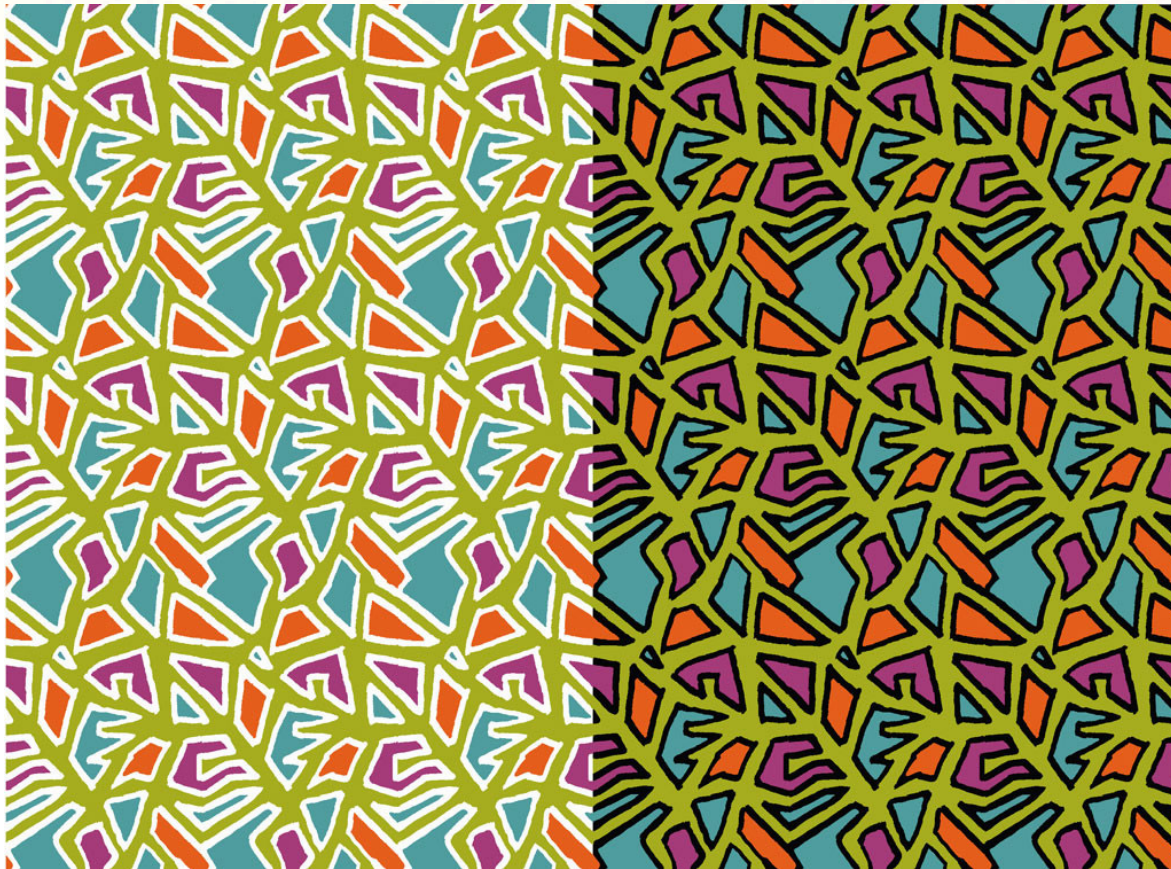
Compliments in an optical mixture vibrate  
as if repelling each other



# Optical Mixtures of Pigmented Color

## Bezold Effect

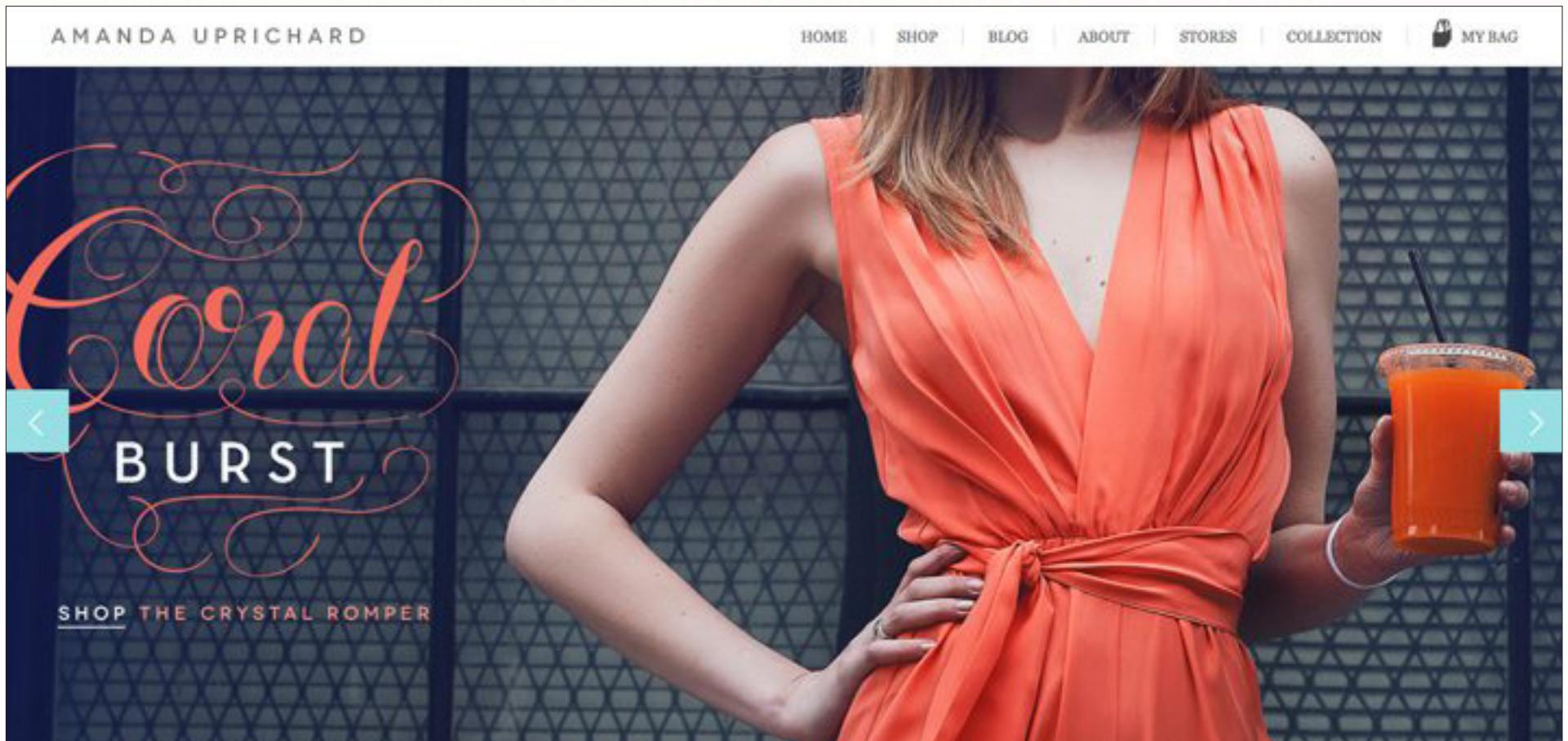
A single color change can completely change a pattern



# Optical Mixtures of Pigmented Color

## Color Dominance

when a single hue, value, saturation is the most dominant in a composition



# Optical Mixtures of Pigmented Color

## Color Transparency

**Actual Color Transparency** – use or perception of transparent materials

**Simulated Transparency** – Color interactions that create the illusion of actual transparency

Watercolor is the only transparent medium

