

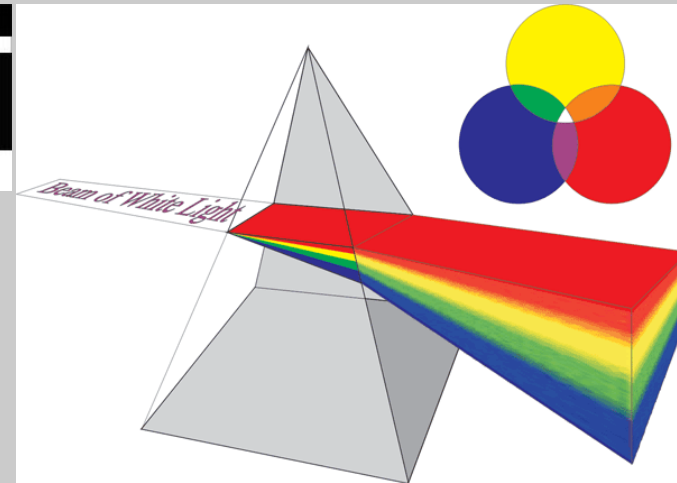
Color is a property of light

- Sir Isaac Newton experimented with the properties of light.
English scientist, astronomer, and mathematician
Born in 1642 - Died in 1727.
- White light refracted through a prism
- His conclusion: something that appears green, such as grass, looks green because it reflects the green light in the sun and absorbs most of the other colors.
- All color comes from light



Prism/Solar Spectrum
Artist: Charles Ross
Artwork Street Address: 401 Second St NW
Location: Convention Center

Value and Color



“If one says “Red” (the name of a color) and there are 50 people listening, it can be expected that there will be 50 reds in their minds. And one can be sure that all those reds will be very different.

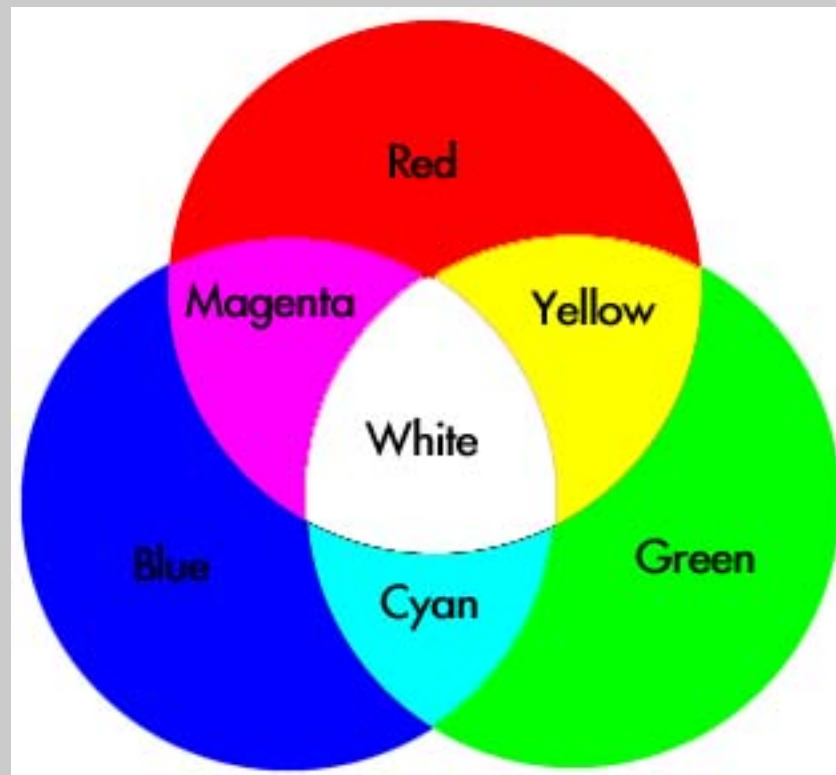
Even when a certain color is specified which all listeners have seen innumerable times- such as the red of the Coca Cola signs which is the same red all over the country- they will think of many different reds.

Even if all the listeners have hundreds of reds in front of them from which to choose the Coca Cola red, they will again select quite different Colors. And no one can be sure that he has found the precise red shade...”

Interaction of Color, Joseph Albers , Yale University Press, 1963, page 3.

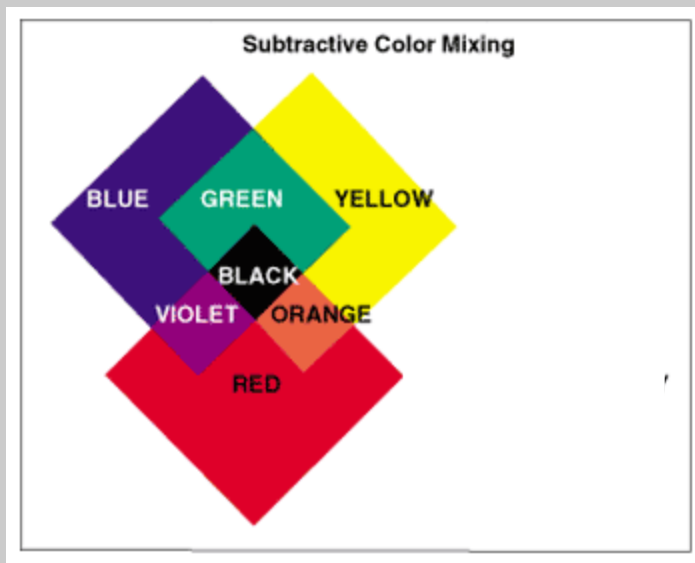
Light and Pigment

- Colors of light mix according to the additive process
- The primary colors of light are Red, Green and Blue



Pigment

- The colors of pigments mix according to the subtractive process.
- The primary colors for pigments are Red, *Yellow* and Blue.



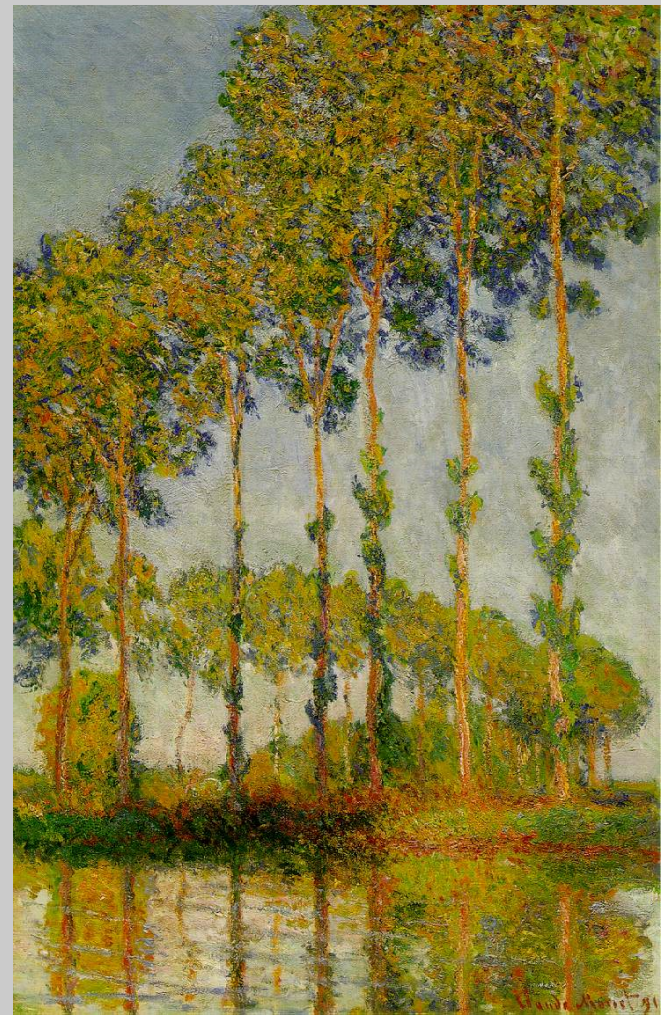
CMYK is the color system used for printing

Color constancy

We insist that the grass is green despite visual evidence
remember: as light changes so does color



Monet,
Poplars along the River Epte



Giorgio Morandi

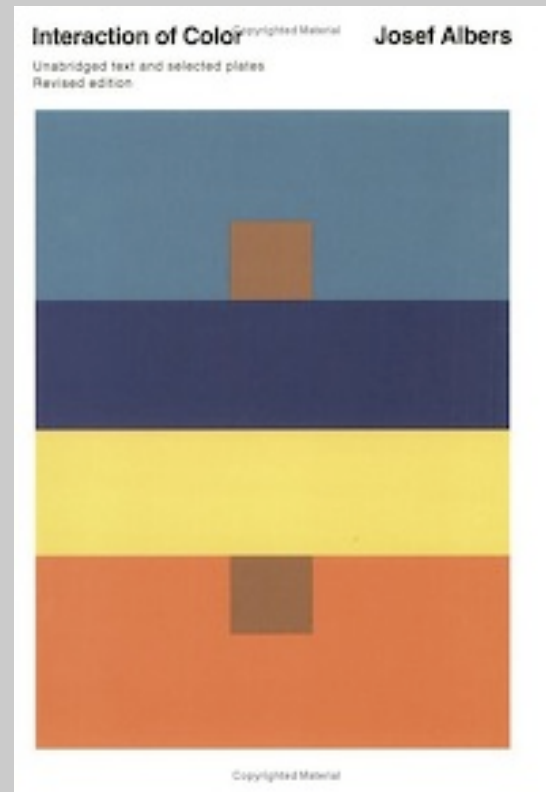
Color varies depending upon the context: the surrounding objects or the light in the room changes the color of each element of the still life below.



Color is relative

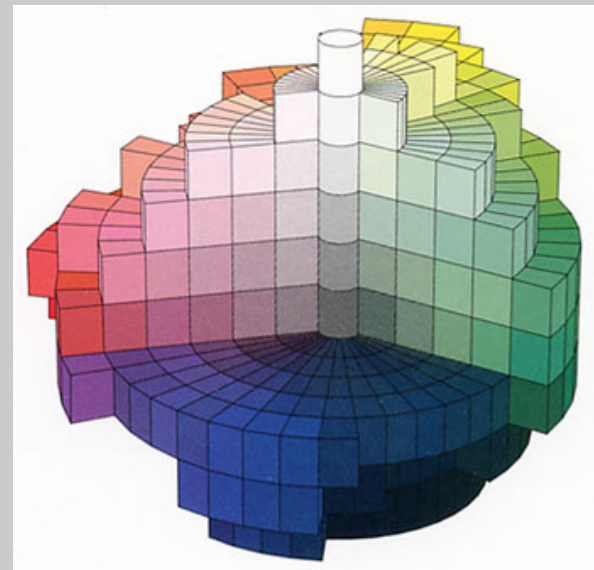
one color can look like two colors

- The top and bottom squares are the same strip of paper.
- Color is affected by surrounding colors.



Hue

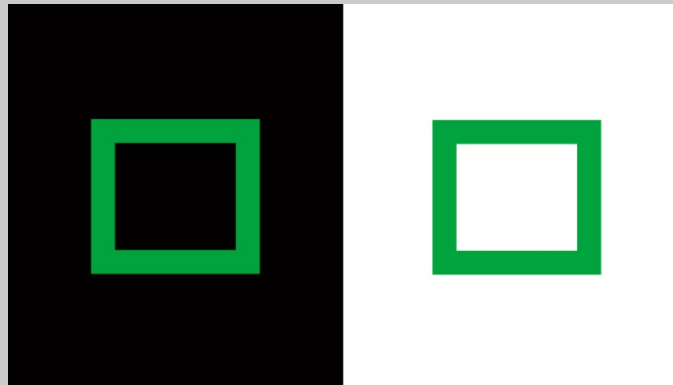
- Hue refers to the name of the color.
- Red, orange and yellow are all hues.
- Hue also refers to a range of colors within part of the color spectrum. For example: pink, rose, scarlet, maroon are all colors but the hue is red.



Value

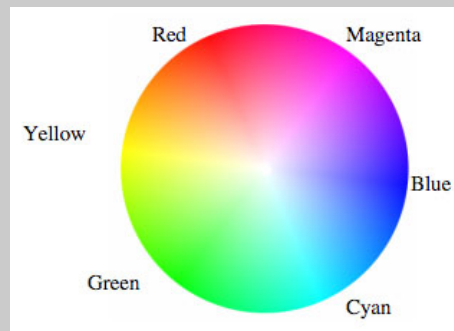
- Value refers to the lightness or darkness of the hue.
- Adding white produces a tint
- Adding black produces a shade

Value, like color, is also relative



Color Intensity

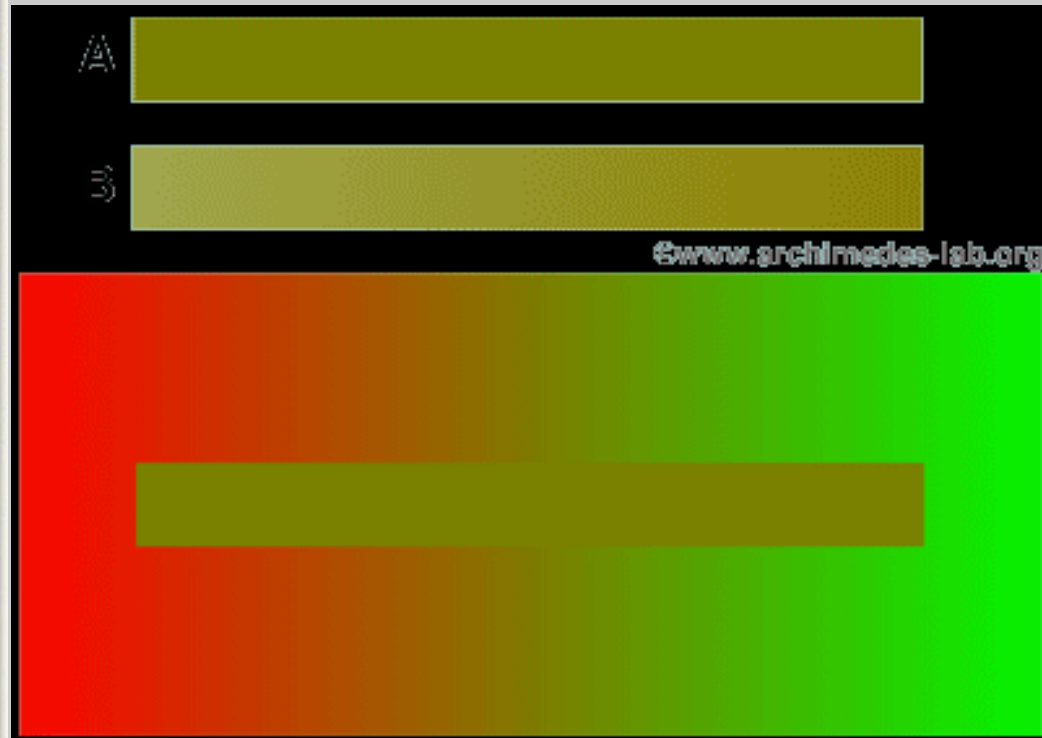
- Intensity refers to the brightness of a color.
- A color is at full intensity when pure and unmixed.
- Intensity is sometimes called chroma or saturation.
- Two ways to lower intensity or saturation
 - One is to add its compliment
 - The other is to add white or black

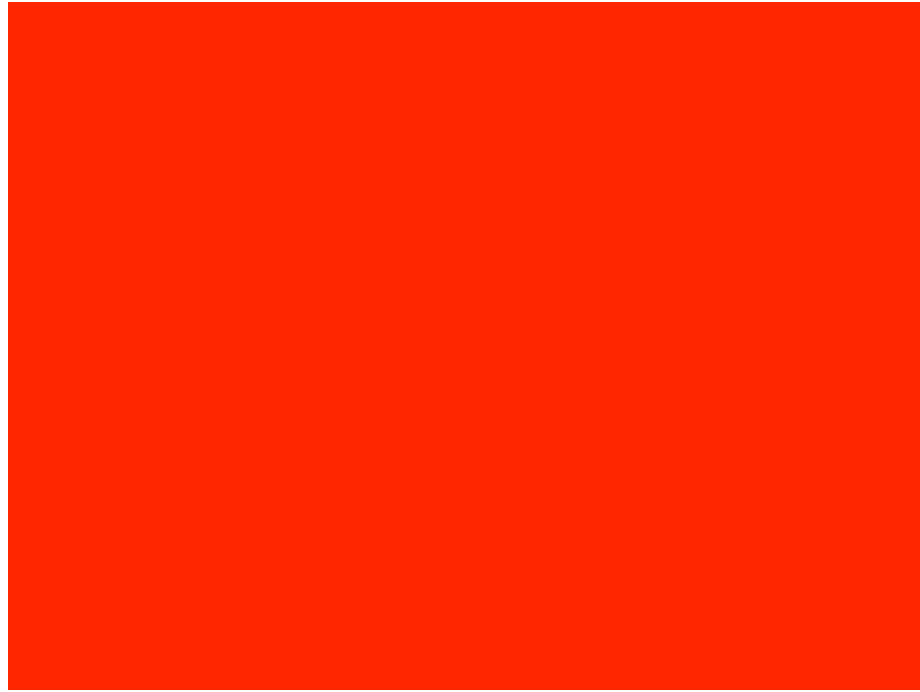


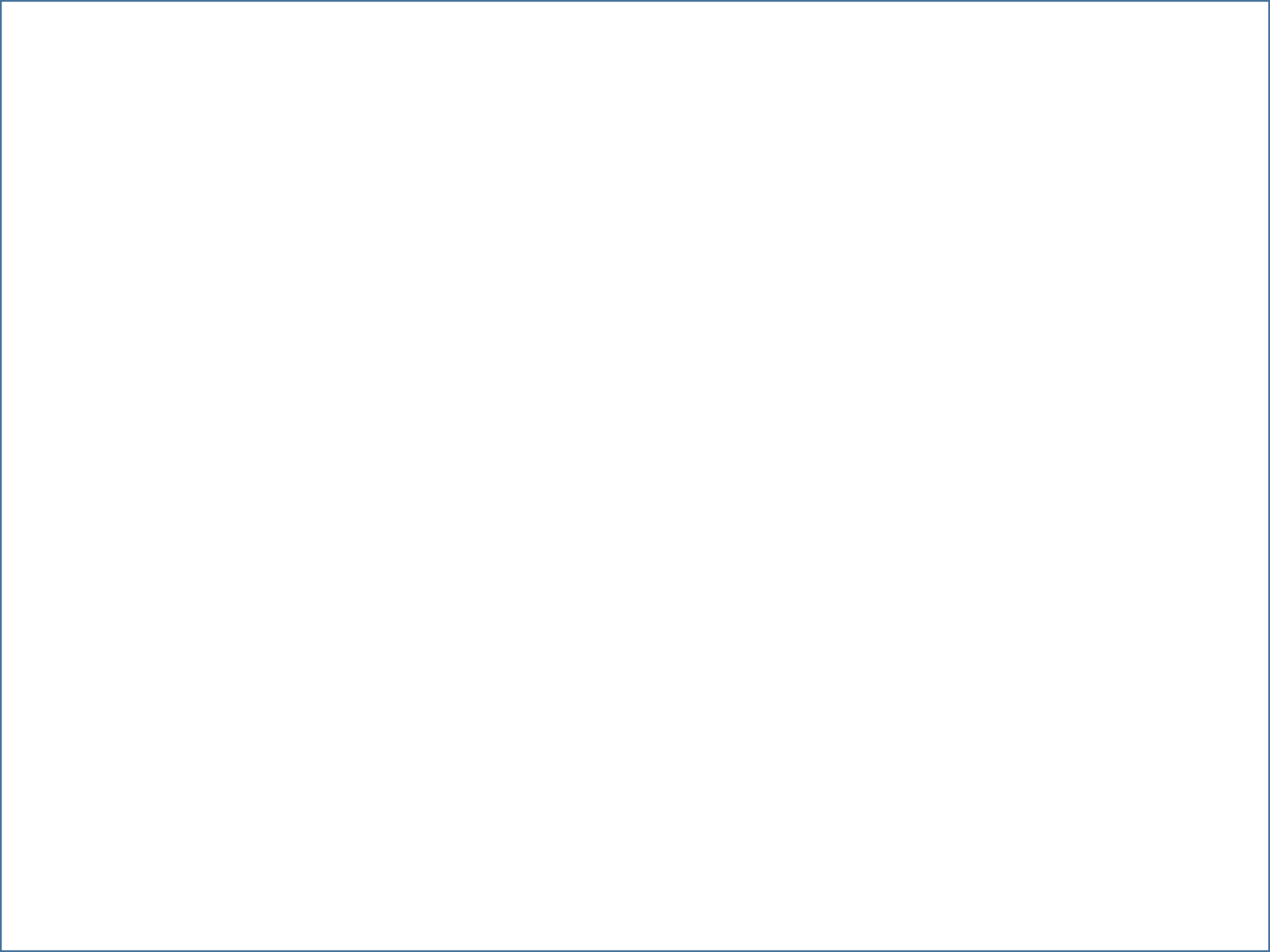
Ways to increase intensity simultaneous contrast



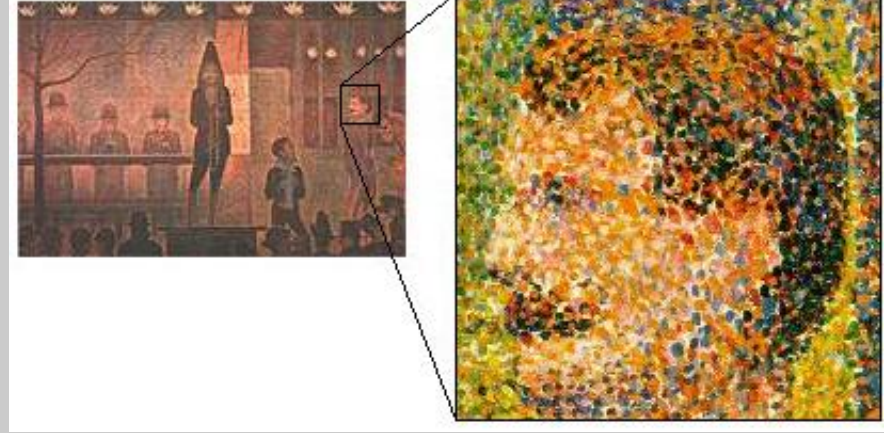
When complementary colors are placed next to each other they increase each other's intensity





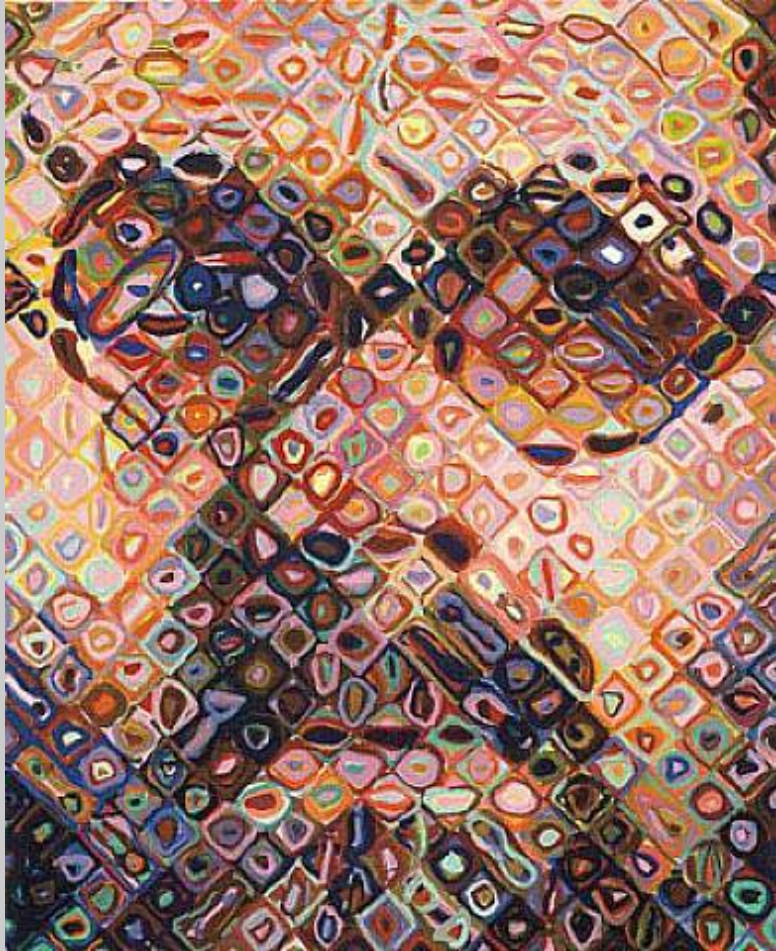


Visual Color Mixing

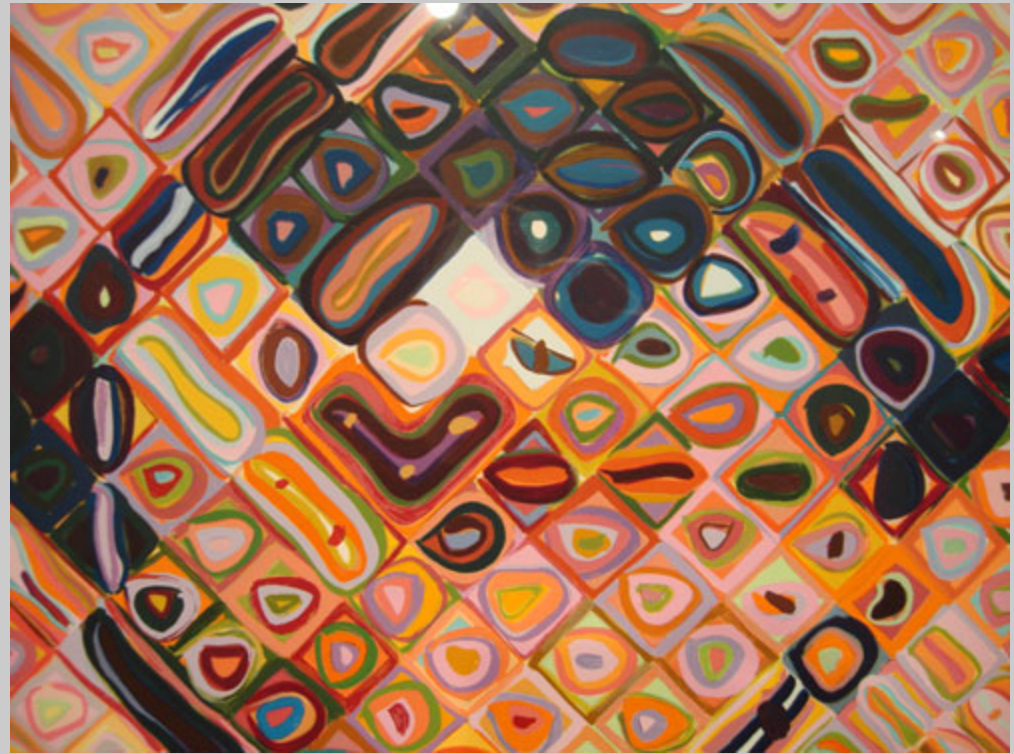


- Subtractive color mixing can cause colors to become dull - visual color mixing is a way to create more luminosity.
- Visual color mixing occurs when two colors are placed side by side and the viewer's eye does the mixing.

An example of visual mixing



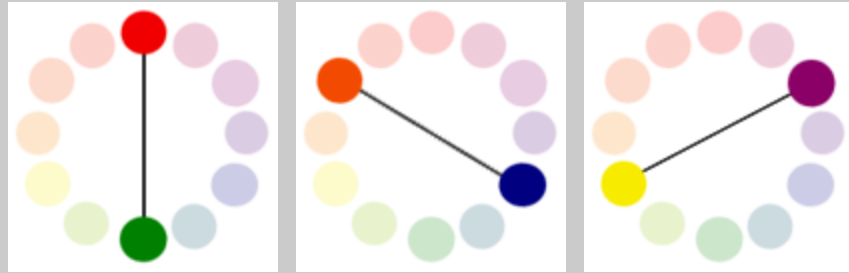
Chuck Close



Primary



Color Schemes



Complementary colors

Analogous

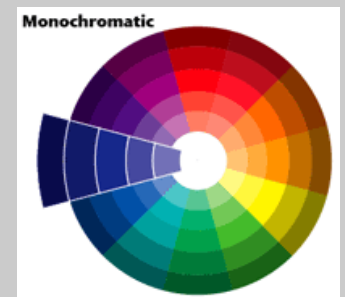


Monochromatic



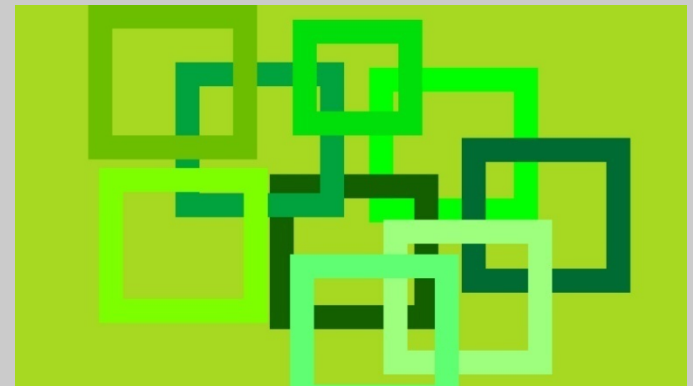
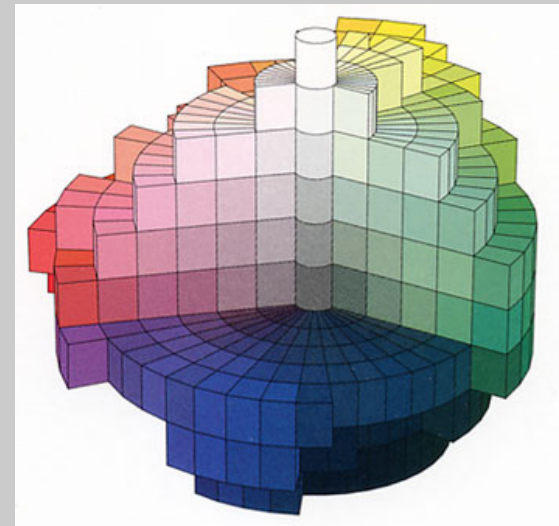
Color schemes

- **Triadic**- colors that are equally spaced on the color wheel
- **Complementary**- colors that are opposite on the color wheel
- **Analogous**- colors that are next to one another on the color wheel
- **Monochromatic**- colors of the same hue



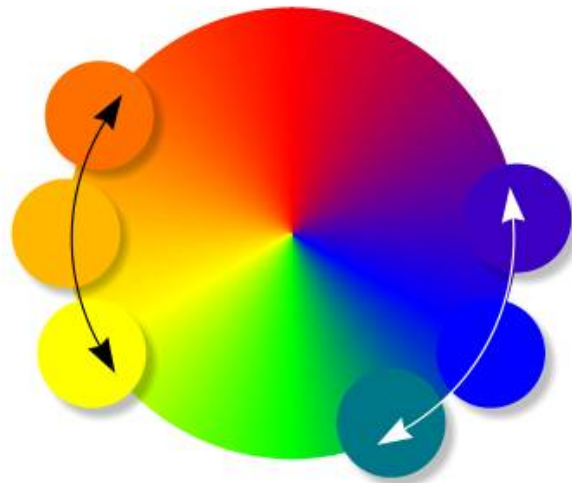
Monochromatic

- Colors within the same hue



Analogous

- Analogous colors are adjacent to one another on the color wheel.



Analogous Colors

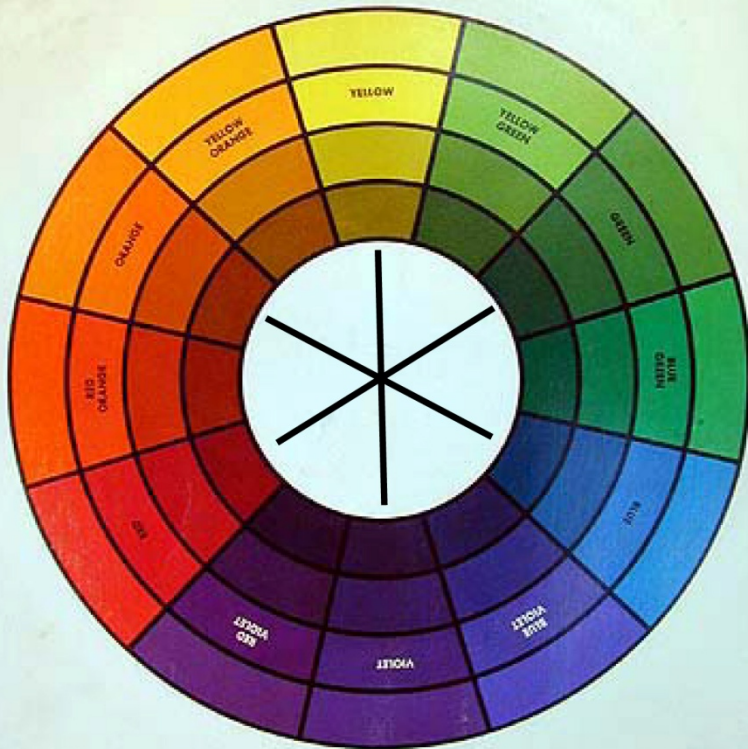


[CLICK FOR FULL-SCREEN IMAGE](#)

Francois Boucher
Madame Marquise de la Pompadour.

Complementary

- Complementary colors are opposite one another on the color wheel.
- Complementary colors produce strong contrast.



Craig Stephens
Radish

Triadic

- A triadic color scheme involves three hues equally spaced on the color wheel.



Source: <http://img509.imageshack.us/my.php?image=triadicq8.jpg>

Warm and cool colors

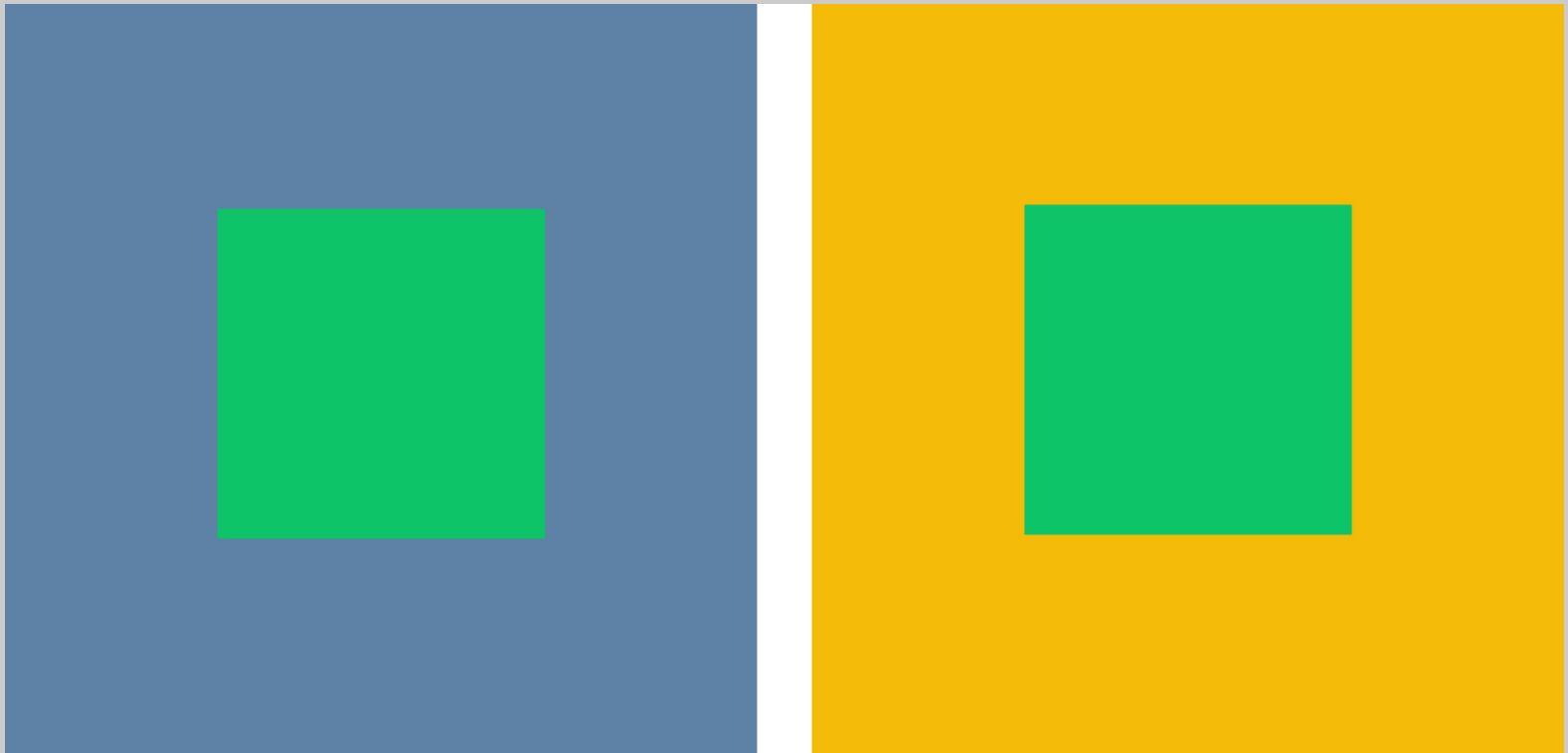
Warm colors are generally considered to be yellow through red violet.

Yellow-green through violet are considered to be cool colors

Warm colors tend
To advance. Cool
Colors tend to recede.



Effects vary and depend on context



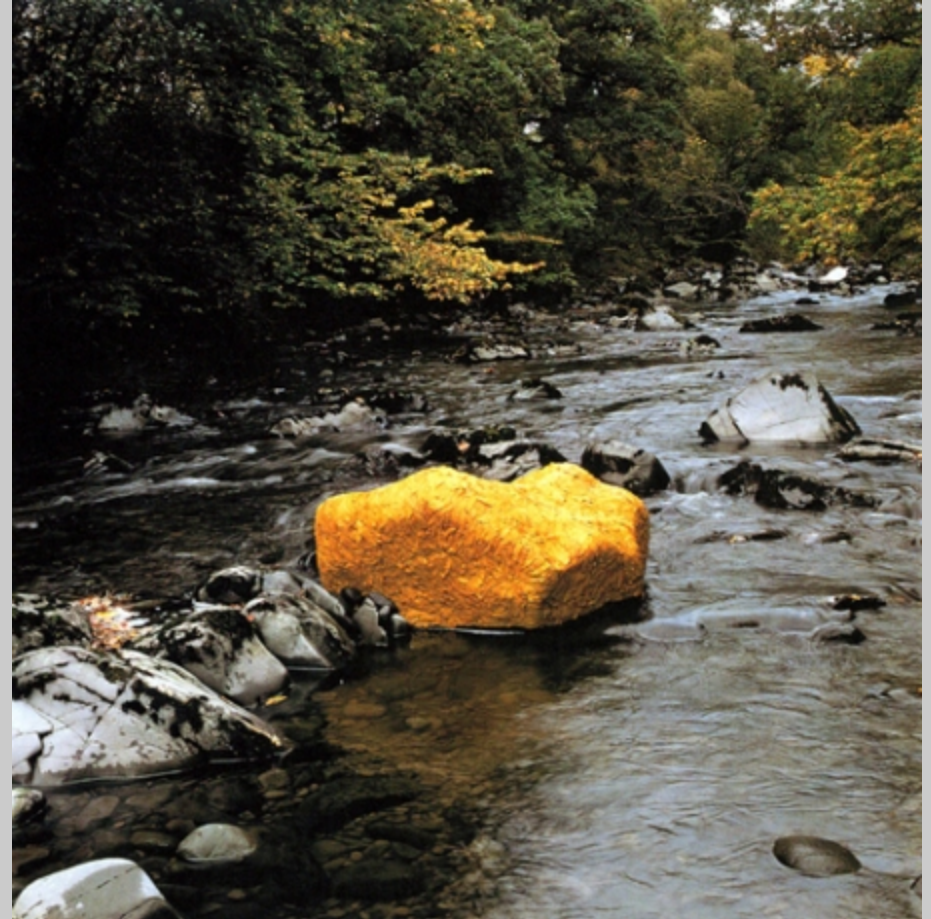
Green on a cool background will appear warm.
The same color on a warm background appears cool.

Color as emphasis

Color is so strong a visual element that it will dominate other devices to establish emphasis. Remember the other devices used to establish emphasis?



Andy Goldsworthy

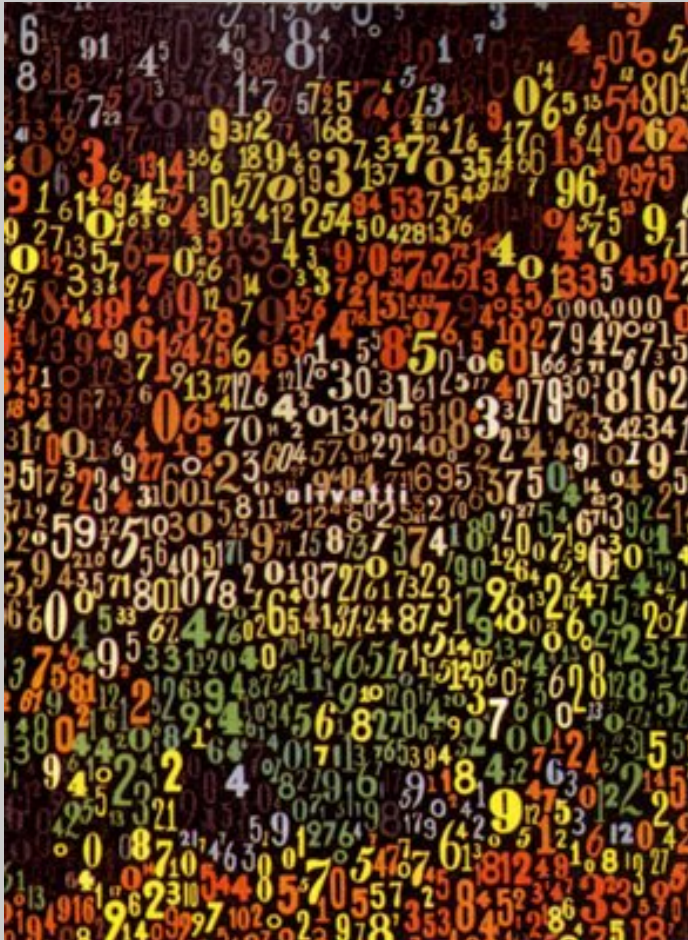


Color balance



Notice how the black and white image is not balanced. Color balances the image.

Color and spatial depth



Cool colors recede and warm colors advance. This is biological and depends upon the amount of muscular contraction in our eyes.

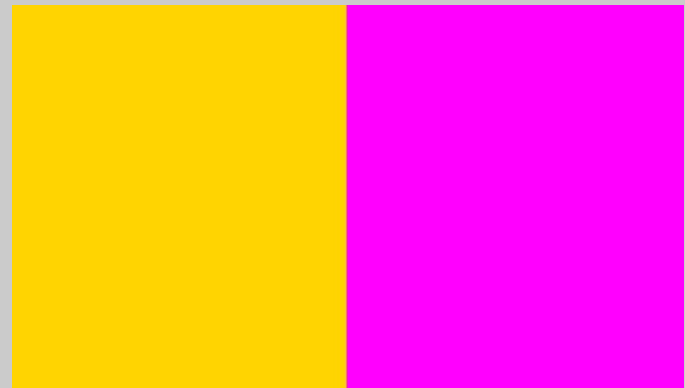
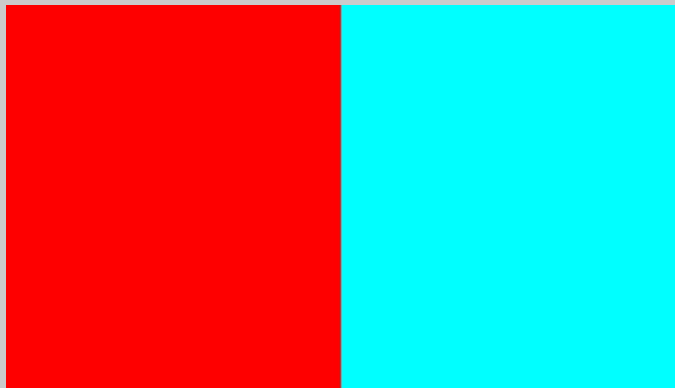
Color emphasizing flatness



David Hockney

Color Discord

- Opposite of color harmony
- Can be visually disturbing
- Can *vibrate* and make the viewer uncomfortable.



Discord can add excitement



Local, optical and arbitrary color

- **Local color** is the color objects actually are under natural light.
Local color can change under the influence of different light sources.
- This is called **optical color**
- **Arbitrary color** is when color choices are subjective, chosen by the artist for design, aesthetic or emotional reasons.



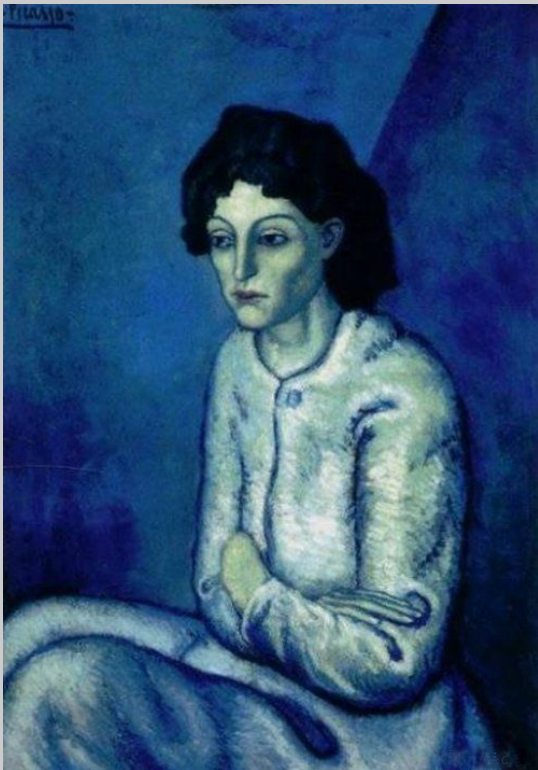
Emotional color

- I'm feeling blue today
- I see red when I'm angry
- I was green with envy
- He was in a black mood today
- Color is cultural

Why do we use color to emphasize emotional states?

Emotional reactions to visual stimulus

- Cooler colors are associated with quieter, less outgoing feelings.
- Warmer colors can be associated with lively, outgoing and even aggressive feelings.



Femme aux Bras Croisés by Pablo Picasso



The Golden Wall

Hans Hofmann

59½ x 71½"

Oil on Canvas

1961

The Art Institute of Chicago

Color and value

- Blue translates into black and white as a darker value than yellow. If the value of the color has changed, either by tinting or shading, the value relationships can begin to equalize.



Color structure

Value structure

Knowledge of color *and* value relationships is important in creating a sophisticated product

Review of color

Color is a property of light

Two types of color mixing: Light and pigment

Color is relative and depends upon the light source and what is around it.

Three properties of color:

Hue, Value, and Intensity

Color schemes: Monochromatic, Analogous, Complementary, and triadic

Color Balance: Color has visual weight

Color shows depth or can enhance flatness

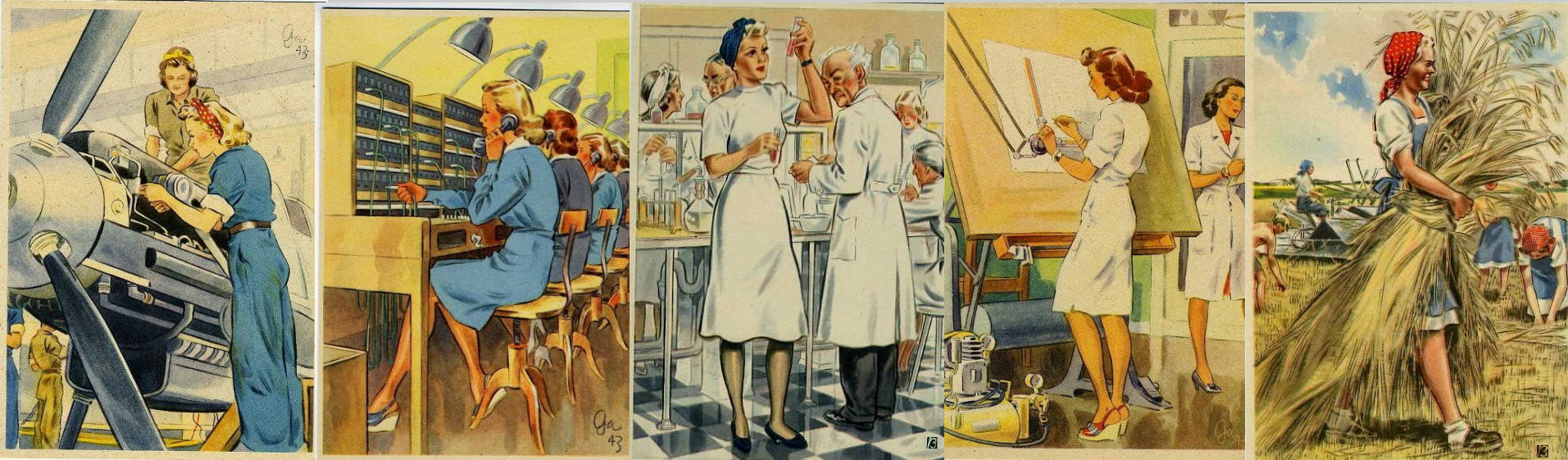
Color as emphasis: color can create a focal point

Warm colors and cool colors, emotional and cultural reactions to color.

Color and Value relationships

SAVE THE WORLD! WE CAN DO IT!





prop-a-gan-da

[prop-uh-gan-duh]

noun

1. information, ideas, or rumors deliberately spread widely to help or harm a person, group, movement, institution, nation, etc.

2. the deliberate spreading of such information, rumors, etc.

Propaganda:



John Heartfield
"Millions Stand Behind Me"
1931



Pro-Nazi poster
“Before Unemployment, Vote for the Fuhrer”
1934



Rosie the Riveter



Hitler Propoganda



“Who Plays With Fire”

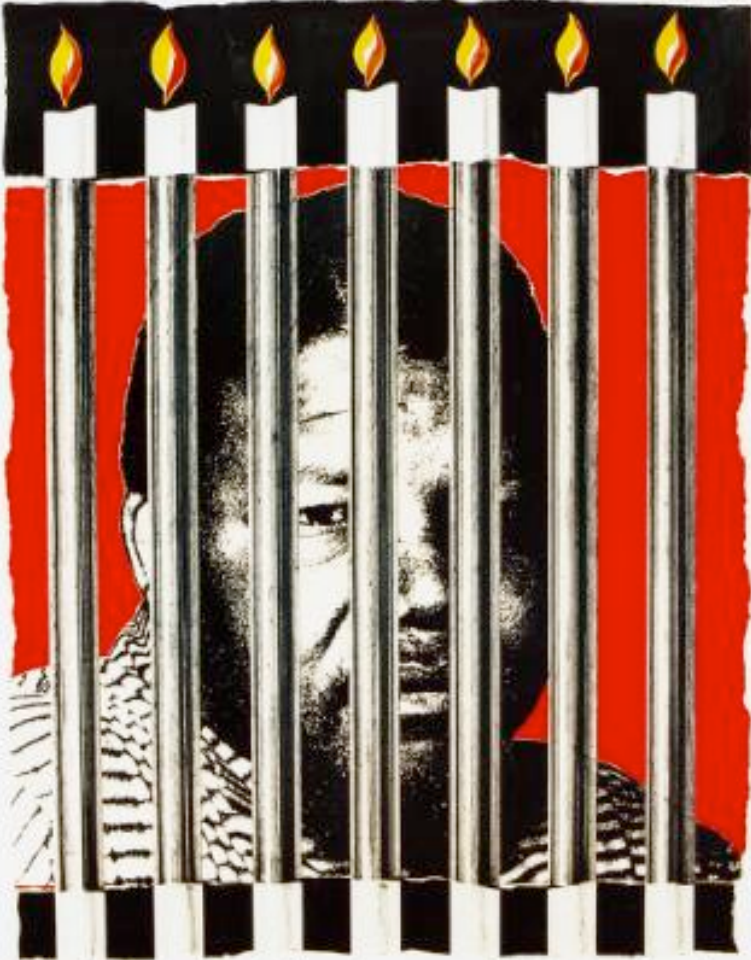


“In our hands, God has put the destiny of a troubled humanity.”
– President Reagan



North Vietnamese Stamp

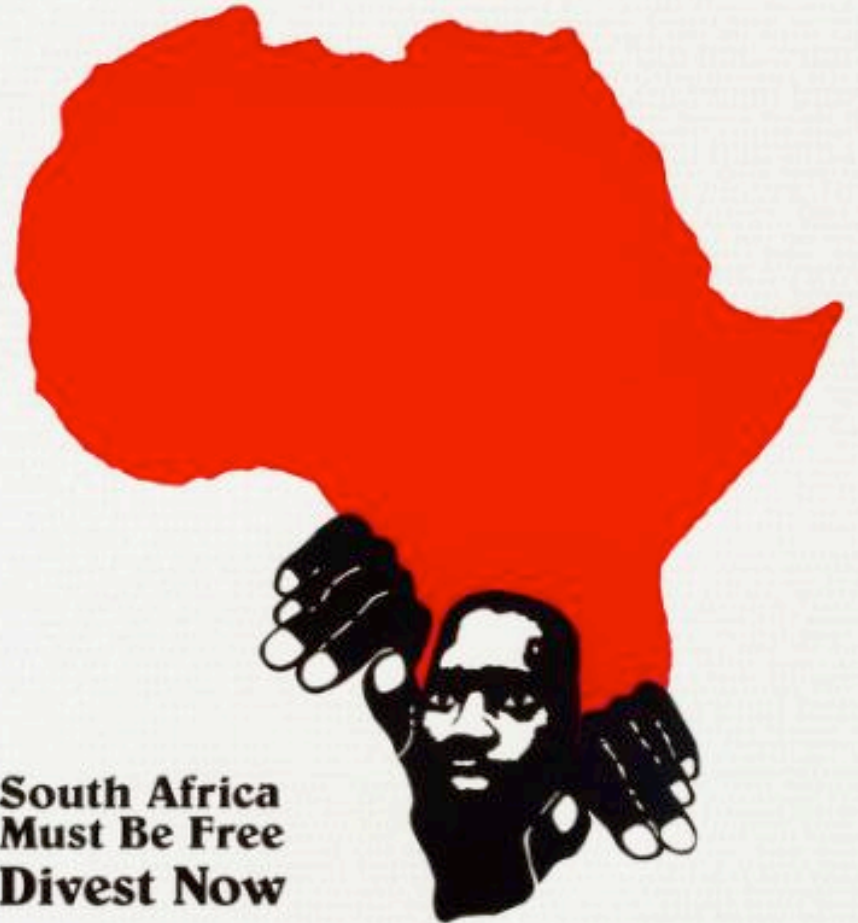
Sunder Singh



Release Nelson Mandela
and all political prisoners of South Africa and Namibia!

Anti-Apartheid Movement 13 Mandela St London NW1 0DW 01-387 7966 

End Apartheid



**South Africa
Must Be Free
Divest Now**

Anti-Apartheid Posters



"Chile! Help!," 1978



"Put an end to the dictator in Chile!," 1983



Shepard Fairey

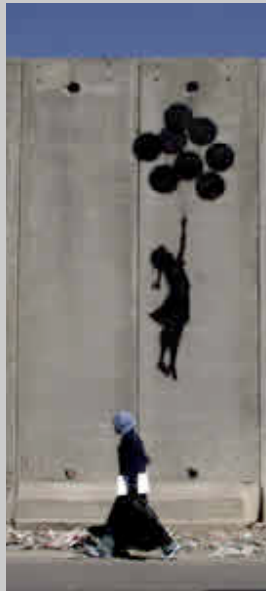




Banksy









Lower 9th Ward

**SPREAD
YOUR
WEALTH**



AROUND

ThePeoplesCube.com



**This finger wasn't made
to press "one"
for English!**

ThePeoplesCube.com

*not Shepard Fairey

Do women have to be naked to get into the Met. Museum?

Less than **3%** of the **artists** in the Modern Art sections are women, but **83%** of the **nudes** are female.

Statistics from the Metropolitan Museum of Art, New York City, 2004
GUERRILLA GIRLS CONSCIENCE OF THE ART WORLD
www.guerrillagirls.com



“Grande Odalisque”
Jean Auguste Dominique Ingres



Dadist Hannah Hoch

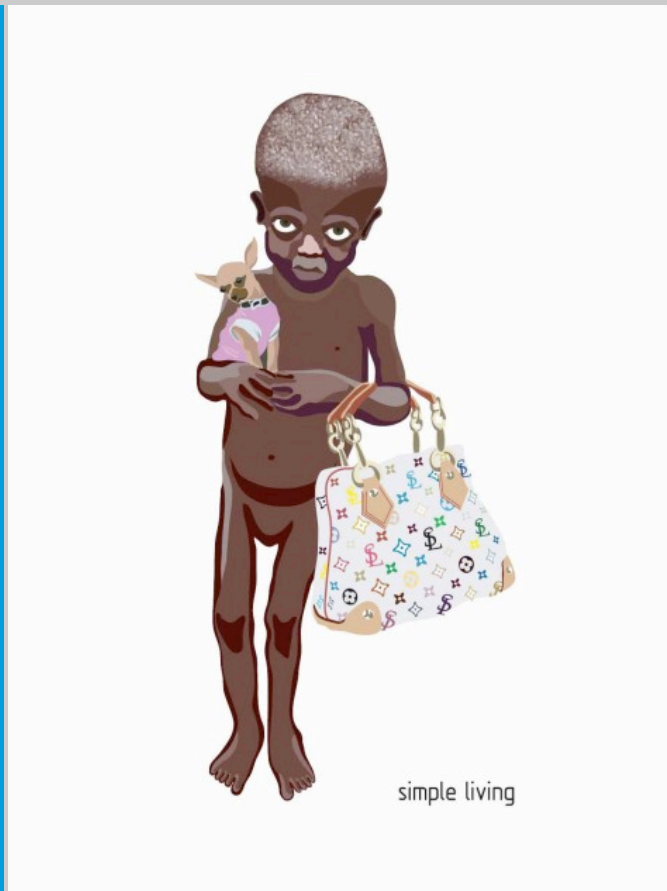


Africa:

† †
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forgo en
con inen
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© Design: Armando Testa

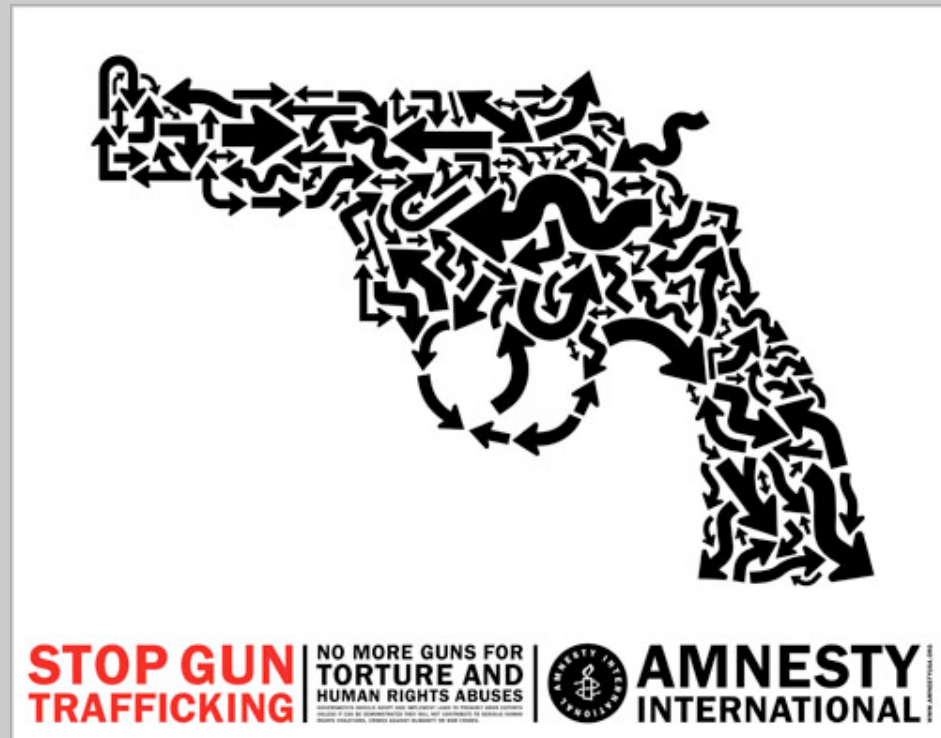
Maurizio Milani



Nadia Plesner



Lourdes Zolezzi



Woody Pirtle



**KEEP
CALM
AND
CARRY
ON**