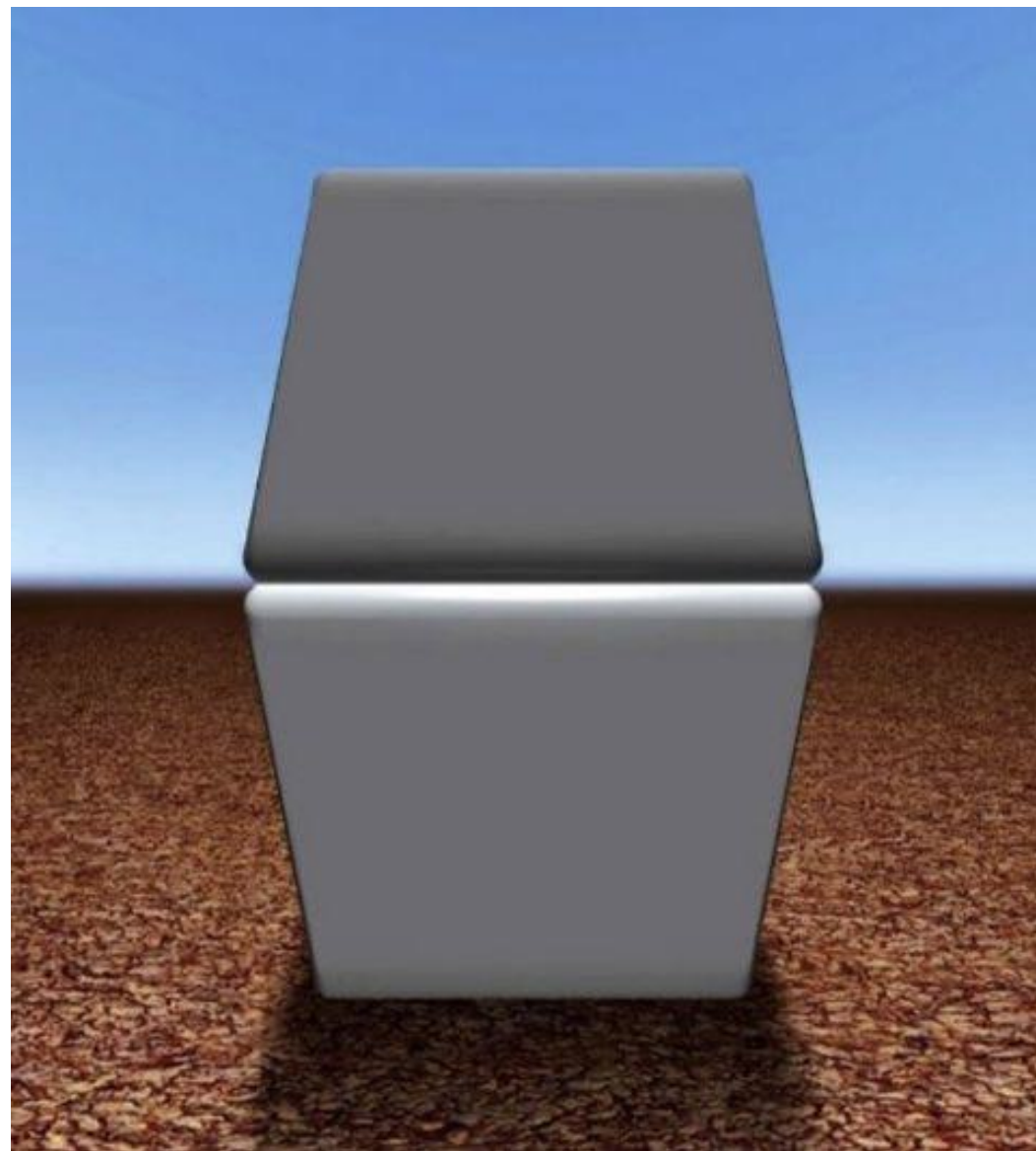
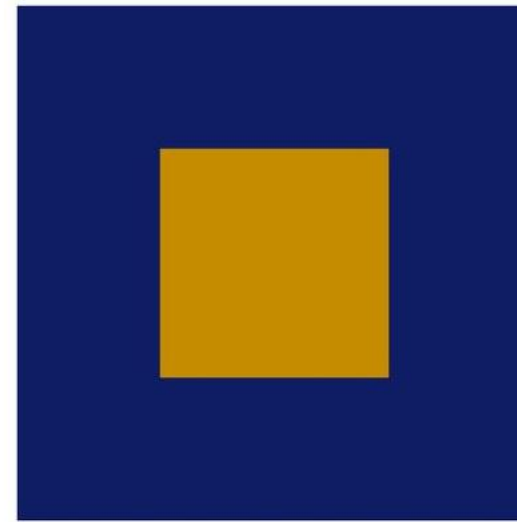
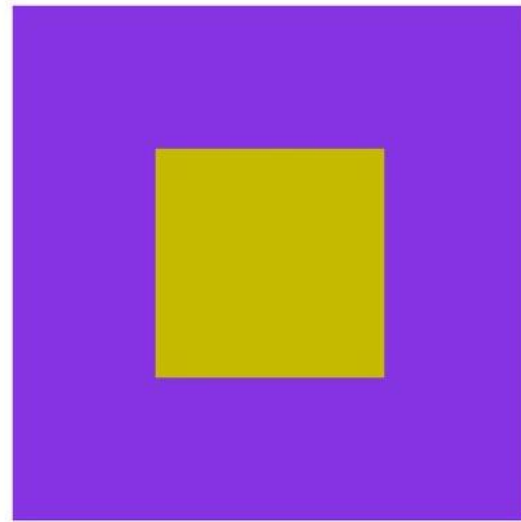
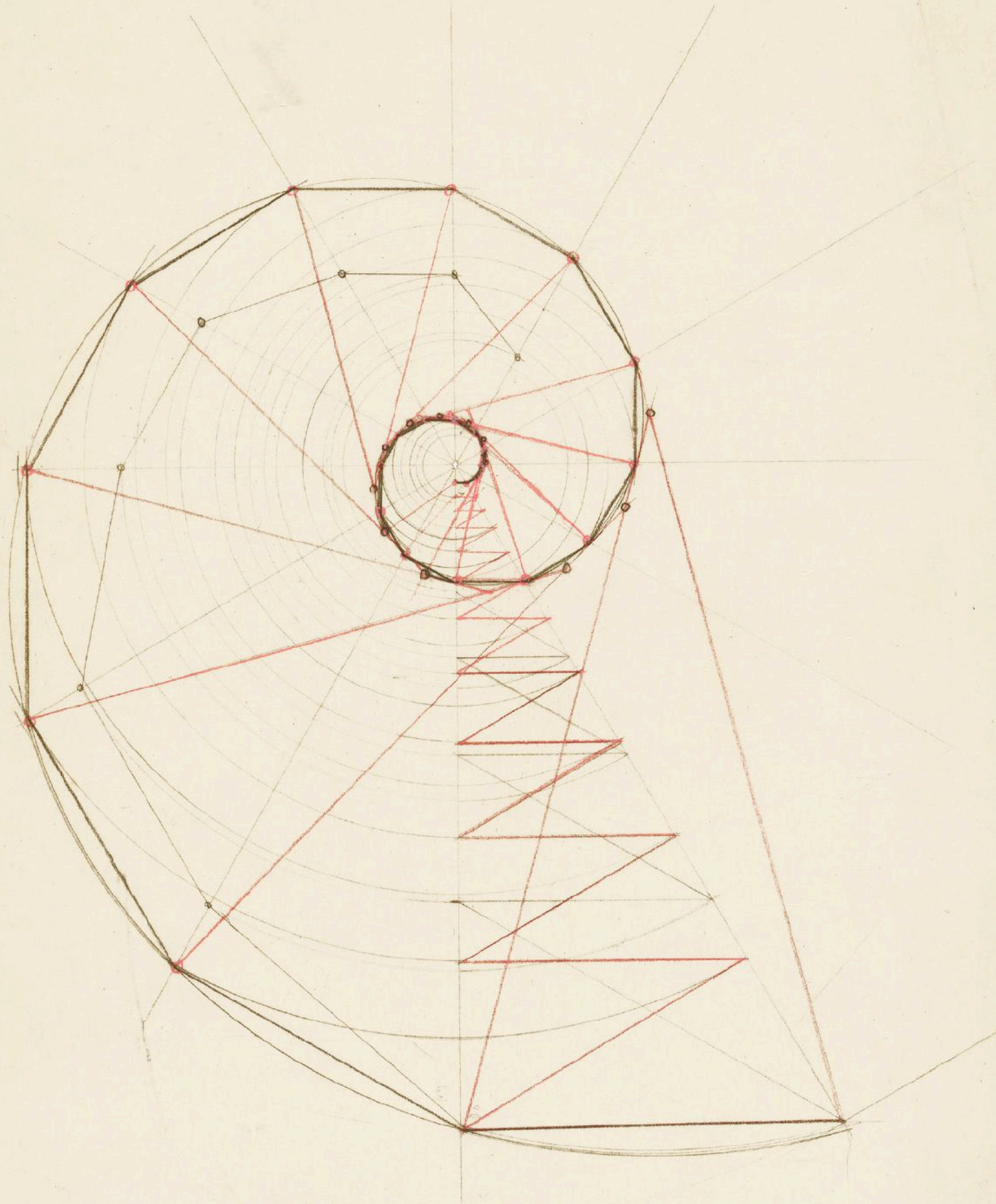








History Lesson

Fundamental Differences

Paintings



Photo & Film

ITTEN'S COLOR CONTRASTS

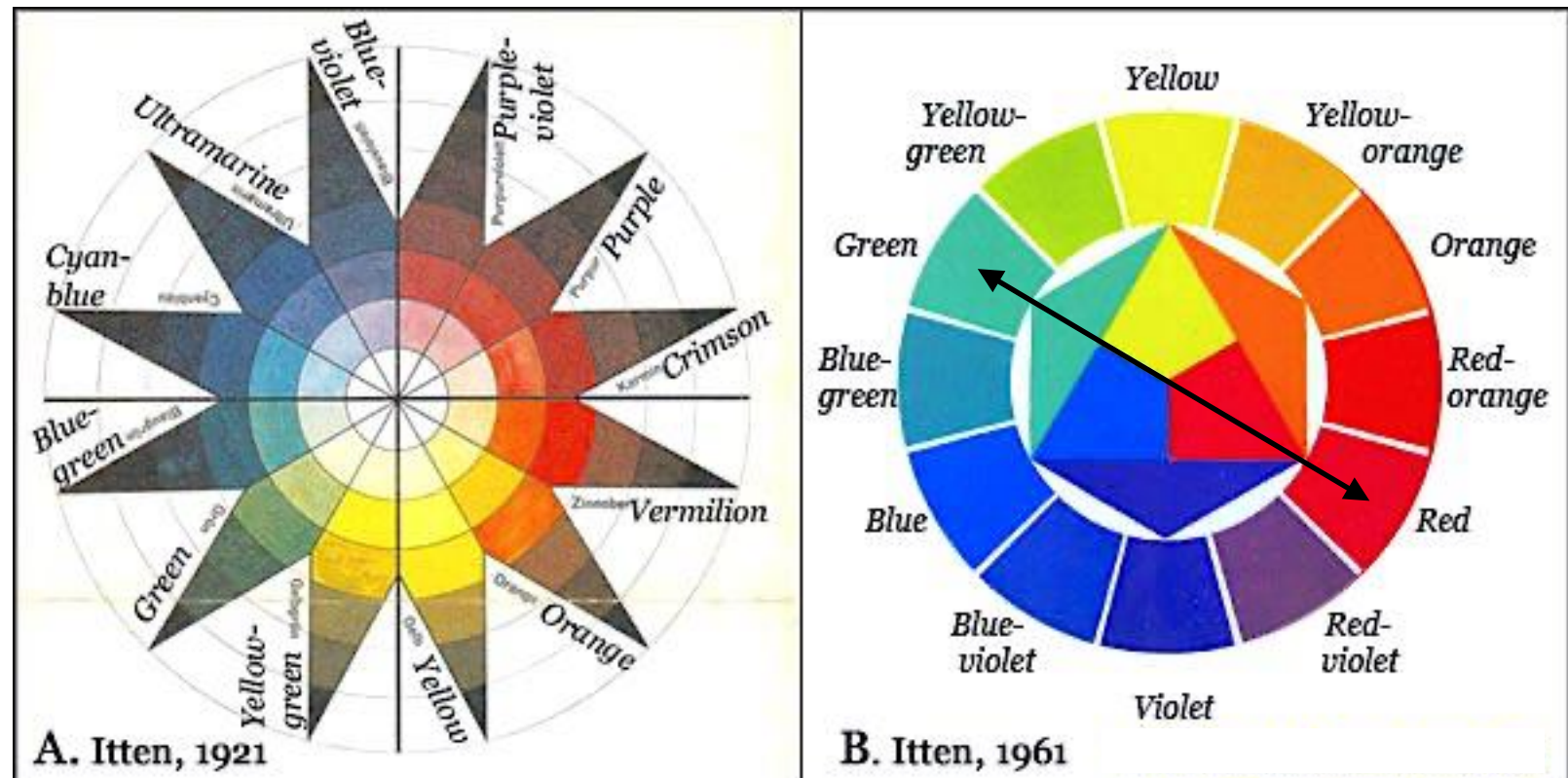
Johannes Itten (Swiss-German) was one of the first people to define and identify strategies for successful (**emotional**) color combinations. Through his research he devised seven methodologies for coordinating colors utilizing the hue's contrasting properties. He was a big part in the **Bauhaus** movement of the **1920s**.

He published his famous book "The Art Of Color" in **1961** and is still relevant today (e.g. Christopher Nolan is a fan), because he defined things like **color wheels**, schemes, temperature and relation charts.

6 basic colors, made up of **3 primary** (RGB) and **3 secondary** ones (created by combining certain primaries). If you mix these two sets you get **12 tertiary colors**.

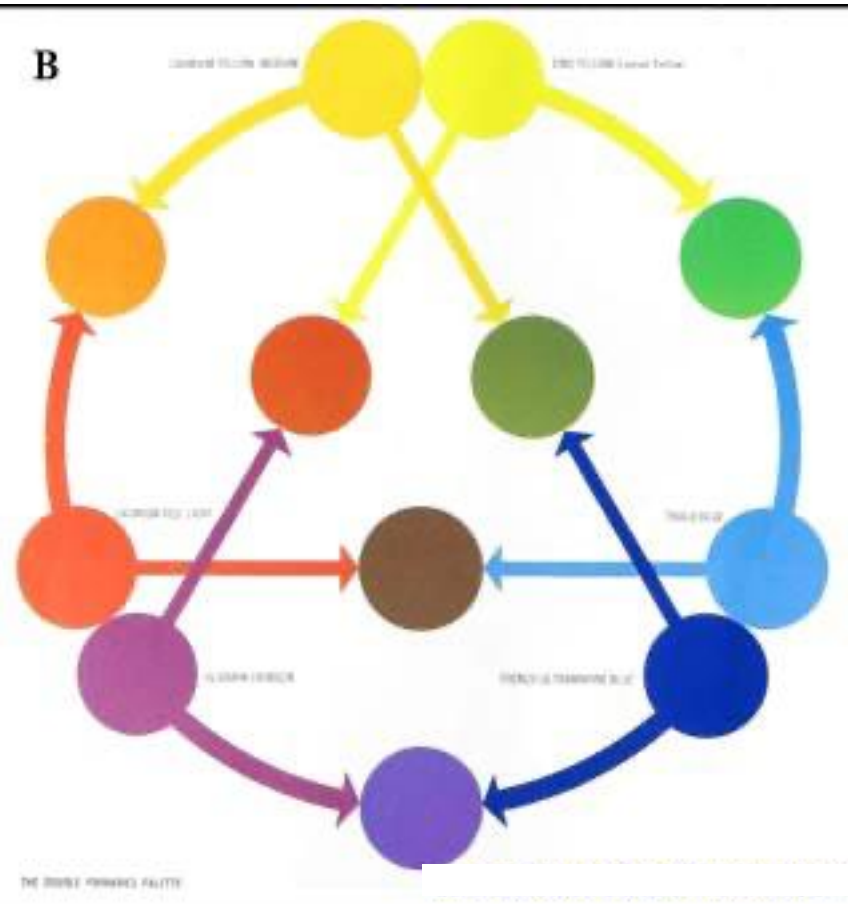
The more you mix them, the darker they get (represented by the **rings** in the star). Itten simplified his model over the years and added the possibility to simply spot **complimentary colors**.

Evolution of Itten's *Farbkreis*



The Palette. — You try to attain nature's effects of light with pigment. Pigment is less pure than light. You cannot have the same scale, the same range, but you must do the best you can, and the arrangement of your palette will help you. As you have not a perfect blue, a perfect red, and a perfect yellow, you must have two colors for one. Your paints will always be more or less impurely primary. No one red will make a pure purple with blue, and an equally pure orange with yellow. Yet pure purple and pure orange you must be able to make. Have, then, both a yellowish or orange red and a bluish or purplish red on your palette. Do the same with blue and yellow. In this way you can not only get approximately pure secondaries when you need them, but the primaries themselves lean somewhat towards the secondaries, so that you can make very delicate combinations with pure colors. A bluish yellow and a yellowish blue, for instance, will make a rather positive green. By using a reddish yellow and a bluish or purplish red, you practically bring in the red note, and make a grayer green while still using only two pigments.

A



It's about imperfections and subjective interpretation, hence the terms "yellowish" or "bluish". The emotional effect (derived from nature, e.g. temperature) is universal. For Itten B/W are considered non-colors and max/min shades of greys.

Physics/Nature

Black = No light, no colors
White = Full light, all colors

Light mixes to White

Materialistic World/Paintings

Black = Full data, all colors
White = No data, no colors

Paint mixes to Black

SUBTRACTIVE COLOR.

When we mix colors using paint, or through the printing process, we are using the subtractive color method. Subtractive color mixing means that one begins with white and ends with black; as one adds color, the result gets darker and tends to black.



The CMYK color system is the color system used for printing.

non-light

Primaries:
Cyan, Magenta, Yellow



Those colors used in painting—an example of the subtractive color method.

ADDITIVE COLOR.

If we are working on a computer, the colors we see on the screen are created with light using the additive color method. Additive color mixing begins with black and ends with white; as more color is added, the result is lighter and tends to white.



The RGB colors are light primaries and colors are created with light.

light

Primaries:
Red, Green, Blue



Percentages of red, green, & blue light are used to generate color on a computer screen.



HUE

The color itself

SATURATION

Intensity of the color

VALUE

Darkness or lightness of a color



COLOR WHEEL



A color wheel (also referred to as a color circle) is a visual representation of colors arranged according to their chromatic relationship. Begin a color wheel by positioning primary hues equidistant from one another, then create a bridge between primaries using secondary and tertiary colors.

ACTIVE & PASSIVE COLORS

The color wheel can be divided into ranges that are visually active or passive. Active colors will appear to advance when placed against passive hues. Passive colors appear to recede when positioned against active hues.



- Advancing hues are most often thought to have less visual weight than the receding hues.
- Most often warm, saturated, light value hues are "active" and visually advance.
- Cool, low saturated, dark value hues are "passive" and visually recede.
- Tints or hues with a low saturation appear lighter than shades or highly saturated colors.
- Some colors remain visually neutral or indifferent.

COLOR TERMINOLOGY



Primary Colors: Colors at their basic essence; those colors that cannot be created by mixing others.



Secondary Colors: Those colors achieved by a mixture of two primaries.



Tertiary Colors: Those colors achieved by a mixture of primary and secondary hues.

aka Triadic



Complementary Colors: Those colors located opposite each other on a color wheel.



Analogous Colors: Those colors located close together on a color wheel.



Triadic

Oooo, artsy!



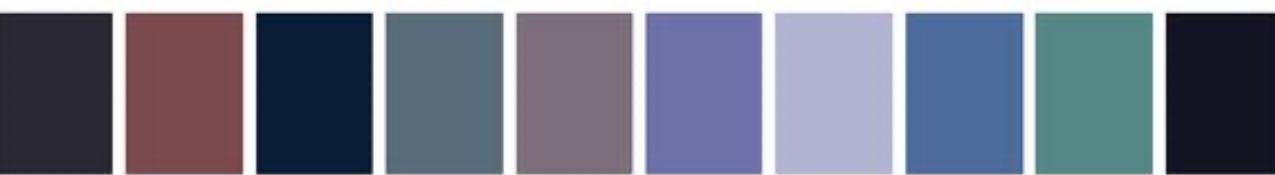
Complimentary



Modern Hollywood loves Complimentary
The famous Orange-Teal Look



Classic Hollywood preferred Analogous Colors



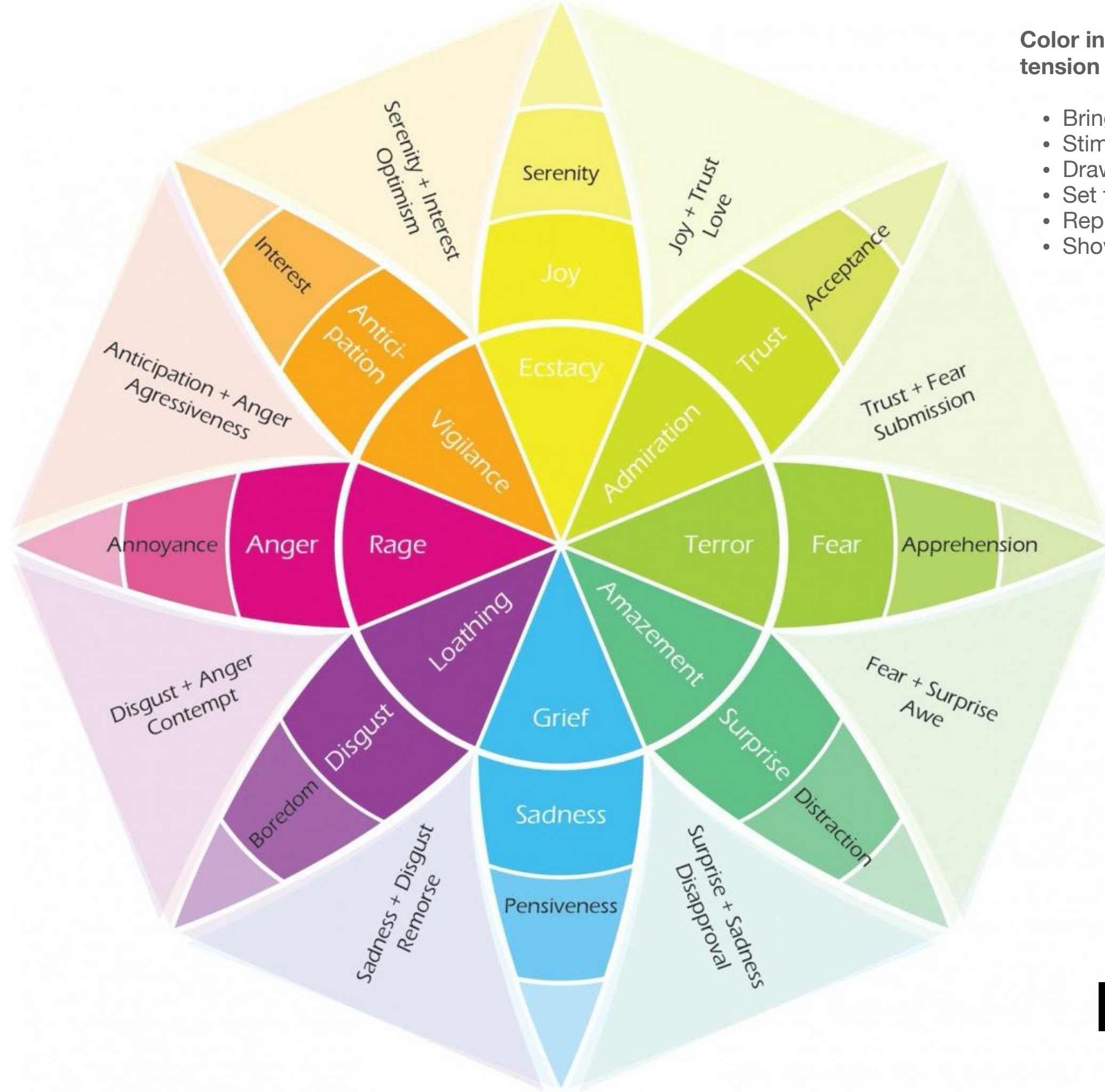


Hollywood also loves Yellow for more Arthouse-feeling

Note: Arthouse derives directly from Bauhaus

Color in film can build harmony or tension within a scene. Moreover:

- Bring attention to a key theme
- Stimulate psychological reactions
- Draw focus to significant details
- Set the tone of the movie
- Represent character traits
- Show changes or arcs in the story



Plutchik's Wheel

Memory Colors

We know from daily life and nature that some things just need to be of certain color (differences in shade are fine).

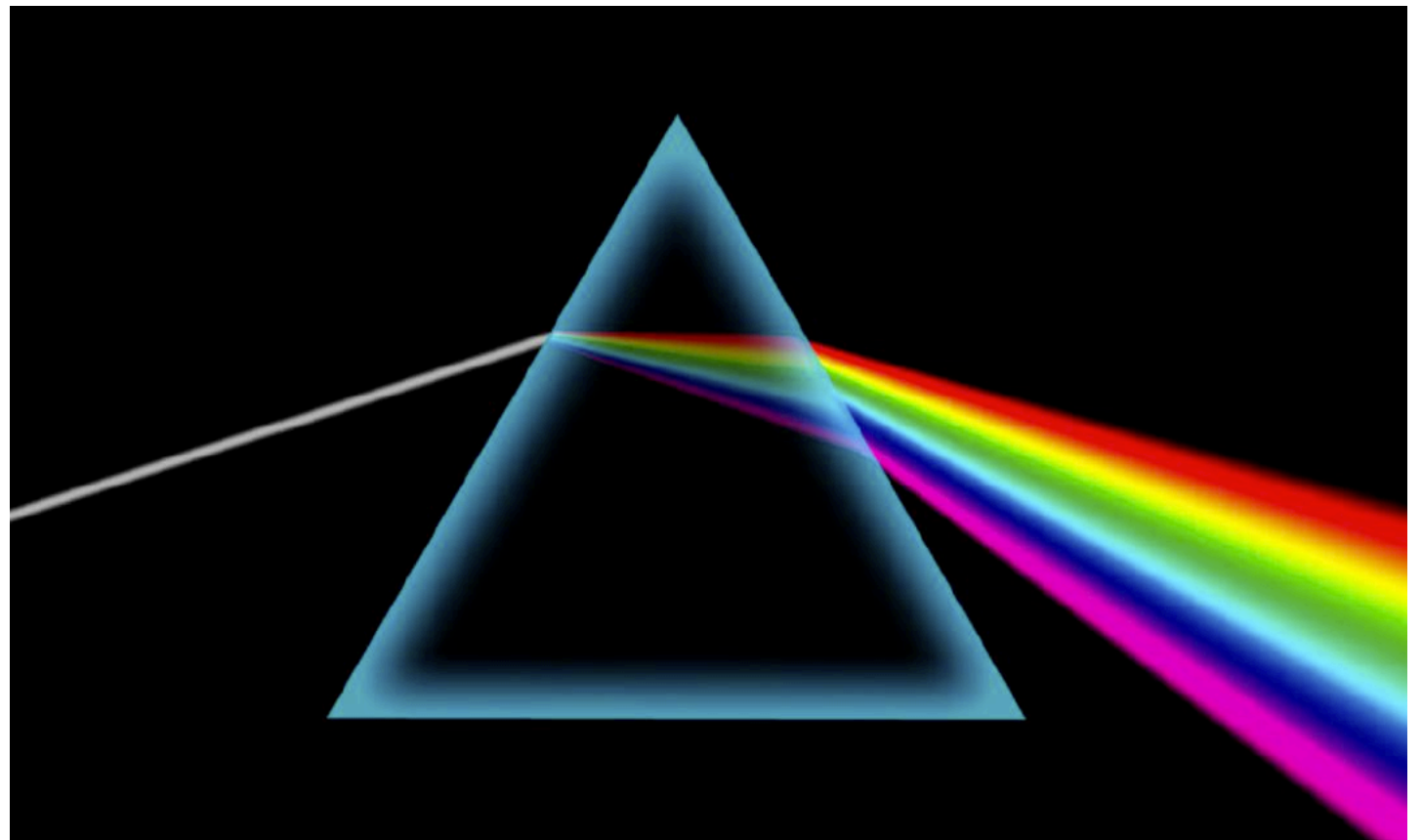
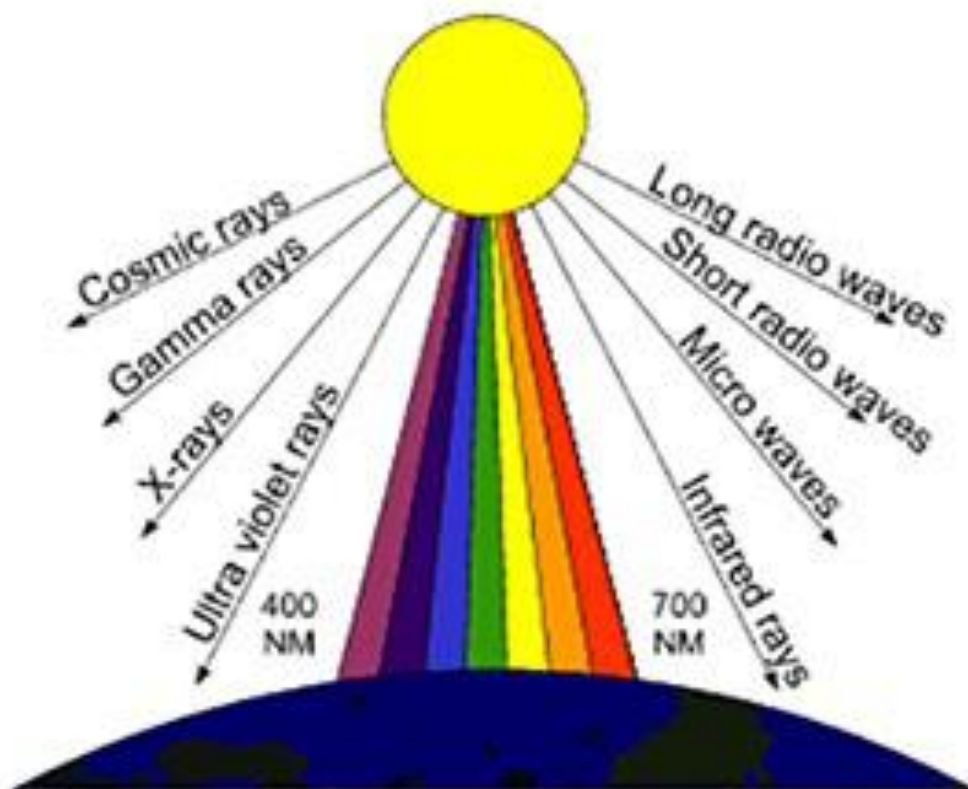
This mainly concerns **skin (tones)**, **grass (trees)**, **snow, sand, soil and sky**.

We need to be careful with these “constants”, especially skin tones unless we are talking about aliens.

Refraction

White light is a mix of all colors, it can be **split apart** into its components by a **prism**, which bends the light twice (hence called *refraction*). Depending on wavelengths, **colors bend differently**, resulting in a spread (aka *spectrum*).

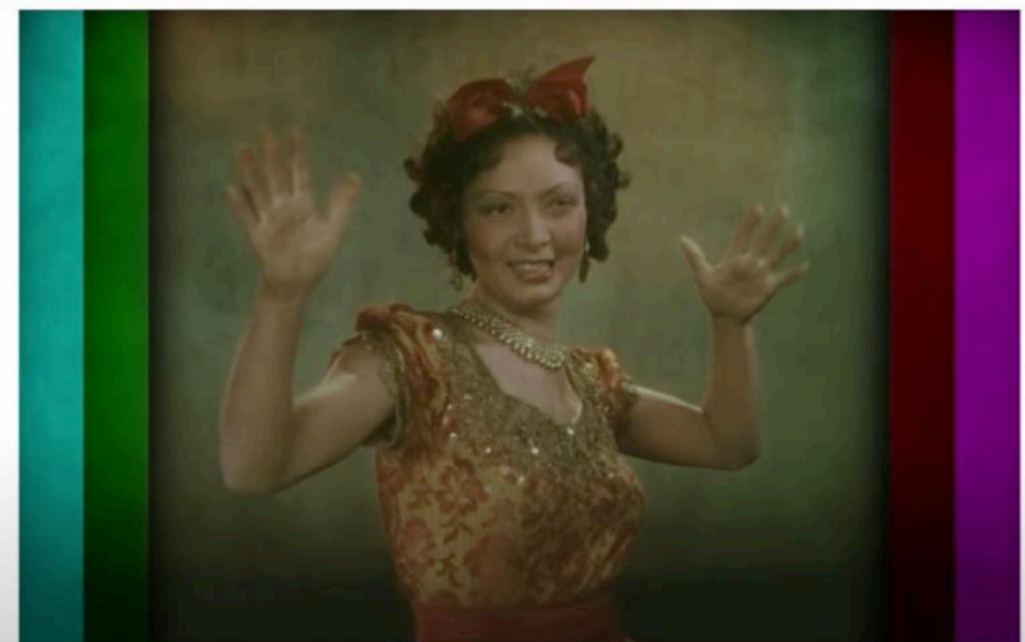
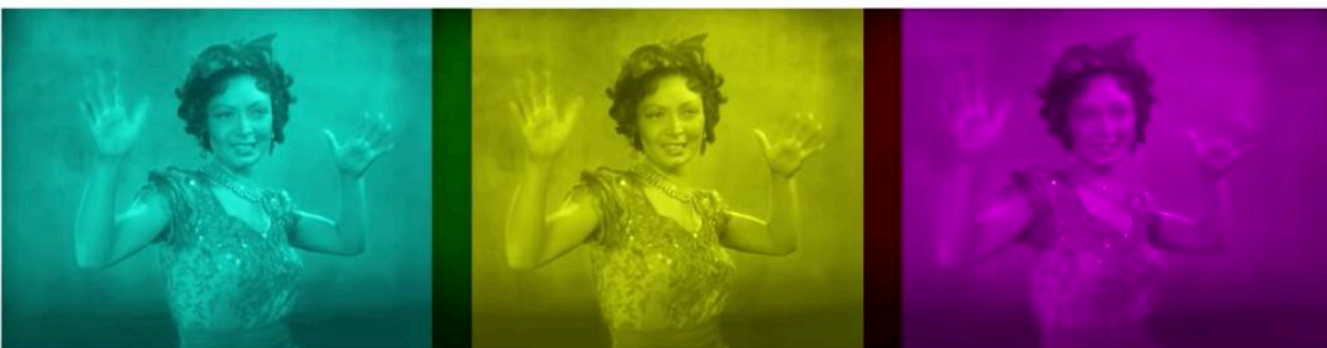
Note: Rainbows appear because water droplets act as tiny prisms on sunlight, which has the full range of wavelengths – not all colors are visible to the human eye though.





Used a prism for separately tinted film stock.
Blue (Cyan) came later. Was CMYK because of “print”.

The Wizard of Oz (1939) was the first full 3-color Technicolor live-action release



THE CONTRAST OF SATURATION



The contrast is formed by the juxtaposition of light and dark values and their relative saturation.

THE CONTRAST OF LIGHT AND DARK



The contrast is formed by the juxtaposition of light and dark values. This could be a monochromatic composition.

THE CONTRAST OF COMPLEMENTS



The contrast is formed by the juxtaposition of color wheel or perceptual opposites.

SIMULTANEOUS CONTRAST



The contrast is formed when the boundaries between colors perceptually vibrate. Some interesting illusions are accomplished with this contrast.

THE CONTRAST OF HUE



The contrast is formed by the juxtaposition of different hues. The greater the distance between hues on a color wheel, the greater the contrast.

THE CONTRAST OF HUE - PRIMARIES



The contrast is formed by the juxtaposition of primary hues.

THE CONTRAST OF WARM AND COOL



The contrast is formed by the juxtaposition of hues considered 'warm' or 'cool.'



You'll Never Guess the HOTTEST Color for Valentine's Day this year!



Notice how Obama is wearing a BLUE suit and BLUE tie which conveys trustworthiness & dependability... and how the background is RED which conveys a sense of POWER.



Analogous Colors:
SEQUENCE



LIGHT



MEDIUM



DARK



GENERAL SPECTRUM





Tertiary Colors:

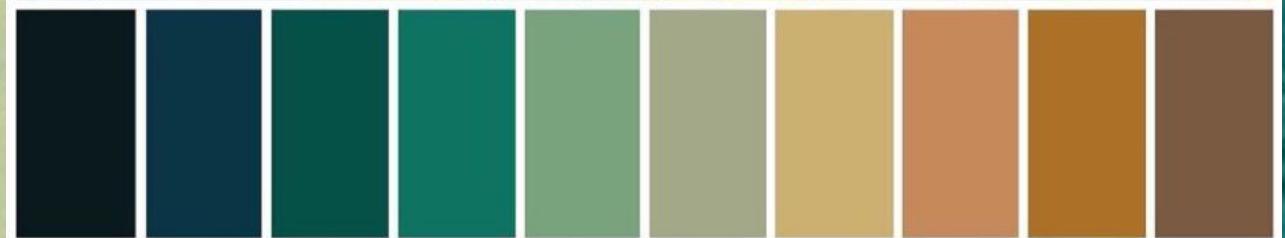
TRANSITIONAL COLORS IN FILM

When a color scheme shifts over the course of the film, it represents a change in the story's characters, story, or themes. A transformation.





@colorpalette.cinema



ANALOGOUS



COMPLEMENTARY



COMPLEMENTARY
CHARACTER ASSOCIATIVE





ASSOCIATED WITH CHARACTER



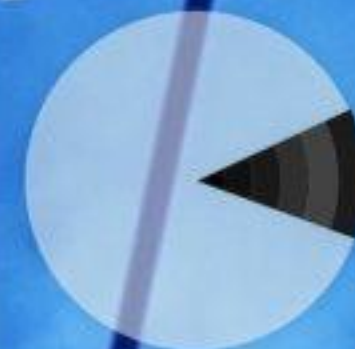
GOOD



EVIL



LUKE



VADER

