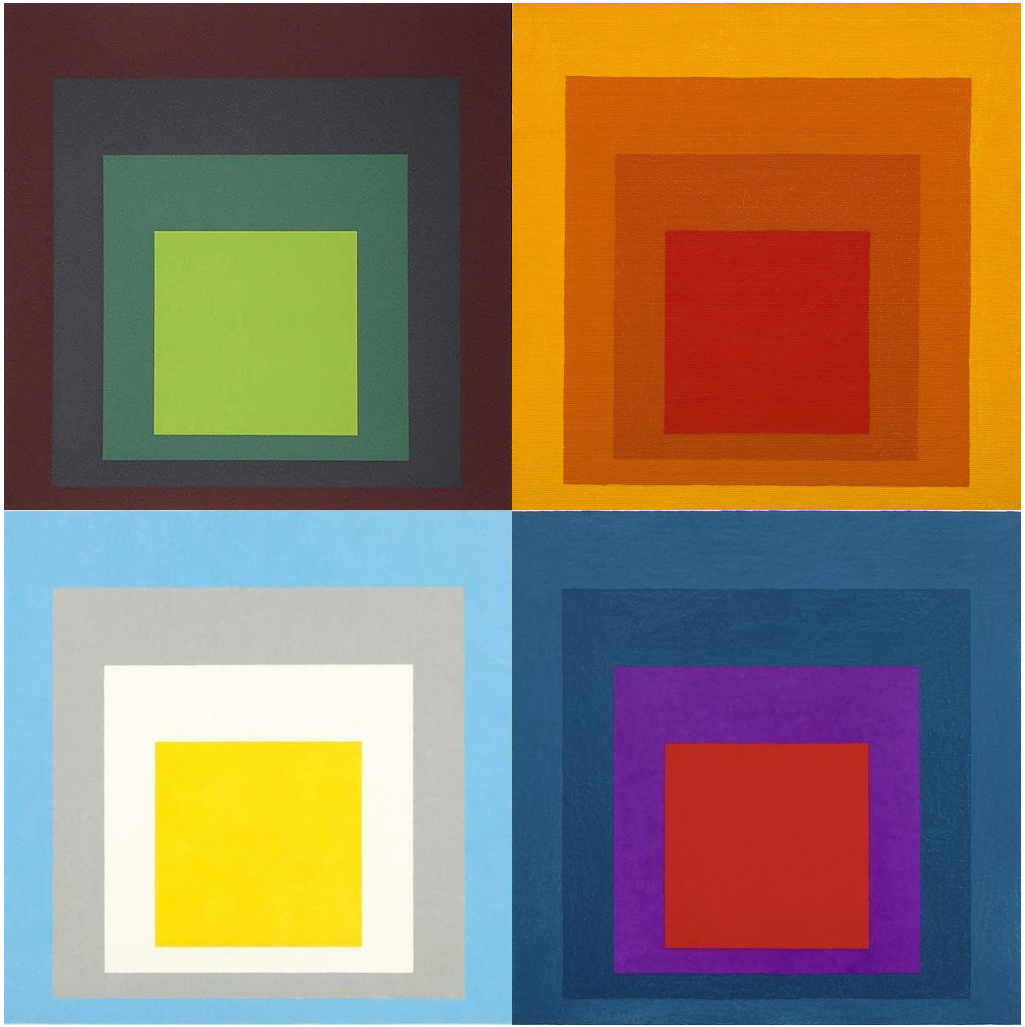


Homage to the Square, Josef Albers, 1970

GD+M Methods 1B Color

Welcome!

Elizabeth Ashley Fox-Jensen
ELIZABETH.JENSEN@MAU.SE

Agenda

10.00-10.05	Check-in
10.05-10.50	Color lecture
	Questions in chat anytime
11.00-11.10	Short break
11.10-11.30	Exercise in breakout groups
11.30-11.50	Reflection on exercise
11.50-12.00	Exercise and instruction of homework





Perception of color

The most common is that researchers in color theory place the perception of color in the so-called *limbic system* of the brain, that is, the part of our brain that is the most primary. This means that our experience of colors is strongly linked to emotions and the subconscious.

Johann Wolfgang von Goethe made scientific studies of color vision that are still valid in some parts, and published them in the work *Zur Farbenlehre (Till Färgläran)* from 1810.

Johannes Itten

Av Originally by
MalteAhrens at de.wikipedia.

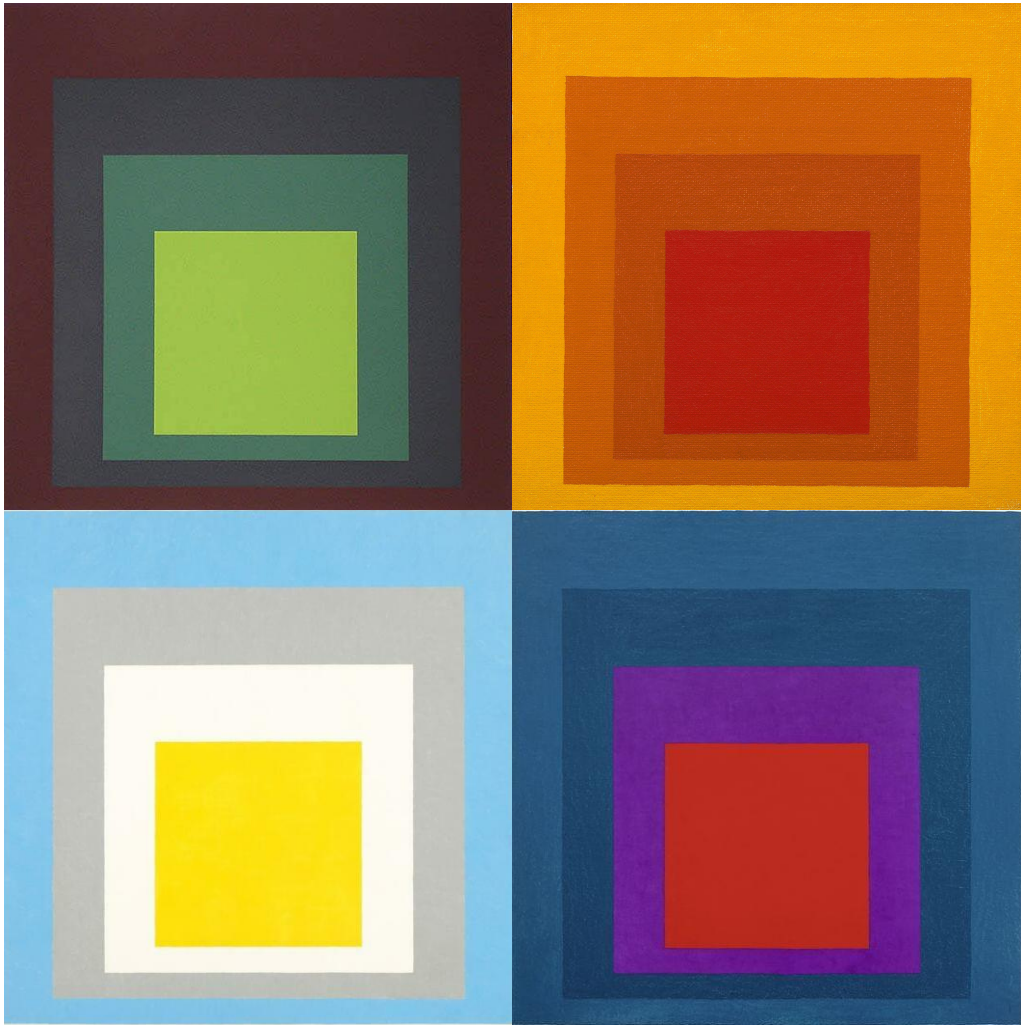


Johannes Itten (1888-1967)
taught at Bauhaus from 1919 until 1922.

The influence of psychoanalysis is apparent in Itten's color theory, as he was early to associate different colors with specific emotions and study the impact of color on our moods. He also studied how individuals perceive color.

The Art of Color, by Johann Itten, first published 1961
https://en.wikipedia.org/wiki/Johannes_Itten

https://www.sensationalcolor.com/bauhaus-color/



Josef Albers

Josef Albers (1888-1976)
Student of Johannes Itten and teacher at Bauhaus.

A German-born artist and educator. Moved to America 1933 and started teaching at Black Mountain College, headed Yale University's department of design.

Albers worked in several disciplines, including photography, typography, murals and printmaking. He is best known for his work as an abstract painter and a theorist. His book Interaction of Color was published in 1963.

Josef Albers, Interaction of colors

Color psychology



The Right Color Sends the Right Message

Color has the ability to evoke a response, create a mood, symbolize an idea, and express an emotion.

People have their own associations with color, but there are conscious and subconscious social and cultural connotations too.

(A Real World Guide to Using Color in Graphic Design, Sean Adams)

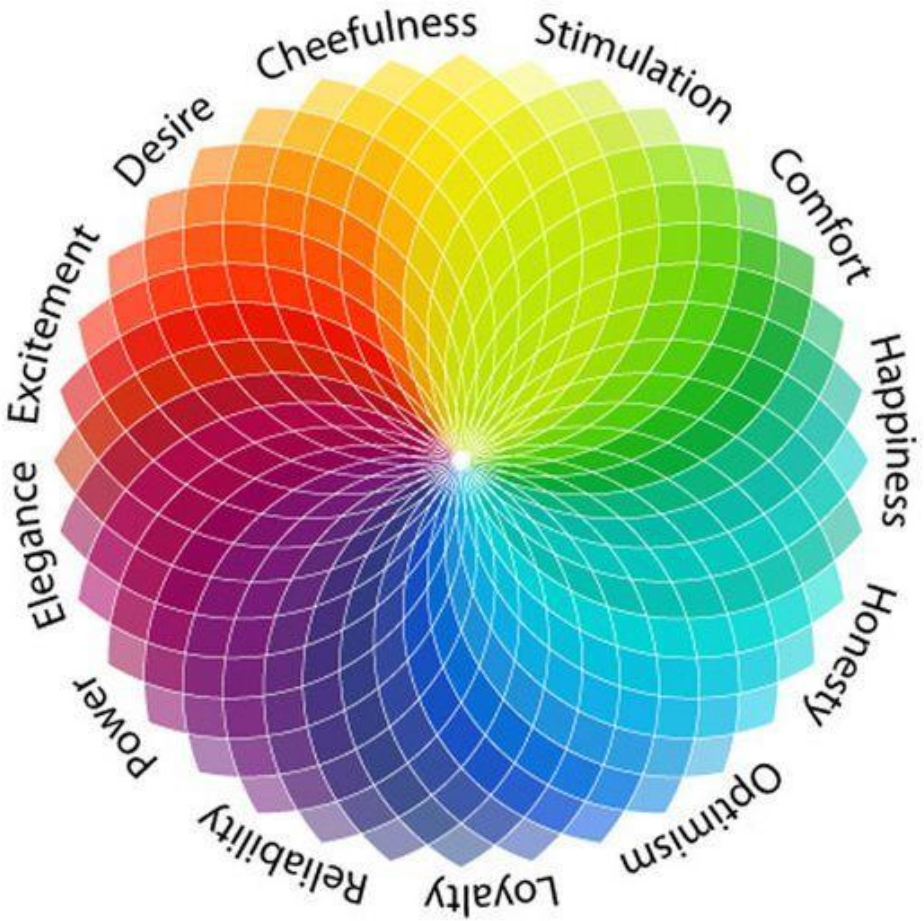


Illustration: Vanderlay Design



Color and Brands

Psychologists have suggested that color impression can account for as much as 60 percent of the acceptance or rejection of a product or service.

(A Real World Guide to Using Color in Graphic Design, Sean Adams)

https://thelogocompany.net/psychology-of-color-in-logo-design/

Klarna.



Break the rules and get attention

Klarna has a pink and black logo. A company that deals with something as dry as enabling money transactions digitally between consumers and stores. Pink is seldom used in logotypes within their industry, which makes them stand out from their competitors.



Basic Color theory

Sir Isaac Newton discovered that a prism separates light into the spectrum of colors: red, orange, yellow, green, blue indigo and violet.

He organized the colors around a wheel.

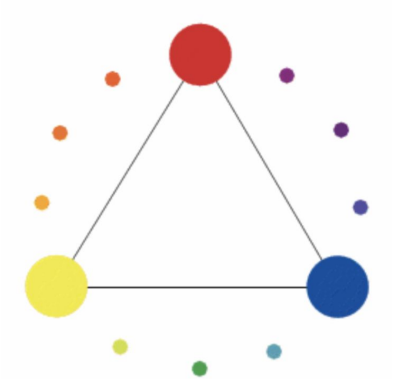
How to use the Color wheel



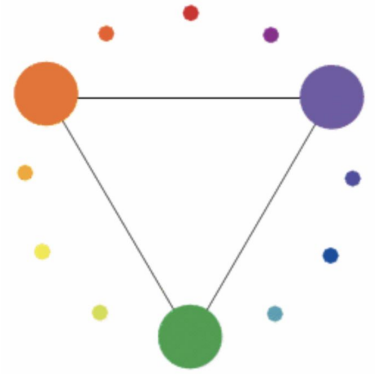
Johannes Itten, who was active within the Bauhaus school chose 12 colors which he developed into a color system.

The color wheel is a useful tool when it comes to understand the relationship between colors. Children learn to mix colours from this model and artist use it for working with pigments like oil paint, watercolor, gouache and so on.

Chapter of Color: Graphic Design The New Basics, Ellen Lupton and Jennifer Cole Phillips



Primary colors



Secondary colors



Tertiary colors



Complements



Analogous colors

Primary, can't be mixed from other colors.

Secondary, each consist of two primaries mixed together.

Tertiary, are mixed from one primary color and one secondary color.

Complements are colors on the opposite of each other.
For a more subtle combination choose near opposites.

Analogous, Color schemes built from hues that sit near each other on the color wheel.

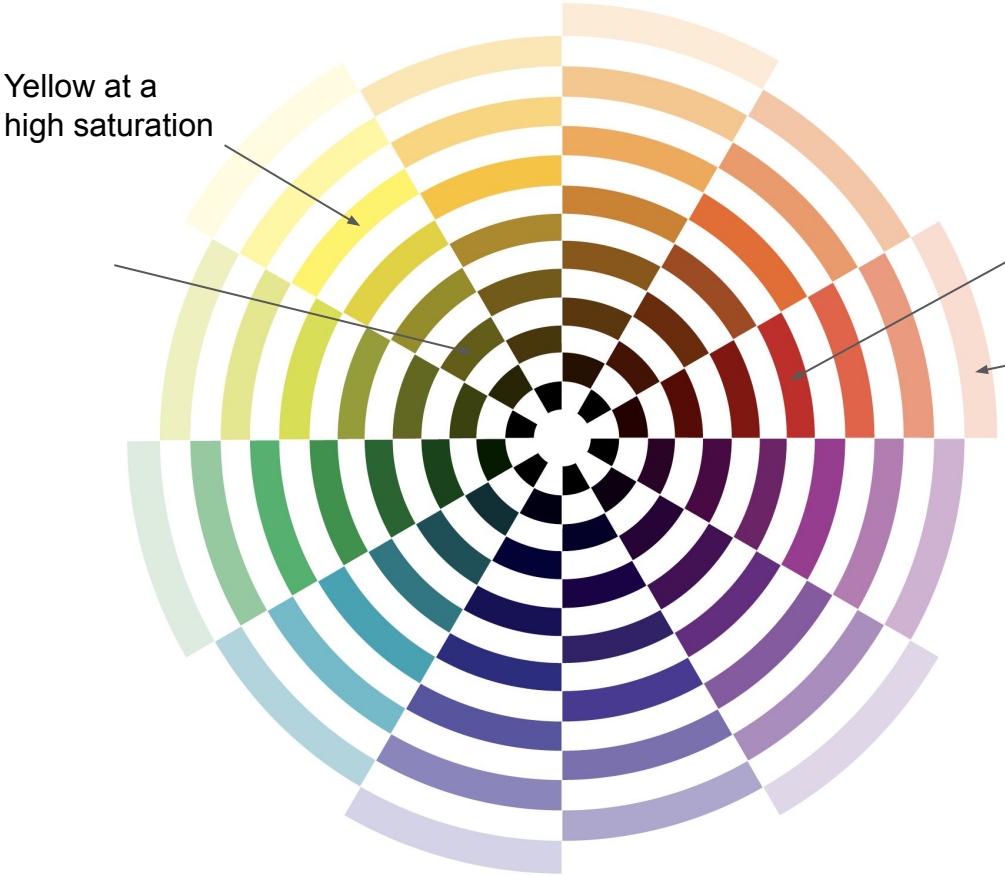




Painting by Axel Töreman
(Nattcafé II, 1906)

An example of how to use colors from the color wheel in a painting.
Note the shadows, tints, complement colors and hues in the picture.

Graduated color wheel



Each hue on the color wheel is shown here in a progressive series of values (shades and tints).
Note that the point of greatest saturation is not the same for each hue.

https://color.adobe.com/sv/create/color-wheel

Neutrals



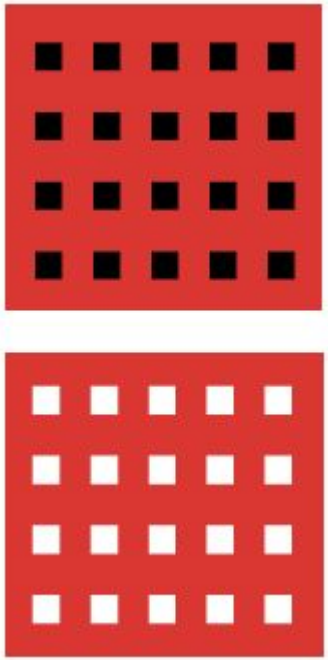
Neutral colors are most clearly defined as hues that appear to be without color, and that don't typically appear on the color wheel. Neutral colors, therefore, do not compete with primary and secondary colors and instead compliment them.

The four most common neutrals are black, white, brown and grey.

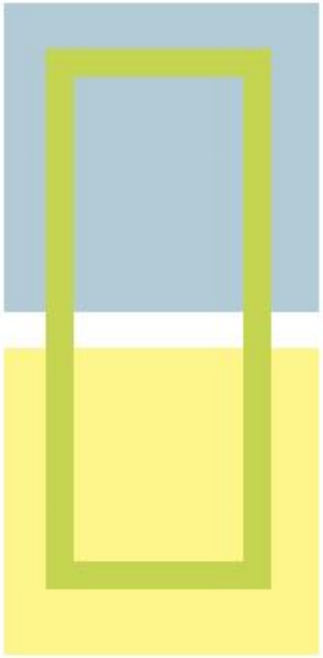
The Realm of Color More on Neutrals

https://medium.com/a-history-of-color/neutral-colors-e394cfce452

Color effects against different backgrounds



Bezold effect
The black squares on red creates a darker effect. and the white squares creates a lighter effect.



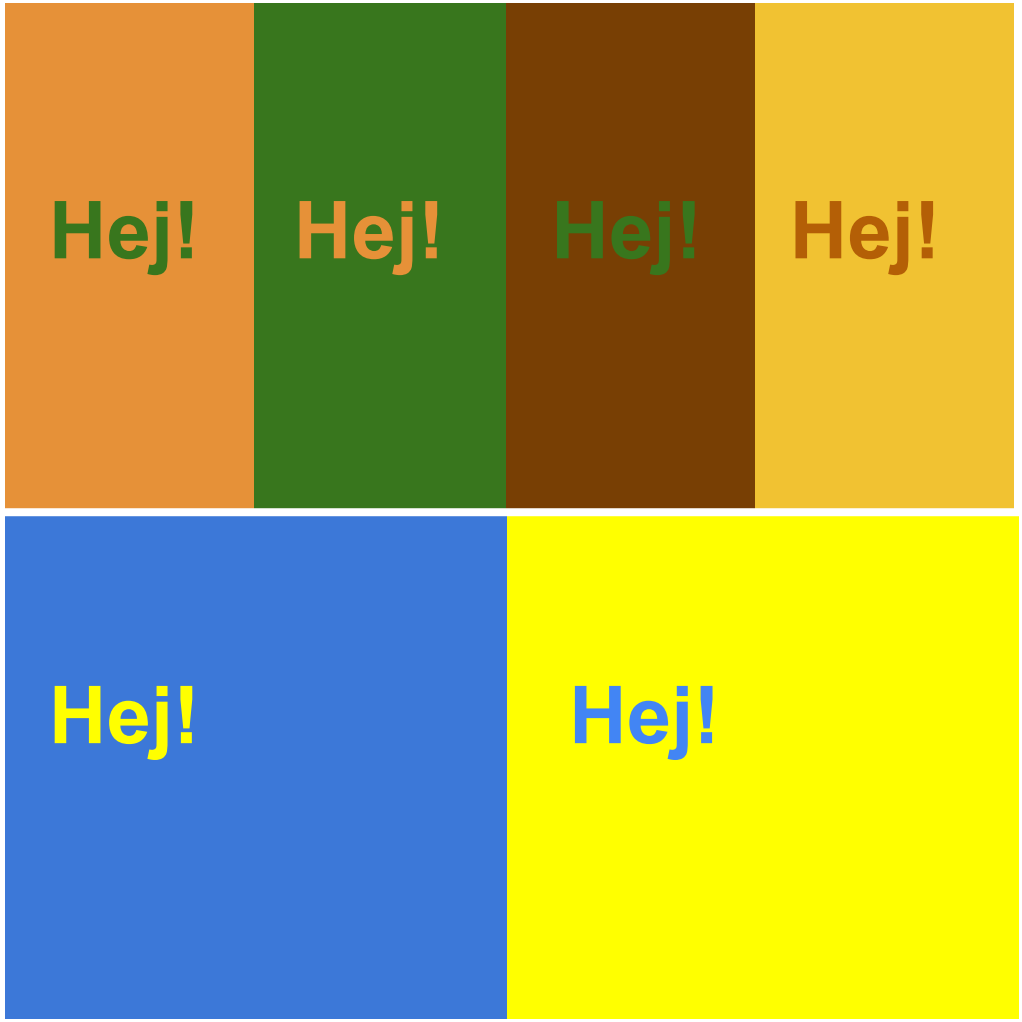
Vibration and Value
The same green appear differently on yellow and blue background.



One color, different effects The same color that passing through these three squares appears differently on each background.

Chapter of Color, page 88, Graphic Design The New Basics

Color blindness



Orange, green, brown and yellow are colors you should avoid combining when they can be difficult to distinguish for people with *Protanopia* and *Deuteranopia.*

Blue and yellow is difficult to distinguish for people with *Tritanopia*.

Good to have in mind especially if you design a chart with different bars where the bars should be easy to distinguish from each other.

h

Accessibility and legibility

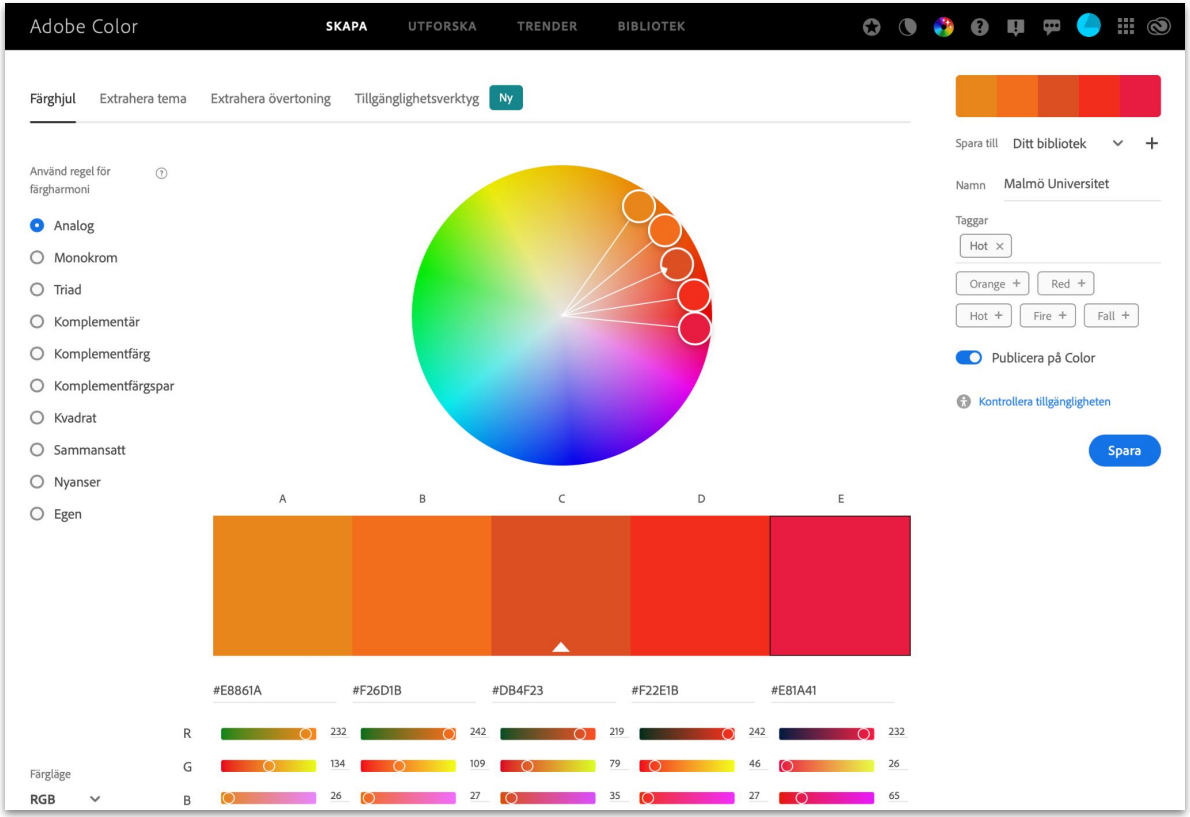


Today, it is important to consider accessibility when designing for screens. It should be easy for everyone to use apps and features on websites.

Make sure that the contrast and size of the objects are easy to read and perceive. This also applies to print media of course.

https://color.adobe.com/sv/create/color-contrast-analyzer

Digital tool



color.adobe.com

https://color.adobe.com/sv/create/color-wheel



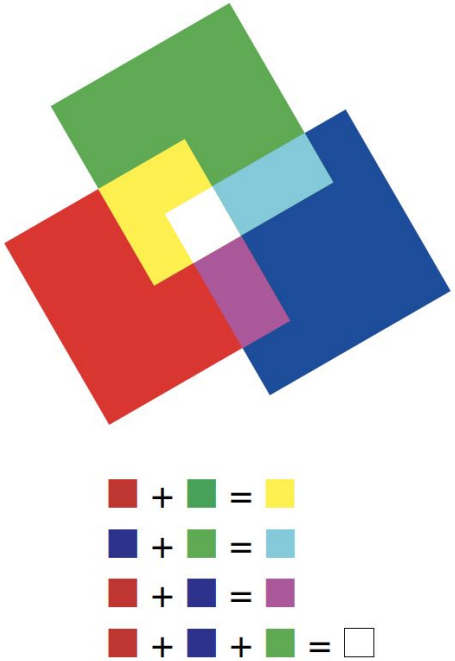
Color systems for screen and print

There are mainly two color models used in graphic design - RGB and CMYK.

The RGB system is used for designing for screens.

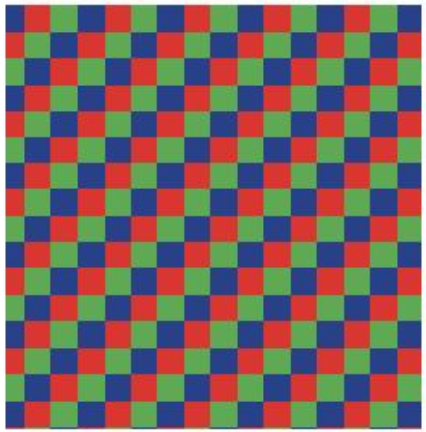
The CMYK system is used for design work for printed media.

Color use for screen



Red + Green + Blue = White

Different percentages of red, green and blue light combine to generate the colors of the spectrum.



Transparent light

An image is built when the different colors of light mix directly, as well as when tiny adjacent pixels combine optically.

RGB

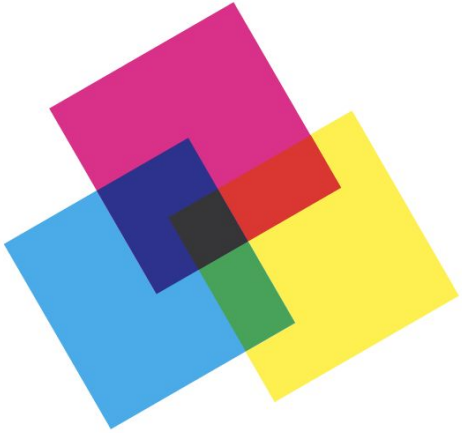
Additive system, based on transparent Light

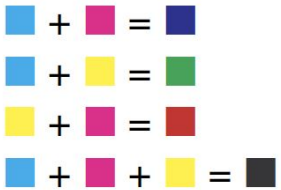
HEX CODE

is the code of the RGB color you choose and is the naming system of colors for web design.

Chapter of Color, page 86, Graphic Design The New Basics

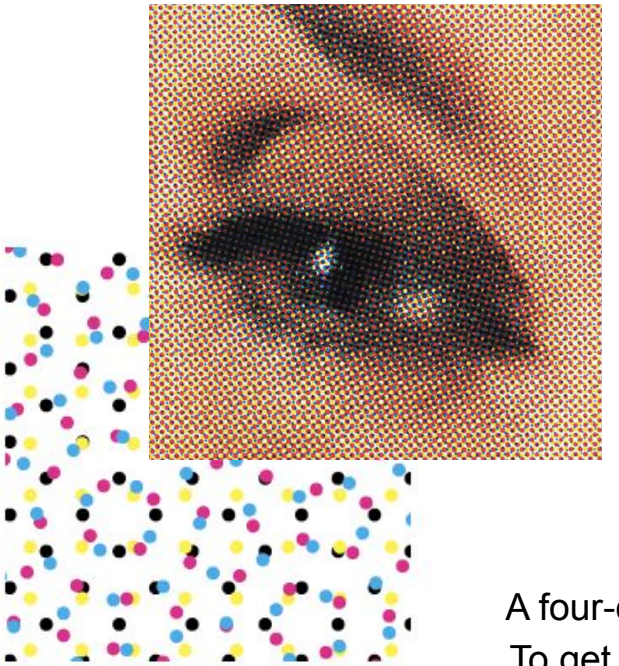
Color use for print





Cyan + Magenta + Yellow = Black

The ink is transparent so color mixing occur as colors show through each other.



Transparent ink

Printer's ink are transparent, so color mixing occurs as color show through each other. It is also performed optically when the image is broken down to tiny dots of colors of varying size.

CMYK

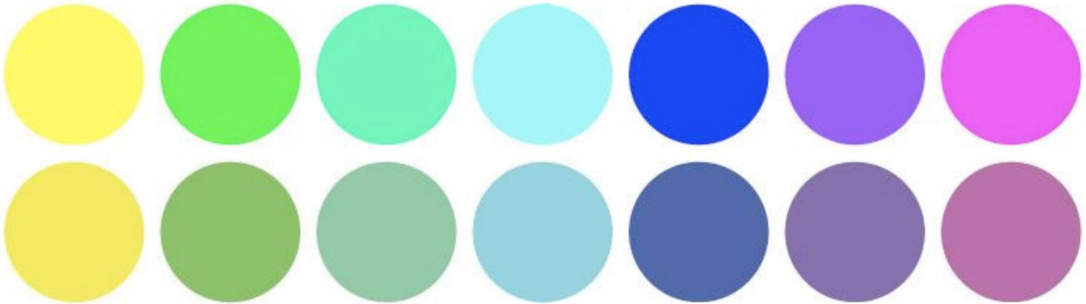
Subtractive system, based on transparent ink.

A four-color process for reproduction of photos. To get a full tonal range you need to add black.
C = Cyan, **M** = Magenta, **Y** = Yellow, **K** = Black

Chapter of Color, page 86,
Graphic Design The New Basics

Color differences between screen and print

Colors on screen



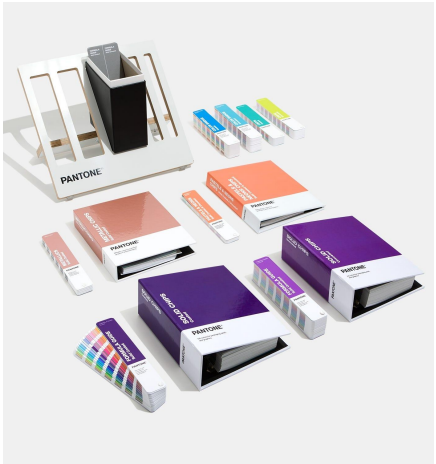
Colors in print

It is important to be aware that colors differ between colors you see on the screen and how they look printed on paper or printed in full color in offset printing.

Usually the colors are percieved to be duller in print than on screen.

Color use for print







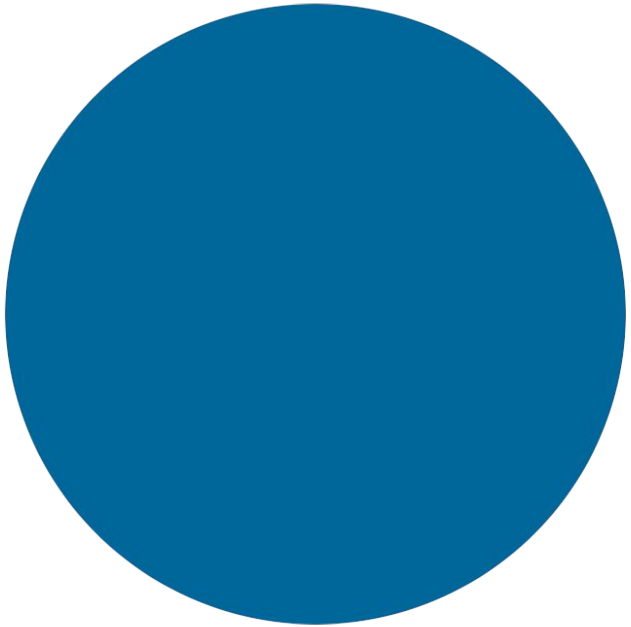
PMS chip
Each PMS color has it own number.
When using PMS you choose the colors from printed color guides.

(The U stands for uncoated).

Pure and bright
Using PMS colors is the best way to get bright and clean colors.

PMS = Pantone Matching System is a system of opaque colors used for print media. They are often perceived as cleaner and clearer than CMYK colors. More useful when you only need to print a few colors. Paper bags from luxurious stores, perfume packaging, and graphic posters are examples of when used.

Color codes and numbers



CMYK	**C** 91 **M** 53 **Y** 19 **K** 4
RGB	**R** 0 **G** 102 **B** 153
HEX CODE	**#**006699
PMS	**2160 C**

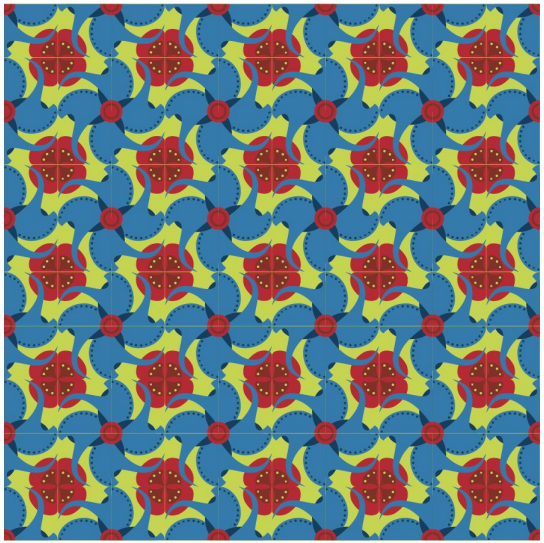
Naming the colors

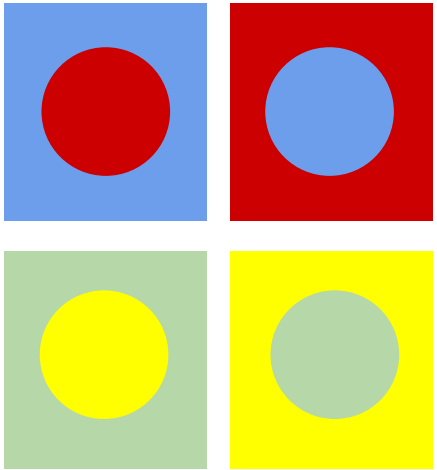
In most software used by graphic designers you can easily find the codes for CMYK, RGB and HEX.

For PMS Colors there are good converters online where you get some options to choose from.
https://www.pantone.com/color-finder

Designing with colors







Two different palettes, the same pattern
Textile designer often create numerous colorways for a single pattern. The pattern often look quite different depending on the color setting.

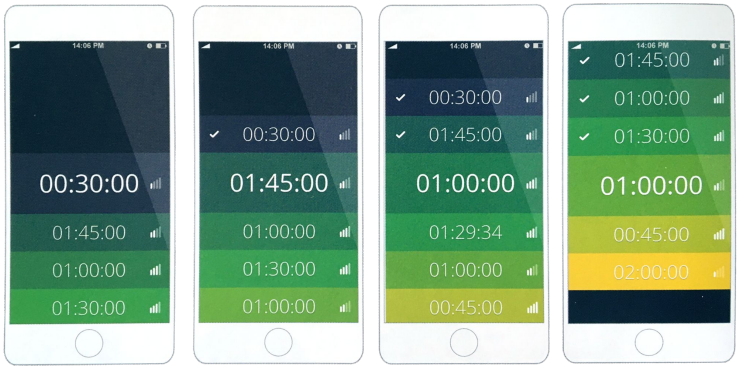
Intense colors pop out more
If you paint a room in a bright red or yellow it will look smaller than if you paint it in blue or green.

Chapter of Color, page 97, Graphic Design The New Basics

Designing with colors



A branding project based on analogues colors
The designer has picked colours near each other on the color wheel. This makes a nice palette that creates coherence but also a variety between the different units in the project.



From blue to green to yellow
An App that tracks the duration and intensity of cardio workouts. The different colors represent the time of the workout and the bars to the right represent the intensity.

Chapter of Color, page 90+94, Graphic Design The New Basics

Designing with colors

From little to much - often used in bar- and circle diagrams



Black and bigger



Clear and modest



Hierarchy

Color is a useful tool to clarify the hierarchy of what you want to tell with your design and in which order.

Using color is also a way to help the user/viewer understand the information intuitively. To navigate on a web site, pressing the right buttons and understand and perceive the content in the design solution.

Hierarchy from What Is Graphic Design by Gareth Davies
https://www.youtube.com/watch?v=RITZ98UXIdw



Class Exercise:
Identify this autumns color

Breakout groups, 20 minutes
Choose a presenter

1. Discuss in groups ONE color that you think will be trendy autumn 2024. Decide on which one together.

2. Give a couple of examples to prove your thesis. Could be in fashion, graphic design, home furnishing, makeup, hair colors, etc.

Share your groups reflections after the break.

Exercise Methods 1B



Complements



Analogous

Create two color palettes:

1. *complementary* colors
2. *analogous* colors

Create a basic design with both color schemes using shapes. Include a set of feelings with the designs:

Order and Chaos,
Safety and Insecurity
Loud and Quiet

Create with paper, markers or pencils then photograph or digital using Google drawings or similar program.

MORE DETAILS ON CANVAS



Thanks!

Elizabeth Ashley Fox-Jensen
ELIZABETH.JENSEN@MAU.SE