University of Ishik
College of Engineering
Department of Interior Design

Interior Design Studio
Health Building

[The Impact of Color upon the perception of interior spaces]

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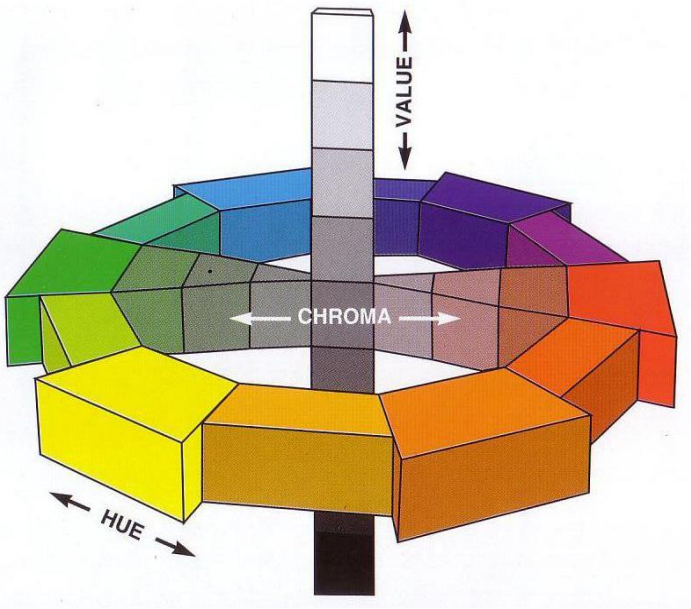
Color Fundamental

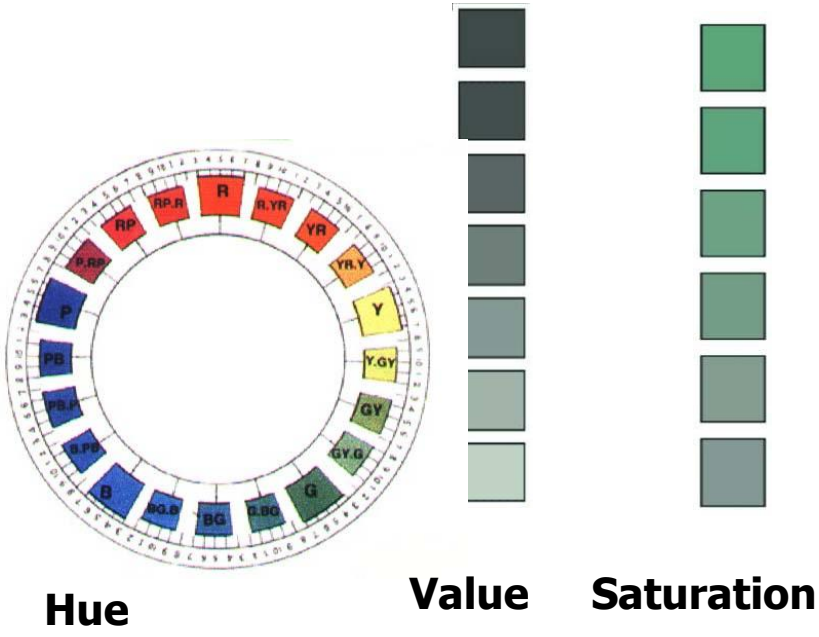


Definition of color is a specific visual sensation produced by visible radiation, or "color stimulus".

1. **Hue: - The attribute that we recognize and describe a color such as red or yellow.**

2. **Value (Lightness):- The degree of lightness or darkness of a color in relation to white and black.**

3. **Saturation (chroma, intensity):- Saturation refers to the strength of a color. The brilliance or dullness of colors.**



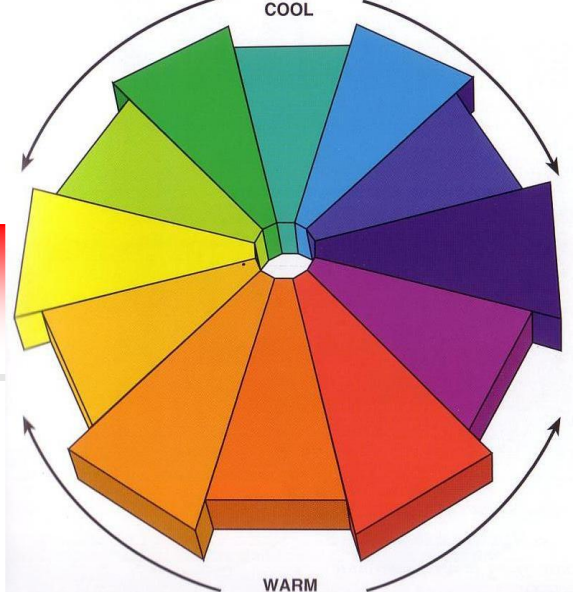
The Functional Use of Color

Colors are used to create beauty more than that they are useful.

Color can be used as pure function, to reflect or absorb light. Color is a visual language. Colors can alert or warn they can be used to express emotion.

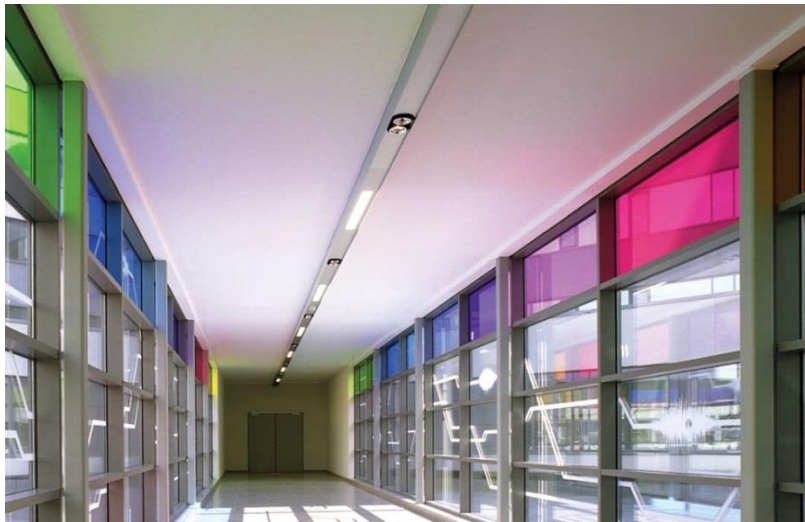
Color identifies and discrimination between objects of similar or identical form and size. Color can be used to modify the perception of space. It can create illusions of size, nearness, or distance. It can be used to separate one area from another. Color can be used to create continuity between separated elements in design, and it can be used to attract the eyes, establishing emphasis or focus in composition .

Color Schemes



Color schemes have been classified into three main groups which are subdivided into subgroups.

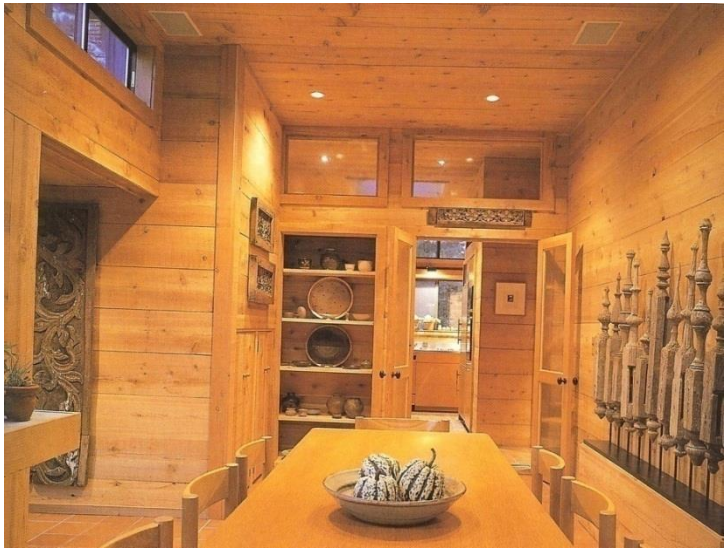
Color schemes are two broad categories of hue schemes, related, contrasting based on the hue relationships within a color group and the third is triangle scheme based on color value.

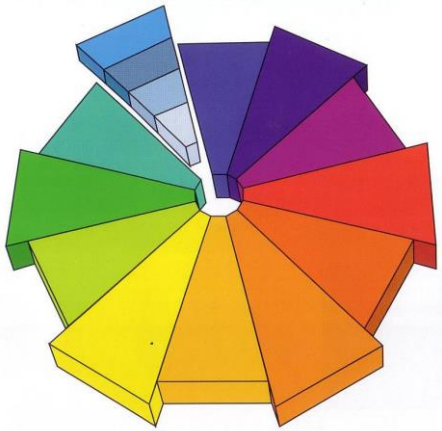


A- Related Color Schemes

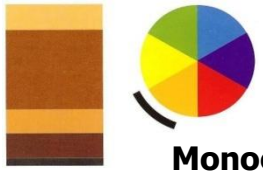
1. **Monotone (Neutral) Color Schemes** use a single color of **low chroma in one value** Typical colors used are **grays,** tone, and tinted **whites** .
2. **Monochromatic or One-Hue Harmony** use a **wider** range of chroma, and value in **a single hue**. These schemes tend to be **easy**.

Monotone (neutral) color scheme



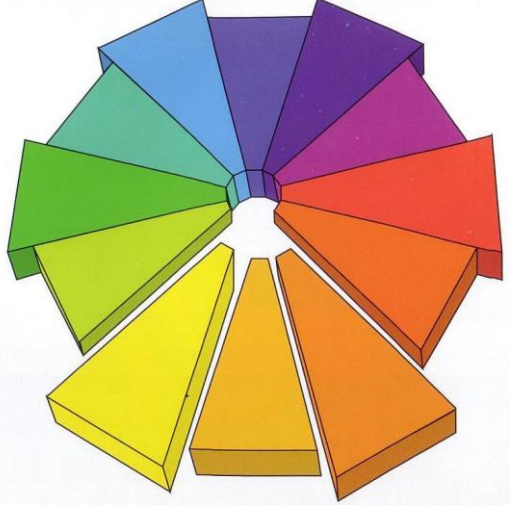


Monochromatic color



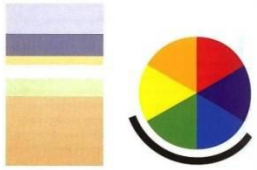
Monochromatic color scheme

A- Related Color Schemes



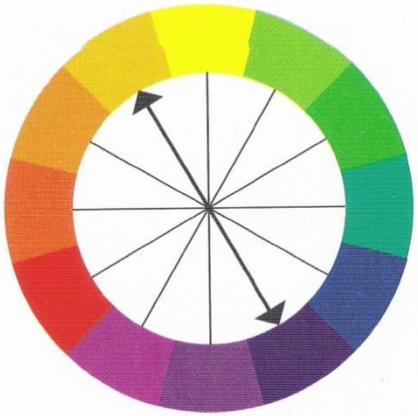
Analogous color

3. **An Analogous or Closely Related Hue Harmony** the typical analogous scheme uses one primary or one secondary plus the hues adjacent to it on either side. An adjacent **primary and secondary plus the tertiary hues between them** .



Analogous color scheme

A- Related Color Schemes



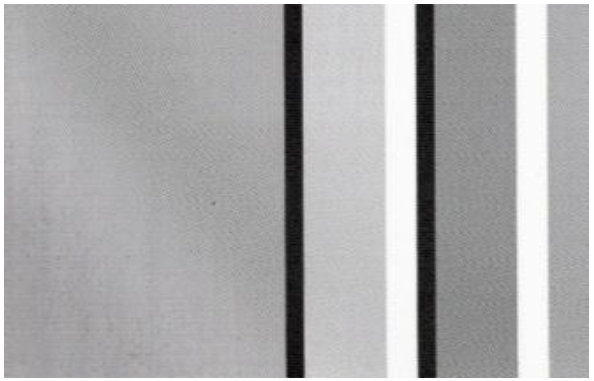
Complementary color

4. **A Complementary Hue Harmony consists of hues that are approximately opposite each other on the hue circle ,for example reds with greens, which tend to seem bright and balanced.**

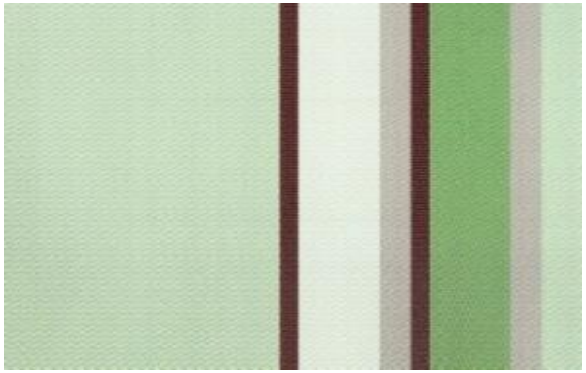
Complementary color scheme

B- Contrasting Color Schemes

1. **Light-Dark Contrast** appears in the difference between colors in relation to their degree of lightness.
2. **Chromatic-Achromatic Contrast** results when chromatic and achromatic colors come together. Its degree depends on the intensity of hue and on brightness contrast.



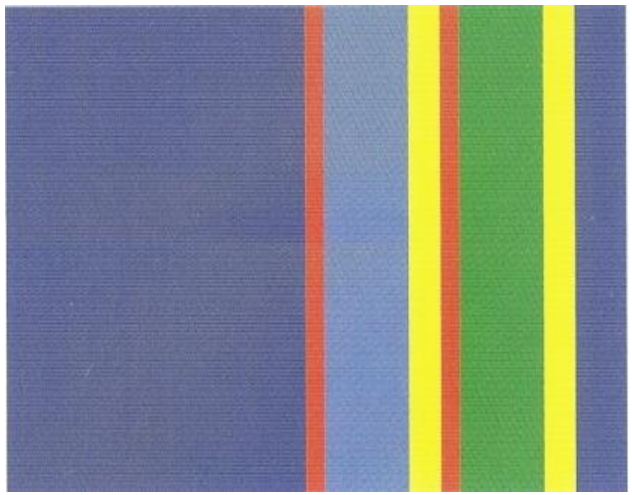
Light-Dark Contrast



Chromatic-Achromatic Contrast

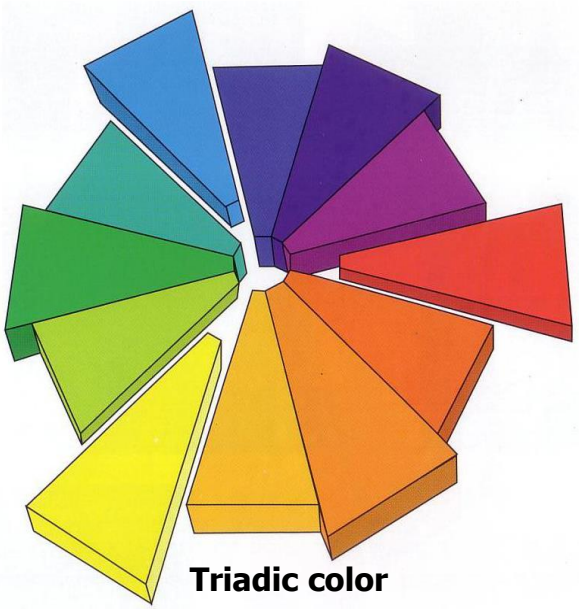
B- Contrasting Color Schemes

3. **Chromatic Contrast** results from combining chromatic colors. Chromatic contrasts using pure colors are very powerful.



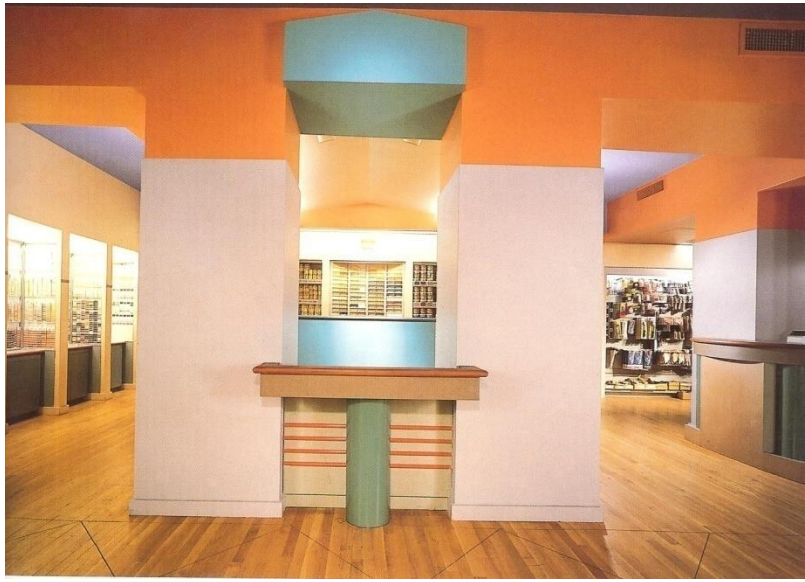
Chromatic Contrast

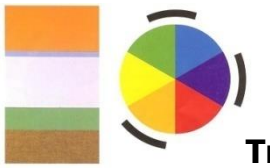
B- Contrasting Color Schemes



Triadic color

a) **A Triadic Hue is a scheme that uses three hues about equally spaced around the color circle . Red, yellow, and blue or orange, green, and violet. These are the most difficult of all the color schemes .Successful triad schemes generally employ reduced intensities of all hues or all but one hue .**

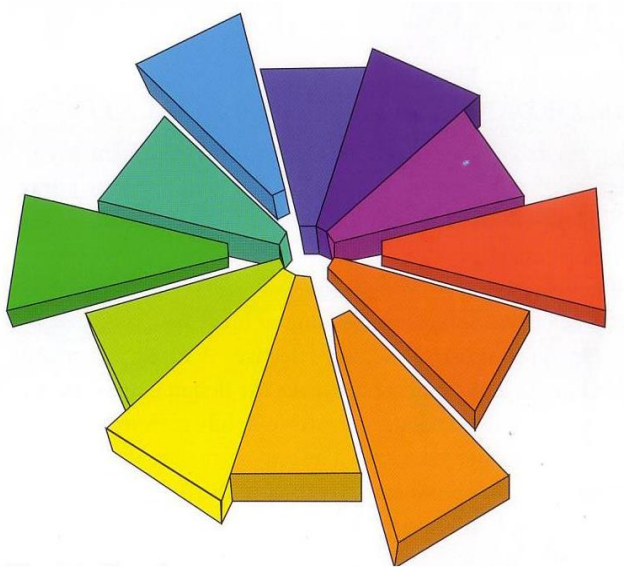




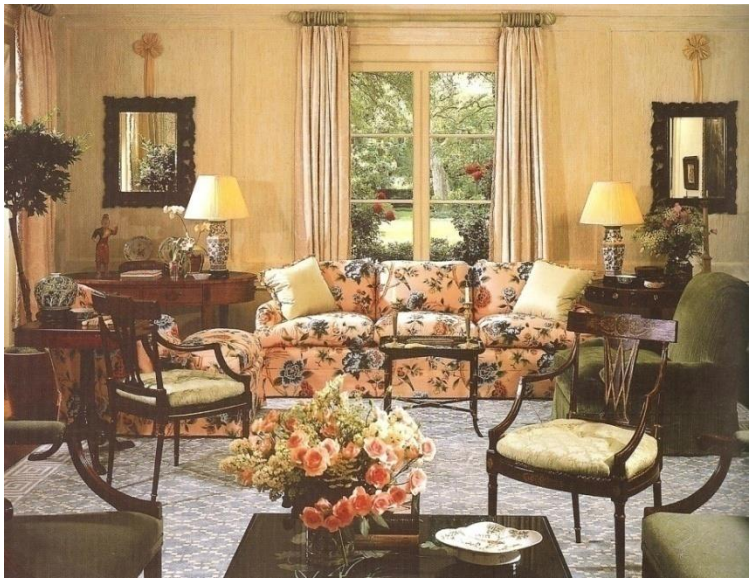
Triad color scheme

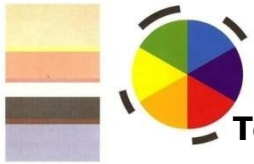
B- Contrasting Color Schemes

b) Quadratic Hue we could use four hues equally spaced on the hue circle.



Quadratic (tetrad) color

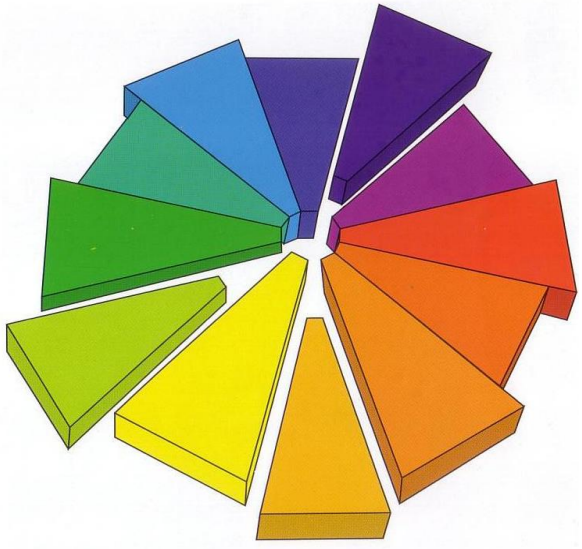




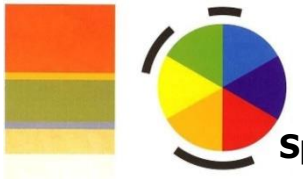
Tetrad color scheme

B- Contrasting Color Schemes

c) **Split-Complementary Scheme** in this scheme a **hue on one side** of the wheel is used with the **two hues that fall on either side** of the **directly opposite complementary**. Effective split-complementary schemes look lively and colorful.



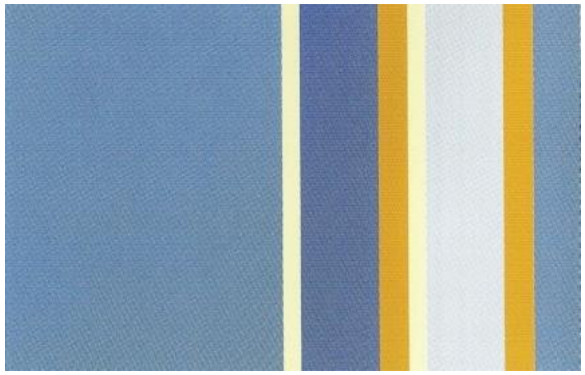
Split complementary color



Split complementary color scheme

B- Contrasting Color Schemes

4. **Intensity Contrast** this describes the contrasting of colors **with different saturation**. Its effect is strongest when small amounts of pure color are placed as an accent between large areas of extended, muted colors. It is a good instrument for color dominance, sub dominance.
5. **Quantity Contrast** refers to the proportional relationship of colors and their interaction.

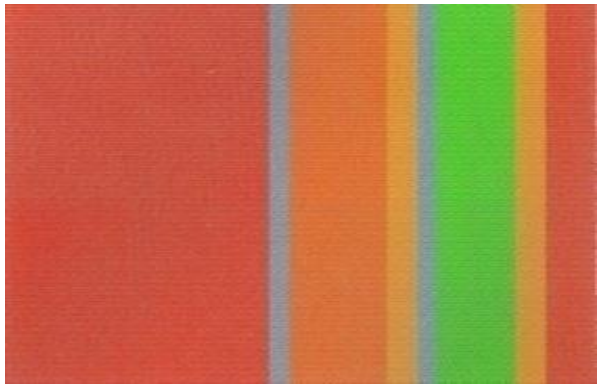


Intensity contrast

Quantity Contrast

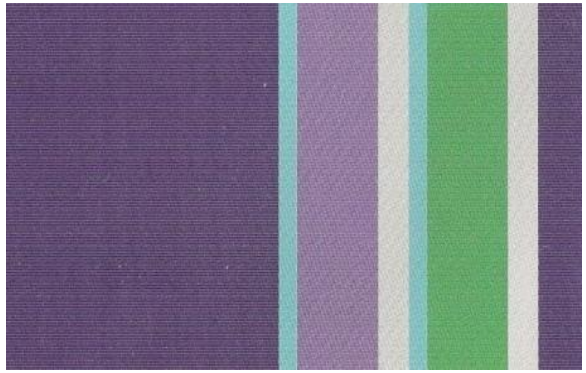
B- Contrasting Color Schemes

7. **Flicker Contrast** it will often occur when intensive colors with the same degree of brightness or darkness are applied to a wall. It is evidence that a sensible **contrast between figure and ground** is not considered.



Flicker Contrast

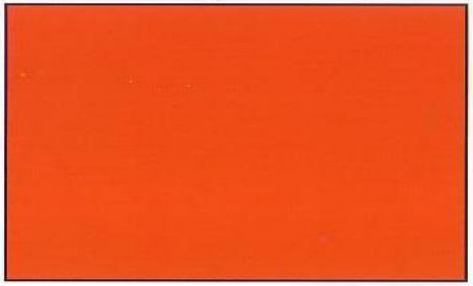
8. **Cool-Warm Contrast** if we take the color wheel as a reference some colors are considered cool or warm in the subjective psychological response to them. They also contain elements that suggest distance thus becoming a medium for perspective effects.



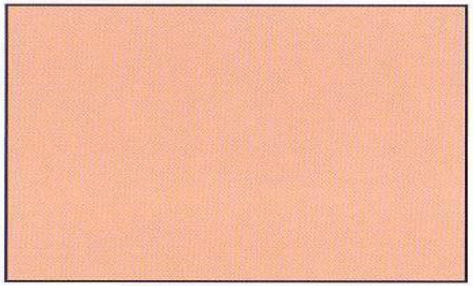
Cool-Warm Contrast

C- Triangle Schemes

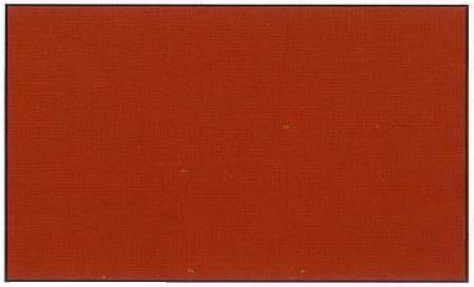
The triangle is based on the three basic elements pure color, white, and black. They combine to create the secondary forms of tint, shade, gray, and tone.



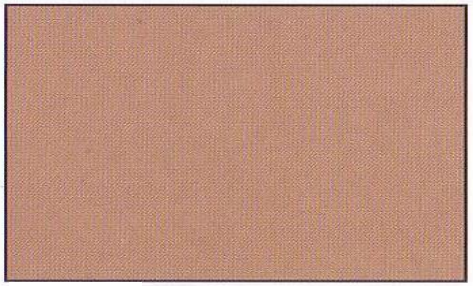
Full intensity



Tint



Shade

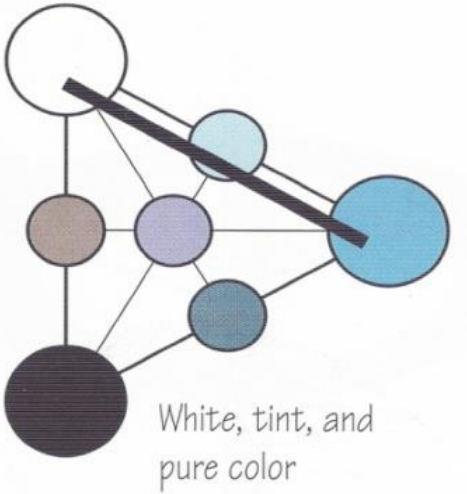


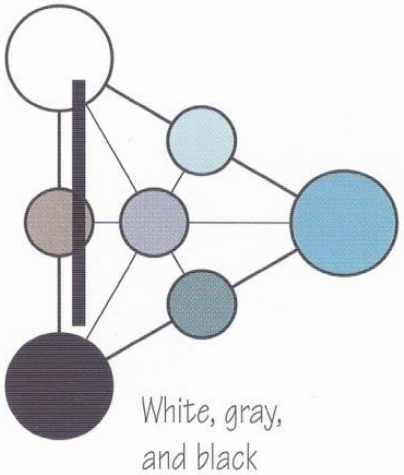
Tone

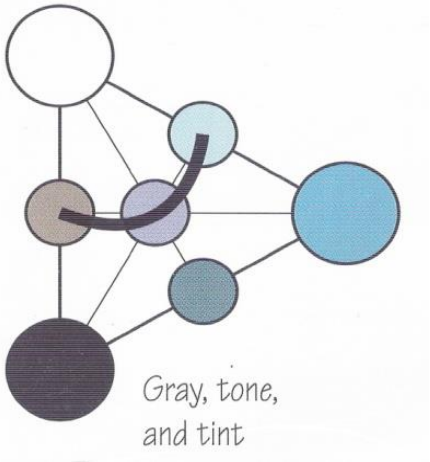
C- Triangle Schemes

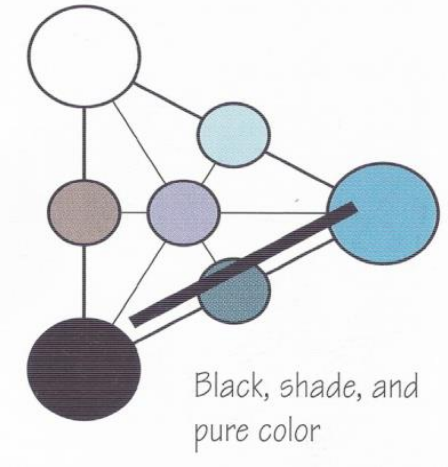
There are eight types of triangle schemes :-

1. **White, tint, and pure color.**
2. **White, gray, and black.**
3. **Gray, tone, and tint.**
4. **Black, shade, and pure color**


White, tint, and pure color

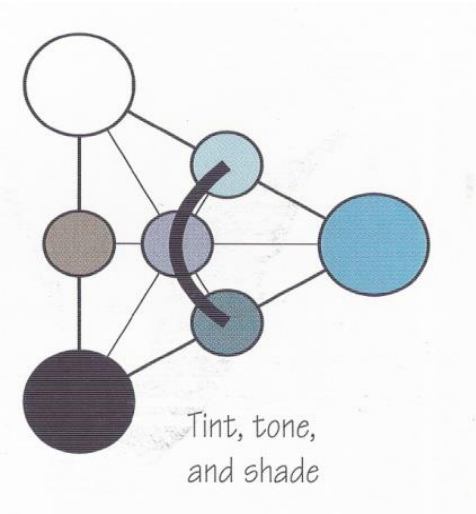

White, gray, and black

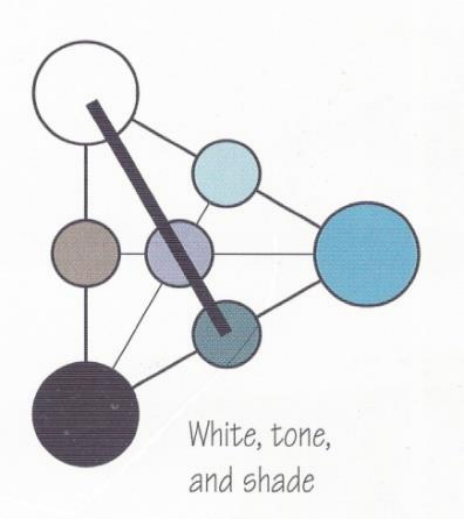

Gray, tone, and tint

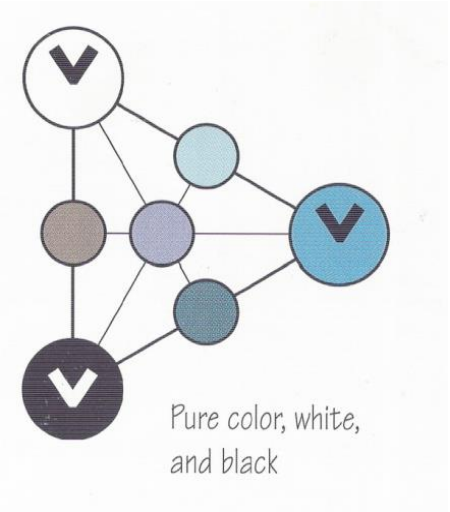

Black, shade, and pure color

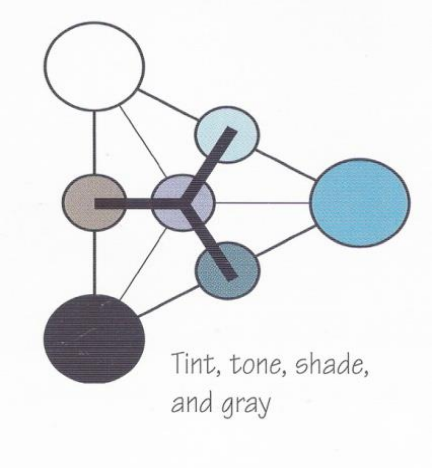
C- Triangle Schemes

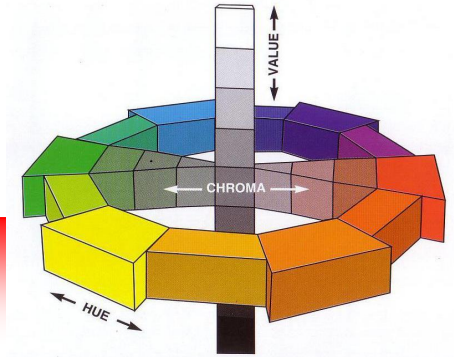
5. **Tint, tone, and shade.**
6. **White, tone, and shade.**
7. **Pure color, white, and black.**
8. **Tint, tone, shade, and gray.**











Progressions Color of the Munsell solid

1. **Progression 1, we could travel vertically on a path of changing value.**
2. **Progression 2, we could travel horizontally on a path of changing chroma.**
3. **Progression 3, we could travel diagonally on a path where both value and chroma change.**
4. **Progression 4, is a duplication of progression 1, where saturation is constant and lightness changes in an orderly fashion with the hues.**
5. **Progression 5, is a counterpart of progression 2, where lightness is constant and saturations change in an' orderly fashion with the hues.**
6. **Progression 6, is a duplication of progression 3, where both lightness and saturation change in orderly fashion with the hues.**
7. **Progression 7, is a hues change in an orderly fashion, but both lightness and saturation are repetitive.**