



CPOPC November 2024

Understanding Colours

Darren Bessette – November 9, 2024

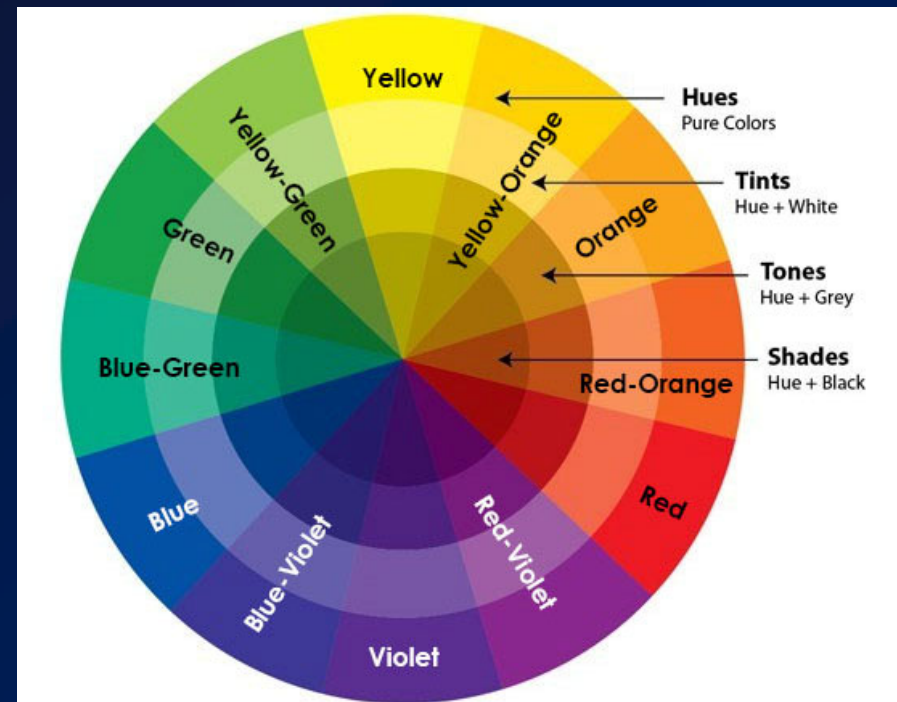
Primary Colours

In theory, mixing primary colours can create every other colour:

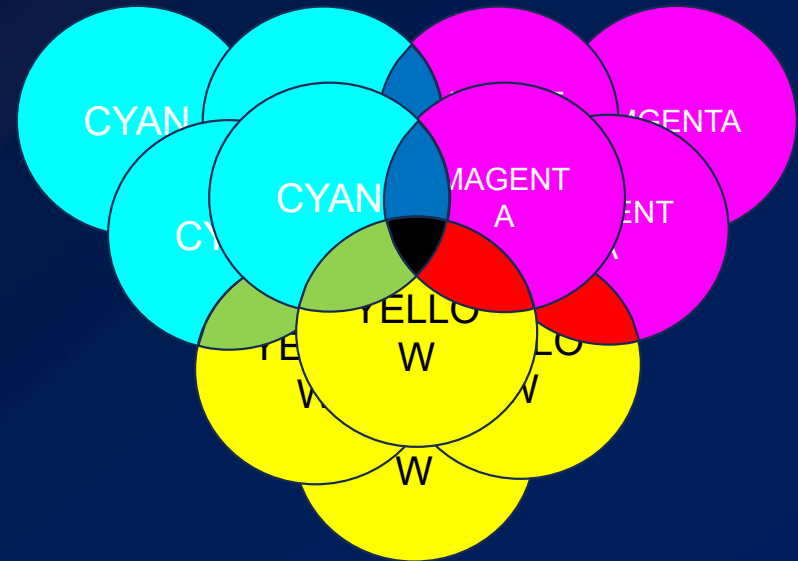
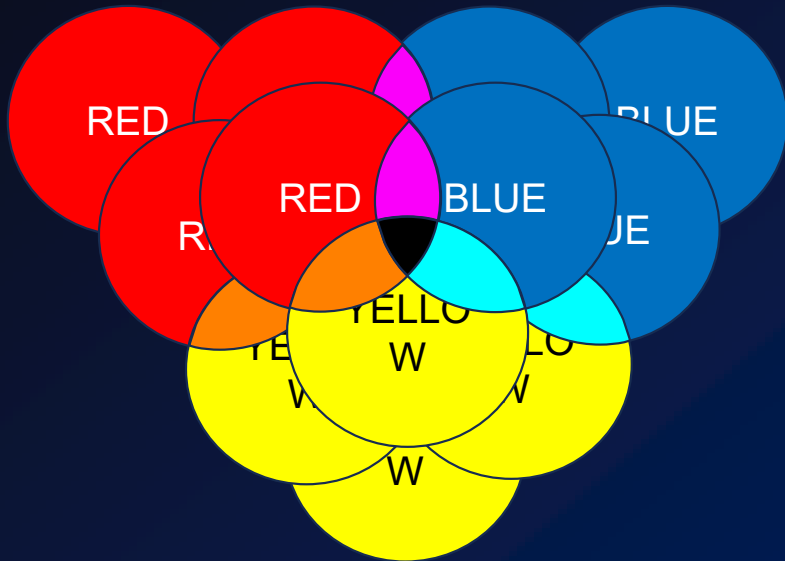
- Can create all the hues
- Can only create a subset of Colours (Colour = Hue x Saturation x Lightness)
- Hue is how humans perceive colour

Two basis for primary Colours: Subtractive and Additive

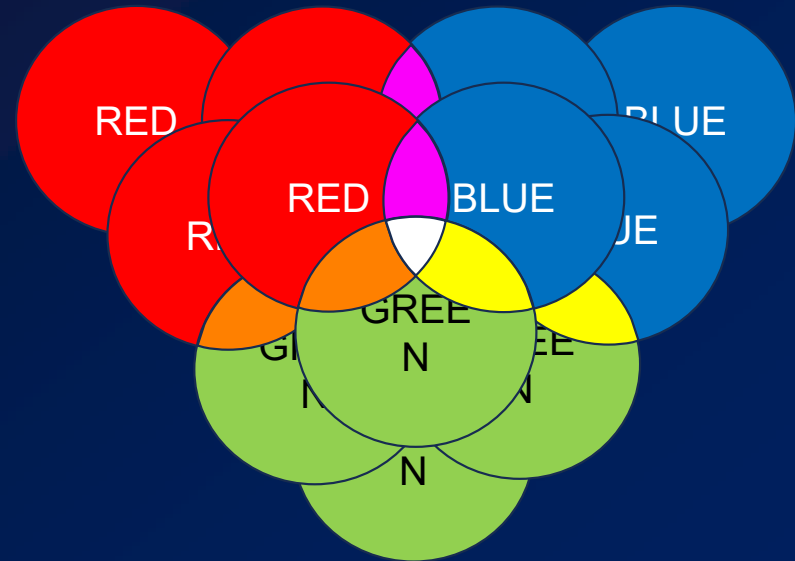
Primary Colours are not pure



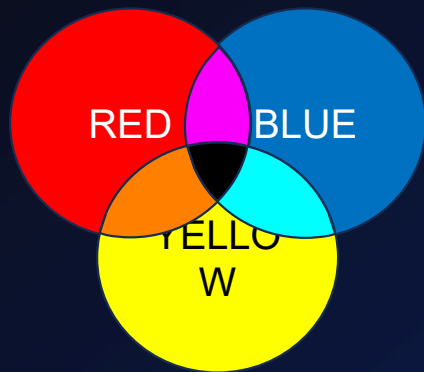
Subtractive Colour



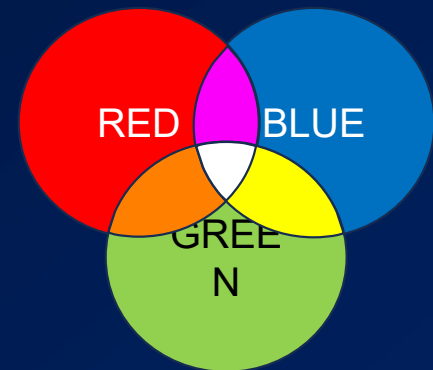
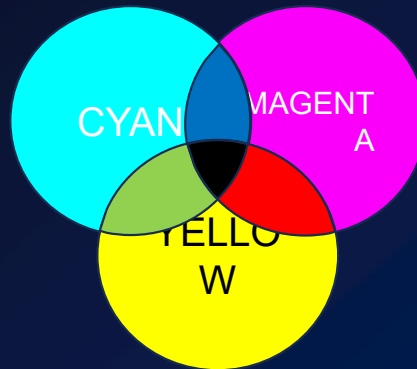
Additive Colour



Comparing Colour Spaces



Subtractive



Additive

Additive vs Subtractive

Subtractive

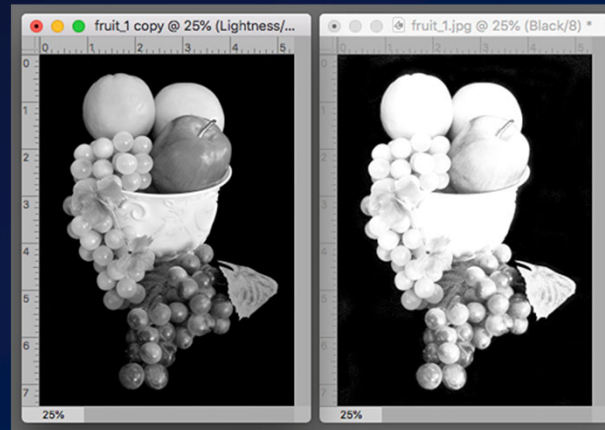
- Material absorbs light and reflects the colour we see
- Used for printing and materials (paints, plastics)
- CYMK is more often used for printing because easier/better to reproduce Colour

Additive

- Projects the Colour we see
- Used for light capture (e.g. cameras) and projection (e.g. televisions, monitors)

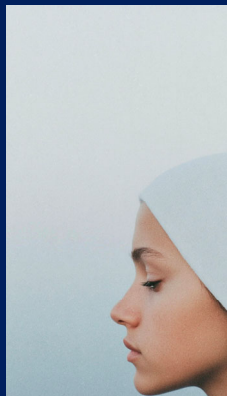
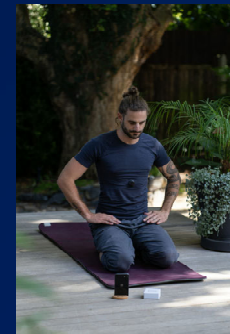
How to Use Colour

- Coloured lights or gels on lights
 - Adds colour and mood to the scene
 - Creates unique monochromatic images
- Saturation, Hue sliders in photo processing



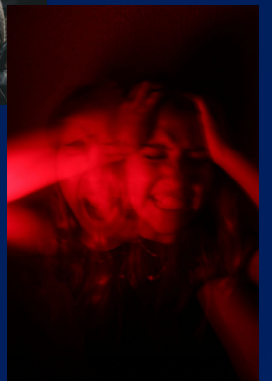
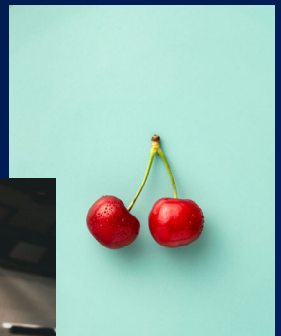
Understanding Colour Psychology

- **Warm Colours:**
 - Red, orange, and yellow
 - Evoke emotions ranging from warmth and comfort to anger and hostility
 - Create a sense of energy, excitement, or even tension.
- **Cool Colours:**
 - Blue, green, and purple
 - Associated with calmness, serenity, and sadness
 - Create a tranquil, peaceful atmosphere or to convey melancholy.
- **Neutral Colours:**
 - White, black, and gray
 - Used to balance your composition or emphasize other Colours
 - Often serve as a backdrop, allowing other Colours to stand out more vividly



Using Colour to Tell a Story

- Highlighting the Subject:
 - Use Colour contrast to make your subject stand out.
- Creating Mood:
 - Colour palette influences the mood of your photograph
- Symbolism in Colour:
 - Colours carry symbolic meanings that add depth



Colour Grading

- Creating Consistency:
 - Create a cohesive look across a series of photos.
- Enhancing Emotion:
 - Subtly shifting the Colours in your image, you can enhance the emotional impact



Complementary Colours

- Creating Visual Interest:
 - Make your images more visually striking
 - Used to draw attention to specific elements in your composition
- Balancing the Scene:
 - Important to balance them to avoid overwhelming the viewer
 - Use one Colour as the dominant hue and the other as an accent to maintain harmony



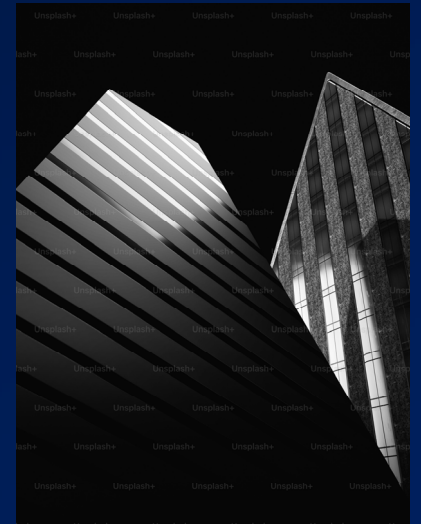
Analogous Colours

- Harmonious Composition:
 - Analogous Colours are next to each other on the Colour wheel and tend to create a harmonious, pleasing effect.
- Subtle Storytelling:
 - Analogous Colours can be used to tell a more subtle, nuanced story



Monochromatic Colour Schemes

- Focus on Form and Texture
- Creating Unity:
 - Monochromatic images can create a strong sense of unity and cohesion



Practical Tips for Working with Colour

- Use Colour Intentionally:
 - Convey a mood
 - Highlight a subject
 - Create a sense of balance
 - As a guide your composition and storytelling
- Experiment with Post-Processing:
 - Fine-tune the Colours in your images
 - Experiment with different Colour grades, tints, and saturation levels to see how they affect the mood and narrative
 - Subtle adjustments can often have a significant impact
- Consider the Environment
 - Pay attention to the Colours present
- Learn from Film and Art
 - Study how others use Colour (Photographers, Films, Artists, etc.)