



#### What is color psychology?

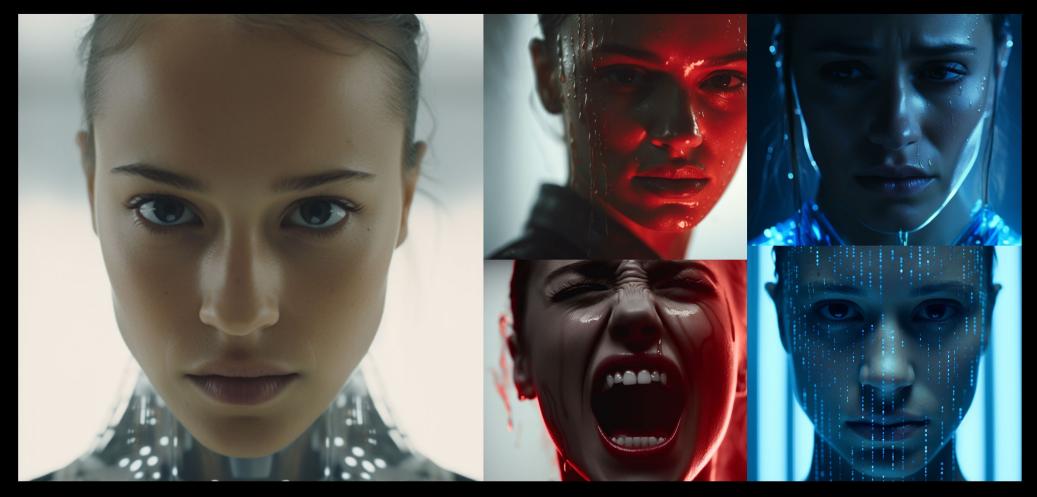
Each color has a different meaning and can evoke different emotions in people. **Color psychology** is a branch of color theory which studies how you can use each color to create emotion, mood, and feeling in art.

<u> </u>				
TRANQUILITY AUTHORITY WISDOM STABILITY CLEANLINESS FRESHNESS FREEDOM	LOVE EXCITEMENT WARMTH ROMANCE PASSION SPEED LUCK	HEALTH HAPPINESS FRIENDLINESS ENTHUSIASM ENERGETIC YOUTH FUN	CREATIVITY FRIENDLINESS CHEERFULNESS ENERGETIC OPTIMISM WARMTH JOY	NATURE GROWTH PROSPERITY HEALTH HOPE LUCK LIFE
COLD SADNESS DEPRESSION	RAGE BLOOD AGGRESSION	RUIN DANGER DESOLATION	ILLNESS DANGER MADNESS	ENVY POISON CORRUPTION
ROMANCE NURTURING INNOCENCE DELICATE PLAYFUL SWEET KIND	LUXURY MYSTERY SPIRITUALITY ATTRACTION FUTURE ROYALTY MAGIC	LUXURY DARKNESS SOPHISTICATION AUTHORITY ELEGANCE MYSTERY POWER	LIGHT HOLINESS CLEANLINESS SPIRITUALITY INNOCENCE PURITY HOPE	STRENGTH CALM TIMELESSNESS NEUTRALITY AUTHORITY WISDOM STABILITY
IMMATURITY DECEPTION MATERIALISM	ILLUSION DECEPTION DETACHMENT	FEAR LONELINESS HOPELESSNESS	COLD ISOLATION EMPTINESS	DULL LIFELESS ABANDONMENT

## **NEUTRAL, RED, + BLUE TESTS, EX MACHINA:**

EXTREME CLOSEUP PORTRAIT OF A [INSERT EMOTION HERE] ALICIA VIKANDER AS EX MACHINA ANDROID AGAINST A BLANK WHITE WALL, MONOCHROMATIC [INSERT COLOR HERE] LIGHTING, 35MM ANAMORPHIC --AR 2:1 [MIDJOURNEY 5.2]

Neutral Sultry Melancholy

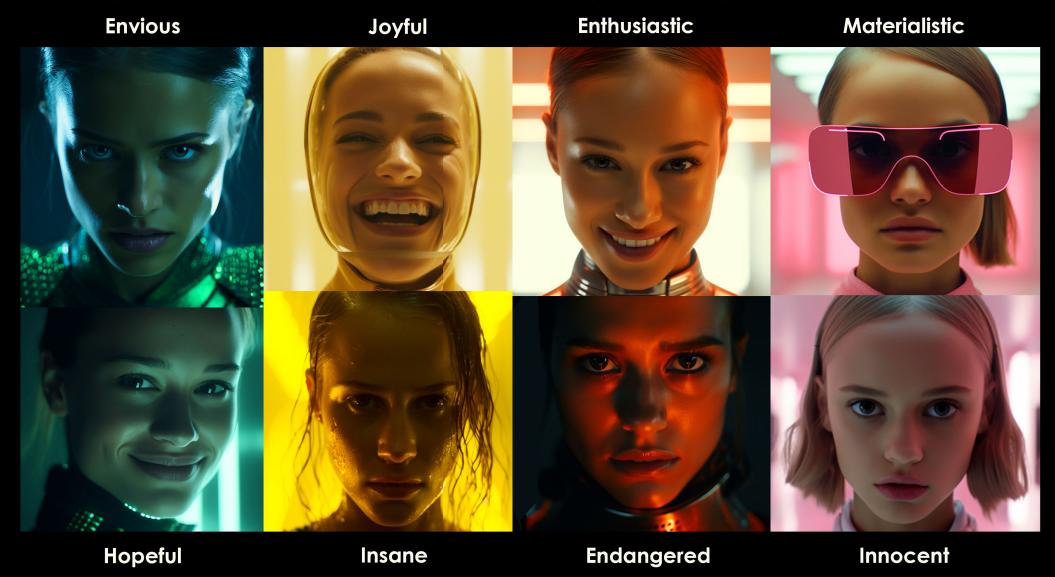


**Angry** 

Tranquil

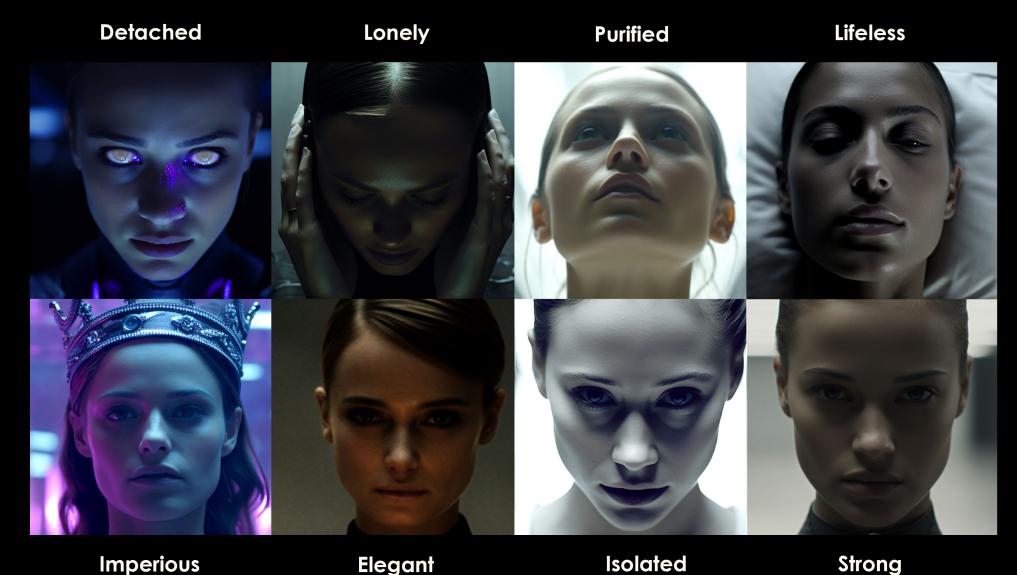
# GREEN, YELLOW, ORANGE, + PINK TESTS, EX MACHINA:

EXTREME CLOSE-UP PORTRAIT OF A [INSERT EMOTION HERE] ALICIA VIKANDER AS EX MACHINA ANDROID AGAINST A BLANK WHITE WALL, MONOCHROMATIC [INSERT COLOR HERE] LIGHTING, 35MM ANAMORPHIC --AR 2:1 [MIDJOURNEY 5.2]

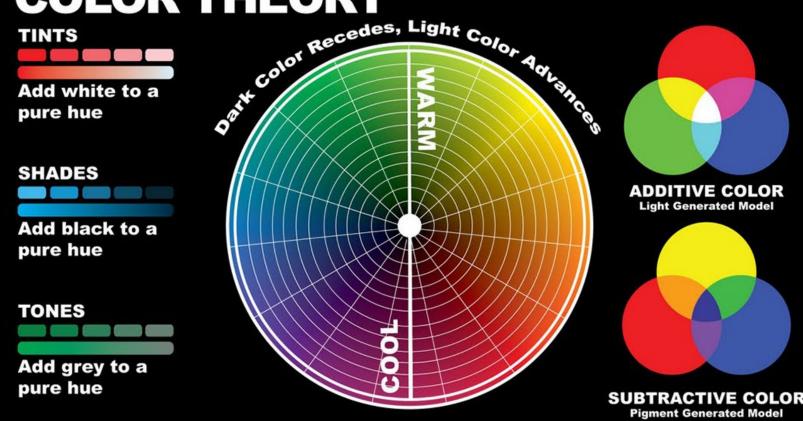


# PURPLE, BLACK, WHITE, + GRAY TESTS, EX MACHINA:

EXTREME CLOSE-UP PORTRAIT OF A [INSERT EMOTION HERE] ALICIA VIKANDER AS EX MACHINA ANDROID AGAINST A BLANK WHITE WALL, MONOCHROMATIC [INSERT COLOR HERE] LIGHTING, 35MM ANAMORPHIC --AR 2:1 [MIDJOURNEY 5.2]



## **COLOR THEORY**



**VISIBLE COLOR SPECTRUM (ROYGBIV)** 



This series is not exhaustive enough to cover all aspects of color theory, but **Seth Wilson's beautiful graphics** capture the most salient points essential for generative artists. RGB is the color mode best for digital designs and CMYK is best for printing; therefore, we will analyze color schemes in the succeeding slides through the modality of RGB.

Midjourney can create color palettes/schemes that inspire you to make other works of art. Its current version (as of today) provides only limited control over the colors used to create images. For example, you cannot specify the Hexcode or Pentone colors when creating an image.

https://www.behance.net/inkfumes

## **COLOR THEORY**

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#### **COLOR MIXING**



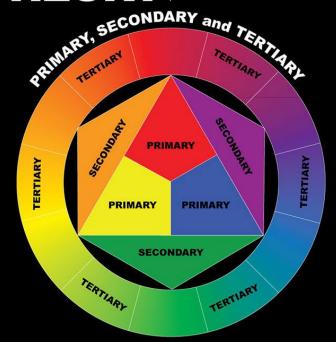
RGB Red, Green, Blue Light Generated Model



RBY Red, Blue, Yellow Pigment Process Model



CMYK
Cyan, Magenta, Yellow, Black
Print Process Model



#### **COLOR MODES**



MONOCHROME Tints, shades and tones of a single hue



GREY SCALE
Black and White only



#### **PRIMARY**



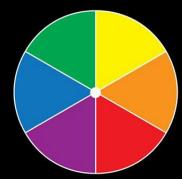
Pigment generated colors are derived from these primary colors: red, yellow and blue.

#### **PRIMARY**



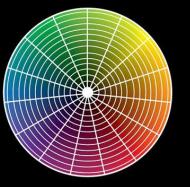
Light generated colors are derived from these primary colors: red, green and blue.

#### **SECONDARY**



Mixing primary colors creates other colors. For example: blue + yellow = green blue + red = violet

#### **TERTIARY & BEYOND**



A secondary color wheel can expand to tertiary and beyond.

















TINTS HUE + WHITE

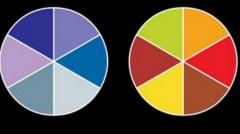


TONES HUE + GRAY



SHADES HUE + BLACK

#### **COLOR PROPERTIES**











COOL

**WARM** 

**BRIGHT** 

DARK

SATURATED DESATURATED

#### **COLOR INTENSITY**













#### **COLOR INTENSITY CHANGES IN RELATION TO ITS SURROUNDING COLOR**

#### **COLOR PALLETTES**



DIFFERENT PALLETTES CAN INVOKE MOOD, EMOTION, LOCATION, CULTURE & MORE



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#### What is color scheme?

A color scheme is a combination of colors used for decoration, clothing, and other design purposes. It can be used to create visual interest, differentiate elements, and convey a certain mood or atmosphere. Generally speaking, color schemes consist of three or more colors that have been chosen for their aesthetic value as well as to harmonize with each other. The various color combinations in a given palette are known as harmonies. The four main types of color schemes are monochromatic, two-color, threecolor, and four-color.

#### What is a color scheme used for?

- Create an emotional impact
- Evoke a certain mood
- Communicate a desired message or theme
- Provide balance



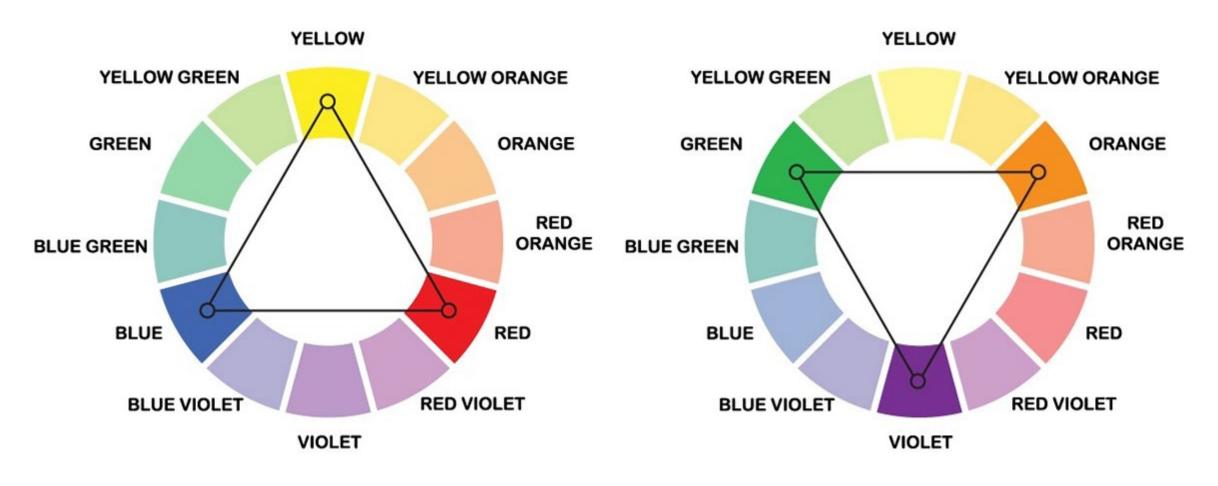
Andie • 2586 px x 1844 px • Seattle, Washington, USA • 9.3.2007 • f/2.8 • 1/30 sec • 120 ISO • 7 mm • Sony DSC-V1 • Jazno Francoeur

#### PRIMARY + SECONDARY COLORS:

PRIMARY COLORS ARE THE "ORIGINAL" COLORS, CONSISTING OF RED, YELLOW, AND BLUE. YOU CAN'T MIX ANY COLORS TOGETHER TO GET THESE COLORS.

**SECONDARY COLORS** ARE FORMED FROM AN EQUAL MIXTURE OF TWO SEPARATE PRIMARY COLORS. YELLOW AND BLUE MIX TO CREATE GREEN, YELLOW AND RED MIX TO CREATE ORANGE, AND BLUE AND RED MIX TO CREATE VIOLET.

https://www.shutterstock.com/blog/complete-guide-color-in-design

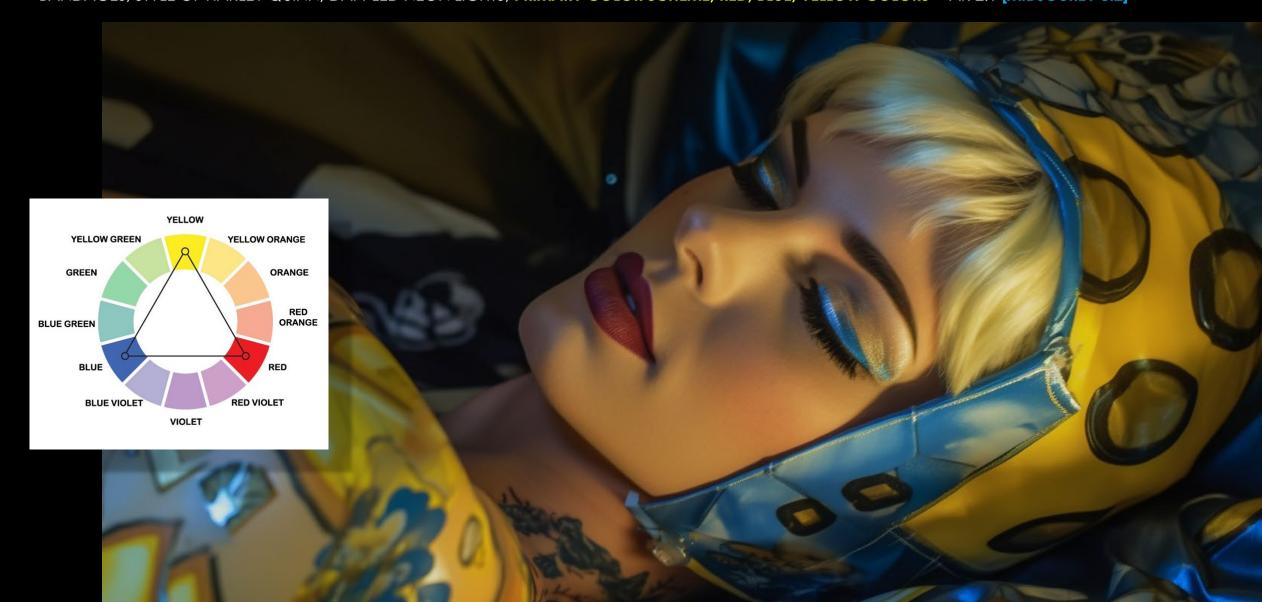


Primary Color: Yellow, Blue, Red

Secondary Colors- Green, Violet, Orange

# PRIMARY COLOR SCHEME, ROLLER DERBY GIRLS:

CLOSE-UP DOWN-SHOT OF BANDAGED ROLLER DERBY DIVA WITH SKATING HELMET AND PADS IN BETTY PAGE ATTIRE AND BUTOH TATTOOS IN HOSPITAL BED, BANDAGES, STYLE OF HARLEY QUINN, DAPPLED NEON LIGHTS, PRIMARY COLOR SCHEME, RED, BLUE, YELLOW COLORS --AR 2:1 [MIDJOUREY 5.2]



# SECONDARY COLOR SCHEME, THE LAKHIYANA:

DEV PATEL TWINS WEARING TRADITIONAL INDIAN DHOTI MESMERIZED BY A GREEN DOME OF SUPER-COOLED LIQUID OVER AN ALTAR, **SECONDARY COLOR SCHEME, GREEN, ORANGE, AND PURPLE,** PROFILE VIEW, 35MM, CINEMATIC LIGHTING --AR 1:2 [MIDJOURNEY 4]



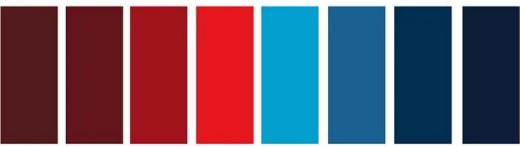
### PRIMARY + SECONDARY COLOR SCHEMES:

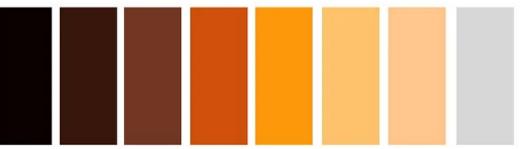
PRIMARY AND SECONDARY COLOR SCHEMES DO NOT HAVE TO INCLUDE ALL COLORS, AS PRESENTED IN THE EARLIER SLIDES. FOR INSTANCE, IN THE IMAGE TO THE LEFT, PRIMARY COLORS OF BLUE AND RED ARE INTRODUCED, BUT NOT YELLOW.

SIMILARLY, IN THE IMAGE TO THE RIGHT, THESE ARE VARIANTS OF **ORANGE**, WHICH IS ONE OF THE **SECONDARY COLORS**.







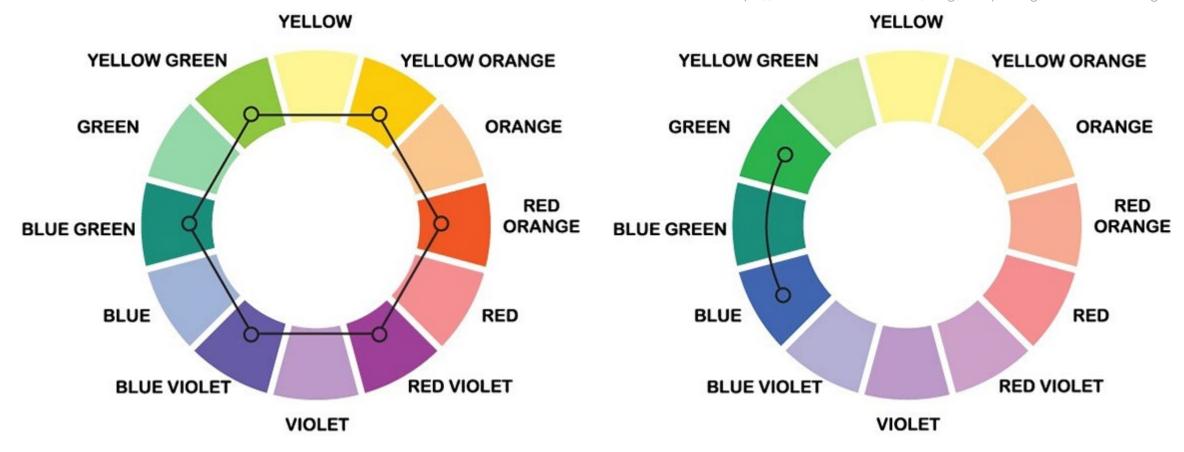


#### **TERTIARY + ANALOGOUS COLORS:**

TERTIARY COLORS ARE CREATED BY COMBINING ADJACENT PRIMARY AND SECONDARY HUES. FOR EXAMPLE, A PRIMARY COLOR, SUCH AS YELLOW, AND A SECONDARY COLOR, SUCH AS GREEN, MIX TO CREATE YELLOW-GREEN. BLUE-GREEN, BLUE-VIOLET, RED-ORANGE, RED-VIOLET, YELLOW-ORANGE, AND YELLOW-GREEN ARE COLOR COMBINATIONS YOU CAN MAKE FROM COLOR MIXING.

**ANALOGOUS** COLORS ARE A GROUP OF THREE OR FOUR COLORS THAT BORDER EACH OTHER WITHIN THE COLOR WHEEL. THE WORD "ANALOGOUS" MEANS CLOSELY RELATED, SO THE COMBINATION OF THESE HUES HAS A HARMONIOUS APPEAL SIMILAR TO MONOCHROMATIC COLOR SCHEMES.

https://www.shutterstock.com/blog/complete-guide-color-in-design



**Tertiary Colors** 

**Analogous Colors** 

# TERTIARY COLOR SCHEME, THE LAKHIYANA:

DEV PATEL SLEEPING IN A FUTURISTIC CONTAINMENT POD CONNECTED TO DOZENS OF TUBES AND WIRES, SANSKRIT HOLOGRAM HUD DISPLAY, GIGER AND VAN HERPEN AND ZAHA HADID, TERTIARY COLORS, RED-VIOLET COLOR SCHEME, 35-MM-LENS --AR 2:1 [MIDJOURNEY 5.2]



# ANALOGOUS COLOR SCHEME, ROLLER DERBY GIRLS:

EXTREME CLOSE-UP OF WOMAN'S BLUE LIPS DRAGGING ON CIGARETTE, **ANALOGOUS COLOR SCHEME**, HIGH REFLECTIVITY, LEICA, SPEED RACER, CARL ZEISS LENS, SUBSURFACE SCATTERING, DAPPLED NEON LIGHTS, BARGELLO **INTERPOLATING BLUE TO GREEN** --AR 2:1 **[MIDJOURNEY 5.1]** 



## **TERTIARY + ANALOGOUS COLOR SCHEMES:**

TERTIARY AND ANALOGOUS COLOR SCHEMES DO NOT HAVE TO INCLUDE ALL COLORS.

TERTIARY COLORS ARE OFTEN USED TO CREATE VISUAL INTEREST AND MAKE FOR OTHER-WORLDLY VIBES, AS SHOWN IN THE IMAGE TO THE LEFT. IN THE IMAGE TO THE RIGHT, VARYING SHADES OF BLUE AND GREEN ARE ANALOGOUS.



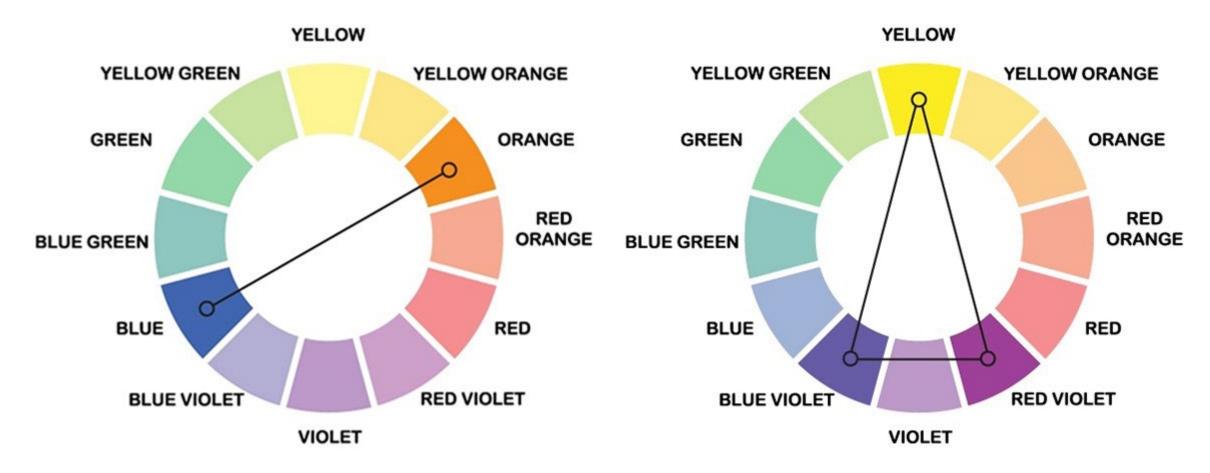
https://medium.com/@pixelmagazine/color-theory-for-photographers-an-introduction-ae23296fda6d

#### COMPLEMENTARY + SPLIT COMPLEMENTARY COLORS:

**COMPLEMENTARY COLORS** EXIST ON OPPOSITE SIDES OF THE COLOR WHEEL; ONE COLOR IS USUALLY A PRIMARY COLOR AND THE OTHER A SECONDARY COLOR. THE MAIN COMPLEMENTARY COLORS ARE BLUE AND ORANGE, RED AND GREEN, AND YELLOW AND PURPLE.

**SPLIT-COMPLEMENTARY** COLOR SCHEMES MIGHT LOOK SIMILAR TO COMPLEMENTARY SCHEMES, BUT THIS COMBINATION INCORPORATES THE TWO NEIGHBORING HUES OF A COLOR'S COMPLEMENT, SUCH AS YELLOW PAIRED WITH BLUE VIOLET AND RED VIOLET.

https://www.shutterstock.com/blog/complete-guide-color-in-design

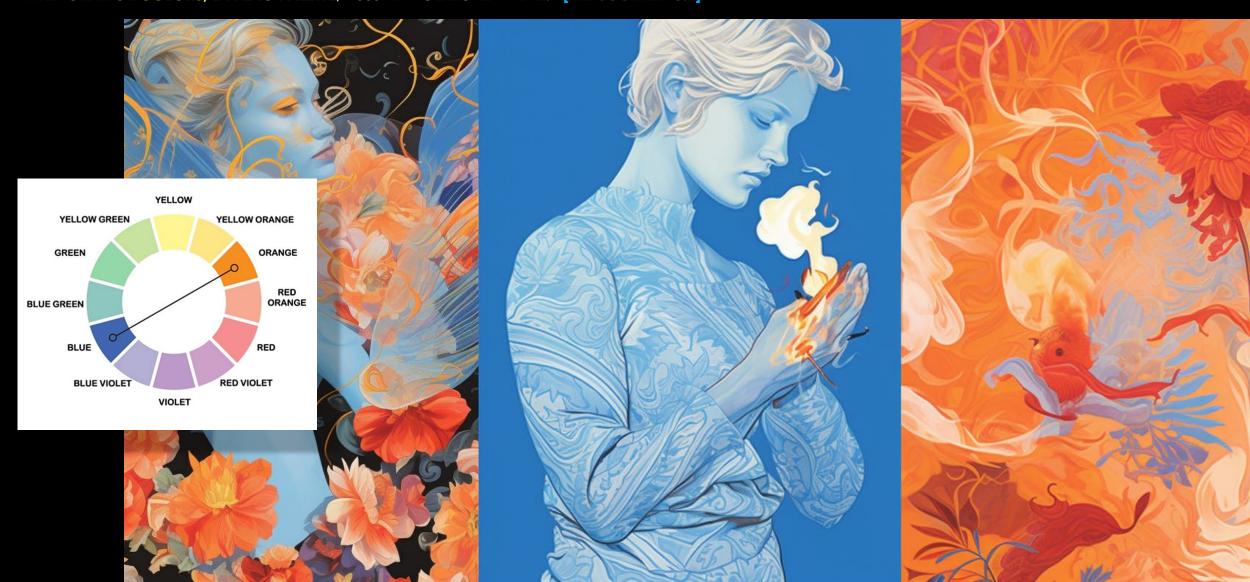


**Complementary Colors** 

Split Complementary Colors (also Triadic)

# COMPLEMENTARY SCHEME, HOCKNEY MEETS JAMES JEAN:

STYLE OF JAMES JEAN + DAVID HOCKNEY, RUSSIAN TOUCHING ADAM'S HAND IN PROFILE, BURNING HOLOGRAPHIC LIVING TATTOOS EMERGING 2D TO 3D OF A SNAKE WITH WINGS TRAVELING UP BODY OVER A SEA OF BLUE CYRILLIC LETTERS, SMOKE ISSUING FROM ITS NOSTRILS EXPLODING INTO FLOWERS, BLUE AND ORANGE COLORS, DYADIC PALETTE, RUSSIAN FOLKLORE --AR 2:1 [MIDJOURNEY 5.1]



# SPLIT COMPLEMENTARY SCHEME, INCENDIARY VFX:

FALLEN OAK ON FIRE IN THE STYLE OF AKIRA, BACKGROUNDS IN THE STYLE OF TY WONG, EXTREME CLOSE-UP, LEAVES ON FIRE, YELLOW EMBERS GLOWING, BLUE SMOKE INTERPOLATING TO DEEP PURPLE, TRIADIC COLOR SCHEME [MIDJOURNEY NIJI 4]



### **COMPLEMENTARY + SPLIT COMPLEMENTARY SCHEMES:**

COMPLEMENTARY COLORS ARE THE ONES WHICH SIT COMPLETELY OPPOSITE ONE ANOTHER ON THE COLOR WHEEL.

A SPLIT-COMPLEMENTARY COLOR SCHEME USES TWO COLORS ACROSS THE COLOR WHEEL, WITH THOSE TWO COLORS LYING ON EITHER SIDE OF THE COMPLEMENTARY COLOR. FOR EXAMPLE, VIOLET'S COMPLIMENTARY COLOR IS YELLOW, BUT ITS SPLIT-COMPLEMENTARY COLORS ARE YELLOW-GREEN AND YELLOW-ORANGE.



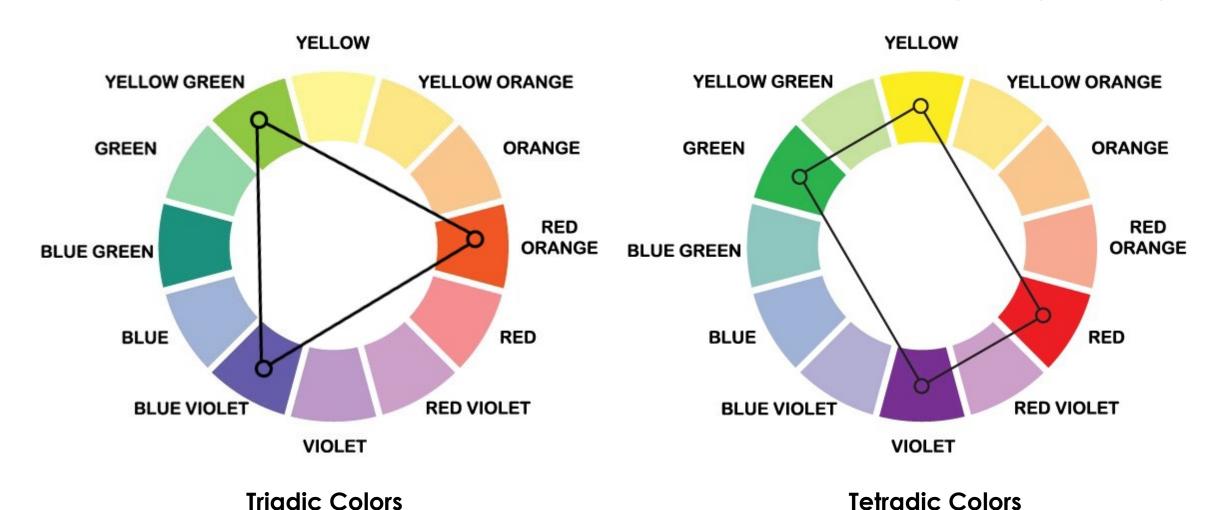
https://medium.com/@pixelmagazine/color-theory-for-photographers-an-introduction-ae23296fda6d

### TRIADIC + TETRADIC COLORS:

A **TRIAD** CONSISTS OF THREE COLORS THAT ARE PLACED EQUIDISTANT FROM EACH OTHER ON THE COLOR WHEEL, FORMING AN EQUILATERAL TRIANGLE AS SEEN BELOW. TRIADS CAN INCLUDE THREE PRIMARY, SECONDARY, OR TERTIARY COLORS.

COMPLEMENTARY COLORS ARE ALREADY INTENSE IN NATURE; DOUBLE COMPLEMENTARY, OR **TETRADIC**, COLOR SCHEMES UP THE ANTE BY USING TWO PAIRS OF COMPLEMENTS.

https://www.shutterstock.com/blog/complete-guide-color-in-design



# TRIADIC COLOR SCHEME, THE CROSSROADS:

COLOR PALETTE IS SATURATED YELLOW-GREEN AND BLUE-VIOLET AND RED-ORANGE, ROBERT JOHNSON OUTPLAYING THE DEVIL AT THE MISSISSIPPI CROSSROADS BY THE CAMPFIRE AT TWILIGHT, EXTREME CLOSE-UP, ANDREW WYETH AND MARTIN FRENCH --AR 2:1 [MIDJOURNEY NIJI 5]



# TETRADIC COLOR SCHEME, AFRO FUNK DJ SERIES:

A GRAPHICAL MUSIC POSTER OF A FEMALE CHINESE AFRO FUNK DJ SHOW, 60'S VIETNAMESE MOLOKO MILK BAR, DRAGON + TIGER MOTIFS, ELEGANT, STYLE OF VLADIMIR TRETCHIKOFF'S CHINESE GIRL, SUBSURFACE SCATTERING, GLOWING CHINESE LANTERNS MORPHED INTO DISCO BALLS, CANDLE LIGHT, TETRADIC COLOR SCHEME, 35MM –AR 2:1 [MIDJOURNEY 5]

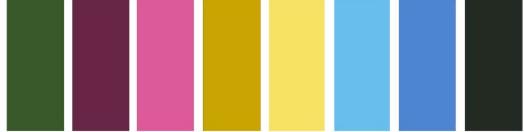


### TRIADIC +TETRADIC COLOR SCHEMES:

A **TRIADIC COLOR SCHEME** IS COMPRISED OF THREE COLORS EVENLY SPACED ON THE COLOR WHEEL. THE TWO MOST BASIC TRIADIC PALETTES ARE THE PRIMARY COLORS RED, YELLOW, AND BLUE, AND THE SECONDARY HUES ORANGE, PURPLE, AND GREEN.

**TETRADIC COLORS** ARE SIMPLY TWO SETS OF COMPLEMENTARY PAIRS OF COLORS THAT ARE FOUND OPPOSITE EACH OTHER ON THE COLOR WHEEL. THESE COLORS LOOK THEIR BEST IF ONLY ONE OF THE FOUR ARE USED AS A DOMINANT COLOR.



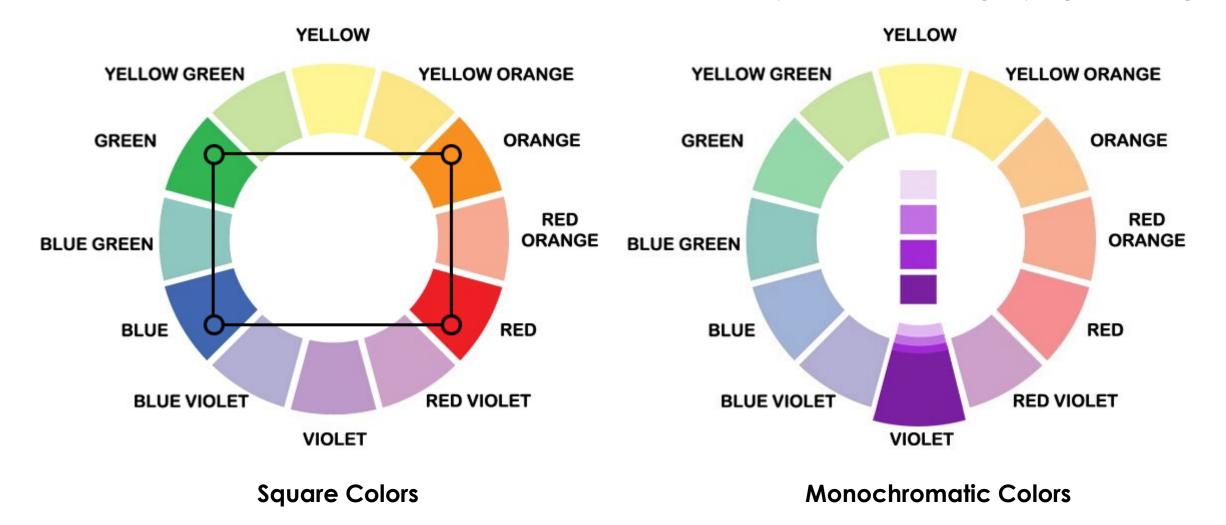


## **SQUARE + MONOCHROMATIC COLORS:**

A **SQUARE COLOR SCHEME** IS BASED ON THE PRINCIPLE OF USING EVENLY SPACED COLORS. IN ADDITION, YOU CHOOSE THE COLOR PALETTE OF THIS SCHEME TYPE BASED ON THE POSITION OF THE COLOR WHEEL.

MONOCHROMATIC COLOR SCHEMES FOCUS ON A SINGLE COLOR, OFTEN USING VARIATIONS OF THAT HUE BY INCORPORATING TINTS, TONES, AND SHADES.

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# SQUARE COLOR SCHEME, WES ANDERSON TEST:

A MAN RESEMBLING RASPUTIN AND RANVEER SINGH IN AN **ORANGE** ROBE WITH A **GREEN** HAT AGAINST A **RED** DOOR, **BLUE** MOSQUE WALL, EXTREME CLOSE-UP, STYLE OF WES ANDERSON --AR 2:1 [MIDJOURNEY 5.2]



# MONOCHROMATIC SCHEME, RETROGRADIO CRUCIATA:

PRE-RAPHAELITE SOCIALITE WITH INQUISITIVE STARE IN THE FOREST, IN THE STYLE OF THEATRICAL EXUBERANCE, MONOCHROMATIC BLUE GREEN PALETTE, STYLE OF WYETH AND SARGENT, RTX ON, SURREAL THEATRICS --AR 128:51 [MIDJOURNEY 5.2]



### **SQUARE + MONOCHROMATIC SCHEMES:**

**SQUARE COLORS ARE** ALSO TETRADIC, AND AS SUCH MUST BE CONSIDERED HOLISTICALLY IN EVERY COMPOSITION. AGAIN, ERR ON THE SIDE OF PUSHING ONE COLOR TO THE FRONT AND ONE COLOR AS AN ACCENT. THE IMAGE TO THE LEFT HAS BLUE-GREEN, YELLOW-GREEN, RED-ORANGE, AND RED-VIOLET AS ITS COLOR COMPONENTS, BUT THE PREDOMINANT COLOR IS BLUE-GREEN (WITH YELLOW AS THE ACCENT). WHILE YOU MAY BE FAMILIAR WITH MONOCHROME REFERRING TO BLACK AND WHITE, IT ACTUALLY REFERS TO ANYTHING WHICH USES SOLELY ONE COLOR VALUE.







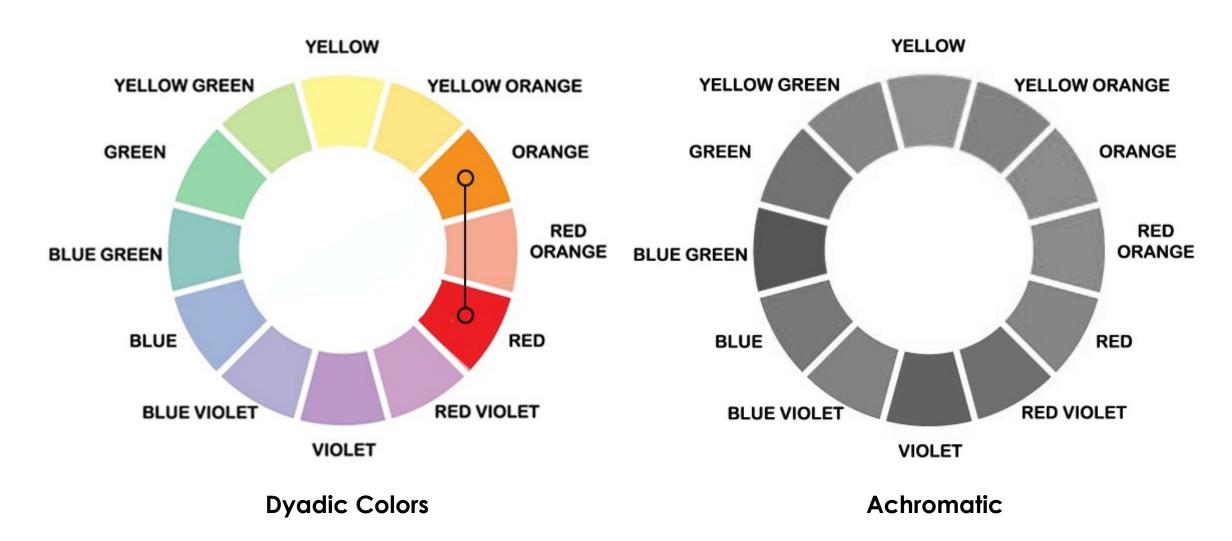


### **DYADIC + ACHCHROMATIC COLORS:**

THE **DYADIC SCHEME** CONSISTS OF TWO COLORS ON THE COLOR WHEEL THAT ARE SEPARATED BY ONE COLOR. BLUE AND GREEN ARE DYADIC, AS WELL AS RED AND ORANGE. DYADIC COLORS WORK VERY WELL TOGETHER, THOUGH THEY DO NOT PROVIDE AS MUCH CONTRAST AS COMPLEMENTARY COLORS.

ACHROMATIC COLORS ARE QUALITIES LIKE WHITE, GREY, BLACK, AND THE LUMINOUS QUALITIES SEEN IN STARS AND IN LAMPS EMITTING "WHITE" LIGHT.

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## DYADIC COLOR SCHEMES, STILL LIFES:

STRICTLY [RED AND ORANGE OR BLUE AND GREEN] PALETTE, CLOSE-UP OF [GERANIUMS OR ROSES] AGAINST AN [ORANGE WALL OR BLUE WALL] WITH [ORANGE OR BLUE] DRAPERY WALL IN THE STYLE OF WILBUR NIEWALD AND CEZANNE --AR 3:2 [MIDJOURNEY 5.2]



# ACHROMATIC SCHEME, CONSTRUCTIVIST COWBOYS:

RUSSIAN CONSTRUCTIVIST STYLE, STYLE OF FRANK MILLER'S SIN CITY AND FREDERIC REMINGTON, EXPRESSIVE **BLACK AND WHITE INK** SPATTERED BACKGROUND, JAPANESE WOODBLOCK PRINT, PLANAR RECTILINEAR SHAPES, LEYENDECKER SHAPES, EXTREME ENERGY AND DYNAMIC POSING, CLOSE-UP OF COWBOY EMBRACING COWGIRL, ROMANCE, ACRID SMOKE, **BLACK AND WHITE WESTERN** --AR 2:1 [MIDJOURNEY 5.1]



## **DYADIC + ACHROMATIC COLOR SCHEMES:**

A DYADIC PAIR WITH 2 SPACES IN BETWEEN IS MOST EYE-CATCHING WHEN ONE COLOR IS WARM AND ONE IS COOL.

ACHROMATIC COLORS (WHITE, GREY AND BLACK) HAVE LIGHTNESS BUT NO HUE OR SATURATION. THEY CAN BE CREATED BY MIXING COMPLEMENTARY COLORS TOGETHER.



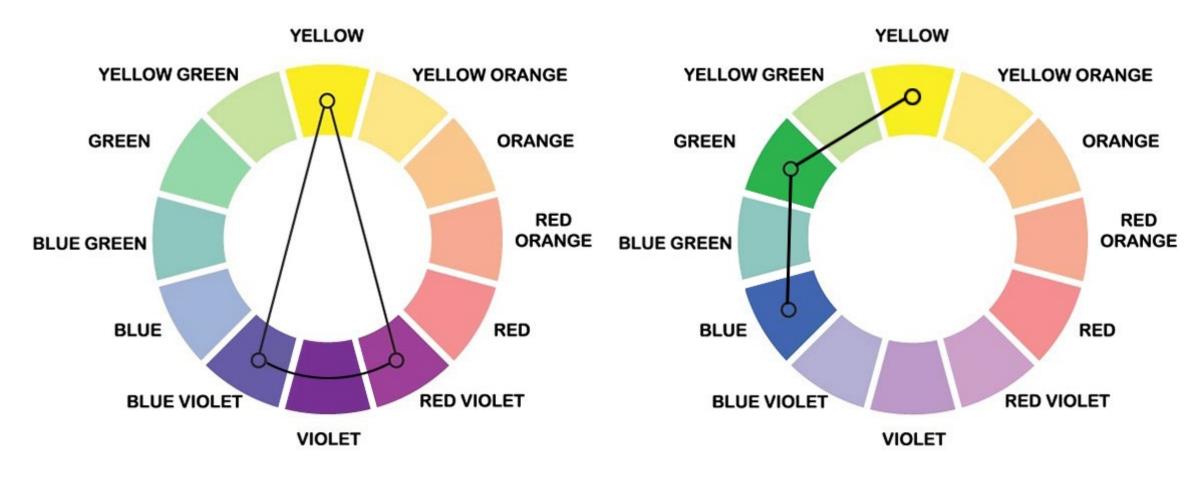
https://medium.com/@pixelmagazine/color-theory-for-photographers-an-introduction-ae23296fda6d

### **ANALOGOUS COMPLEMENTARY + SPLIT ANALOGOUS COLORS:**

TWO COLORS ON OPPOSITE SIDES OF THE HUE WHEEL ARE CALLED A COMPLEMENTARY COLOR HARMONY. THREE COLORS ADJACENT TO EACH OTHER ARE DEFINED AS ANALOGOUS COLOR HARMONY. IF YOU ADD THE COMPLIMENT, YOU HAVE AN **ANALOGOUS COMPLEMENTARY** SCHEME.

A **SPLIT ANALOGOUS COLOR SCHEME** INCLUDES A MAIN COLOR AND THE TWO COLORS ONE SPACE AWAY FROM IT ON EACH SIDE OF THE COLOR WHEEL. AN EXAMPLE IS **RED**, **Blue**, **And violet**.

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**Analogous Complementary** 

**Split Analogous** 

### **ANALOGOUS COMPLEMENTARY SCHEME, VOGUE SHOOT:**

VOGUE MODEL IN A **VIOLET** DRESS STANDING AGAINST A **BLUE-VIOLET** WALL WEARING A **RED-VIOLET** HAT WITH A BRIGHT **YELLOW** PURSE IN THE STYLE OF AUBREY BEARDSLEY AND MOEBIUS, GUO PEI DRESS MADE FROM MYCELIUM NETWORK OF HYACINTHS AND BATIK RELIEF --AR 2:1 [MIDJOURNEY 5.2]



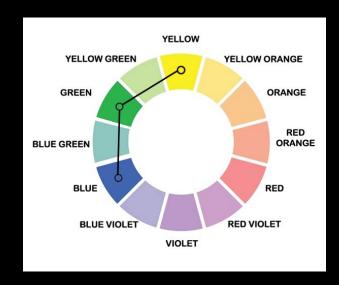
### SPLIT ANALOGOUS COLOR SCHEME, VOGUE SHOOT:

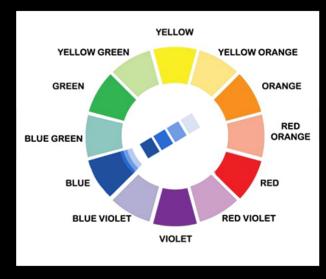
VOGUE MODEL IN A VIBRANT **BLUE** DRESS AND HAT STANDING AGAINST A WALL OF **BLUE**, **YELLOW**, **AND GREEN** HYACINTHS IN THE STYLE OF AUBREY BEARDSLEY AND MOEBIUS, GUO PEI DRESS --AR 2:1 [MIDJOURNEY 5.2]



# VARIANT OF THE SPLIT ANALOGOUS COLOR SCHEME, THE ART OF PURPOSEFUL COINCIDENCE:

STYLE OF CONFOCAL LASER SCANNING MICROSCOPE, WHITE PAPER TORN IN RUSSIAN CONSTRUCTIVIST SHAPES REVEALING BEJEWELED NEFERTITI CONTAINED IN KARA WALKER SILHOUETTES, ELECTROLUMINESCENCE, RAINBOW EXTRACTION, FRANZ KLINE, DIEBENKORN, --AR 2:1 [MIDJOURNEY 5.2]



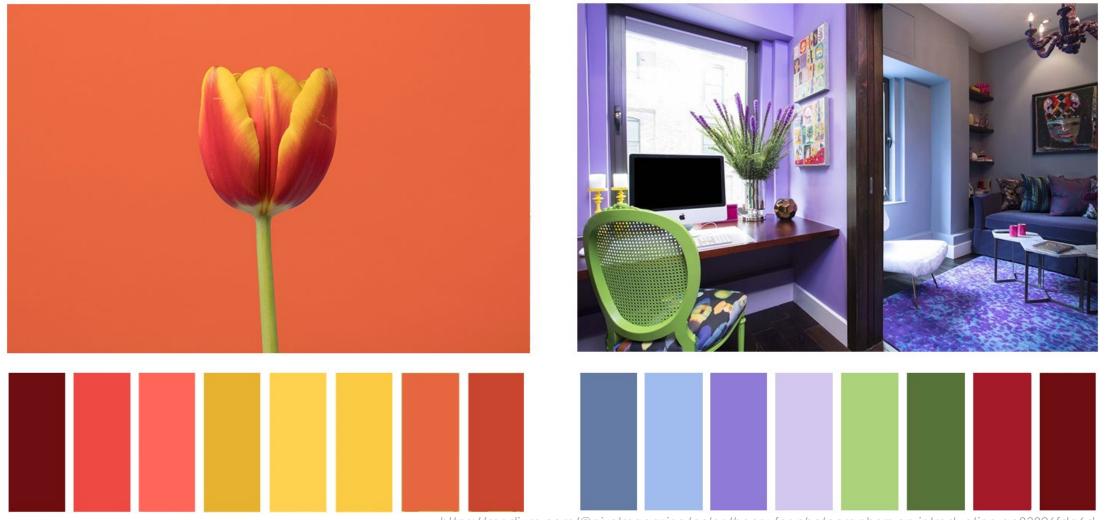




#### SPLIT ANALOGOUS + ANALOGOUS COMPLEMENTARY SCHEMES:

EXAMPLES OF **SPLIT ANALOGOUS COMBINATIONS**: VIOLET, BLUE, AND TEAL; RED, FUCHSIA, AND PURPLE; **RED, ORANGE, AND YELLOW** (SEE THE MAGE OF THE FLOWER TO THE LEFT); GREEN, BLUE, AND PURPLE.

WHEN YOU ADD A **COMPLEMENTARY** COLOR INTO YOUR **ANALOGOUS COLOR SCHEME**, YOU CAN CHANGE THE ENTIRE LOOK AND FEEL OF YOUR PAINTING OR PHOTOGRAPH. NOTE THE IMPACT OF THE **YELLOW-GREEN CHAIR** IN THE IMAGE TO THE RIGHT.

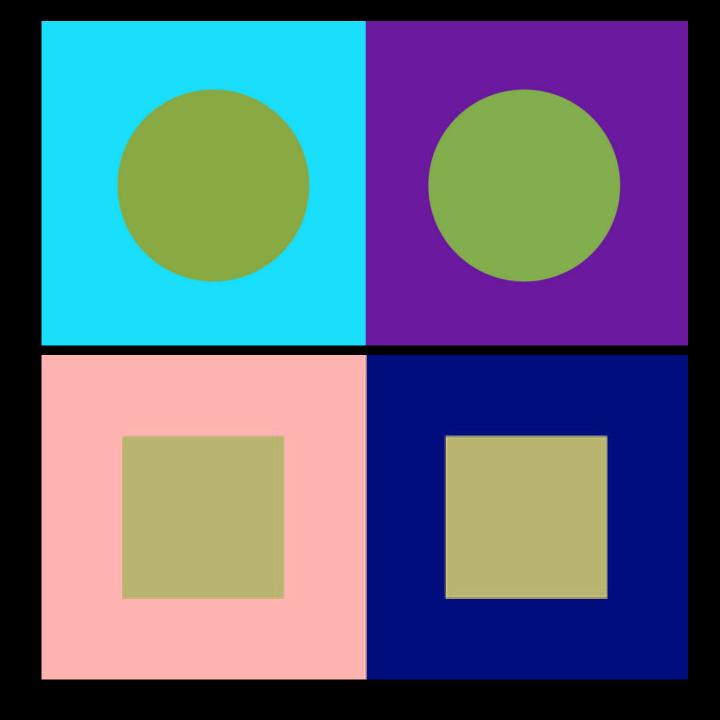


https://medium.com/@pixelmagazine/color-theory-for-photographers-an-introduction-ae23296fda6d

## What is simultaneous contrast and color relativity?

Two colors, side by side, interact with one another and change our perception accordingly. The effect of this interaction is called **simultaneous contrast**. Since we rarely see colors in isolation, simultaneous contrast affects our sense of the color that we see. For example, red and blue flowerbeds in a garden are modified where they border each other: the blue appears green and the red, orange. The real colors are not altered; only our perception of them changes.

**Simultaneous contrast** is most intense when the two colors are complementary colors. Complementary colors are pairs of colors, diametrically opposite on a color circle: as seen in Newton's color circle, red and green, and blue and yellow. Yellow complements blue; mixed yellow and blue lights generate white light.

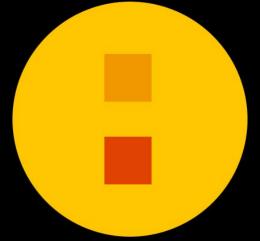


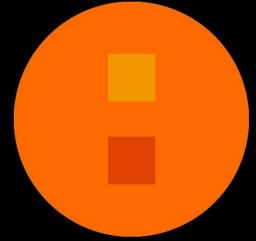
#### Rules of thumb:

- A dark color put next to a light one makes them both look brighter.
- Dark next to bright makes the bright one look brighter.
- Dark next to light makes the light seem lighter and the dark darker.
- Warmer colors look warmer when placed next to cool ones.
- Cool colors look cooler when placed next to warm ones.
- A bright color next to a muted color makes the muted one look more dull.
- If two colors are of a similar brightness, the less bright they'll both look when placed next to each other.

Next time you're choosing a palette, think about how adjacent colors affect one another. To test how colors will look together before putting them on canvas, paint a small swatch of each color on separate cards. Move these cards close to and away from one another to see how each color changes.







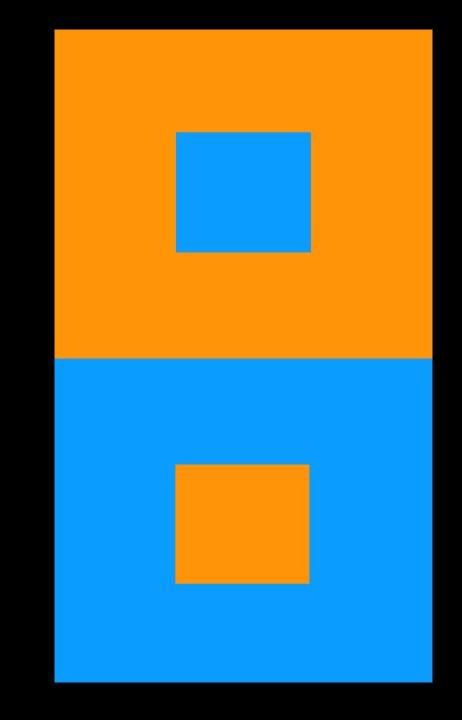
#### Cool colors recede, warm colors advance

Warm colors appear to advance, or come forward, while cool colors appear to recede or go back in space. This is because the wavelengths of warm colors are longer so your eyes see them sooner than the shorter wavelengths of cooler colors. Receding colors tend to be cool, such as blues, greens and violets. Creating warm/cool contrasts can also add a wow factor at your focal point. The focal point is the most important part of the piece and is where you want the viewer's eye to be drawn.

If you want to give the illusion of depth or make an area seem farther away, you can use cool colors. Be mindful of relative color temperature.

Surrounding colors will always affect the appearance of their neighboring colors. This means that you are not limited to reds, oranges, and yellows when picking a warm tone. A slightly more towards-violet blue could be the warmest color in your painting and still have all the properties associated with warm tones.

https://charlenecollinsfreeman.com/blog-montauk/2018/11/28/understanding-color-temperature#



### SYNTH DROID FACTORY, HAMMER OF GOD:

ASIAN ANDROID FACTORY, ANDROIDS TRANSFORMING INTO EXTRUDED BIFRINGENT FIBER OPTICS AND BURNING CABLES, KANADA IN AKIRA, STYLE OF WILLIAM KLEIN SHOT WITH LOMO LC-WIDE 35MM, LIGHT LEAKS, LOMOGRAPHY BLUESCALE XR 50-200 35MM, ELECTROLUMINESCENE, CARL ZEISS PLANAR 50MM F/0.7, BOILED RED DIMENSIONAL EMULSION --AR 2:1 [MIDJOURNEY NIJI 5]



#### What is color temperature?

Color temperature is a system that uses numerical values to measure the color characteristics of a light source on a spectrum ranging from warm colors to cool colors. The numerical values are referred to as degrees Kelvin (K). We often associate orange with warm and blue with cold but on the color temperature chart, it's the opposite.

Higher values are cooler tones such as blue. Lower values are warmer tones such as yellow. A blue sky, for instance, measures 12000 K. A candle light, however, measures at 1500 K.

### Examples of color temperature by light source:

Sunrise/Sunset: 3200 KNatural Daylight: 5500 K

• Blue Sky: 12000 K



JR Model Shoot • Detail • Seattle, Washington, USA • 6.21.2018 • f/2.8 • 1/250 sec • 1600 ISO • 28 mm • Nikon D800 • Jazno Francoeur

Pretty Parlor Shoot • Detail • Seattle, Washington, USA • 4.2.2015 • f/22 • 1/640 sec • 1000 ISO • 50 mm • Nikon D800 • Jazno Francoeur

#### Kelvin Light Scale

Understanding color temperature means understanding how various light sources fall on the Kelvin temperature spectrum. The **Kelvin** is the base unit of thermodynamic temperature. Take a look at this color temperature chart to learn the different Kelvin values the most common types of light sources have.

In this color temperature chart, you might find it a bit confusing that higher Kelvin values are cooler color tones. An easy trick to remember and understand this is that blue flames are technically hotter than yellow flames, meaning they have a higher temperature. Thus, higher Kelvin color temperatures are cooler (bluer) colors.



1000 K 9000 K

### COLOR TEMPERATURE TESTS, SHINJUKU 2080:

MALE WITH BUTOH TATTOOS AND DAY OF THE DEAD MAKEUP ON A **SUNNY DAY**, WARM RIM LIGHT, LOW KEY LIGHT, BACKLIT, VAPORWAVE, STARING AT VIEWER, 135MM LENS [MIDJOURNEY 5.1]

MALE WITH BUTOH TATTOOS AND DAY OF THE DEAD MAKEUP ON A RAINY NIGHT, REFLECTIVE, RAY TRACING, BLADE RUNNER, BLUE KEY LIGHT, PURPLE FILL LIGHT, BACKLIT, VAPORWAVE, MOONLIGHT, STARING AT VIEWER, 135MM LENS [MIDJOURNEY 5.1]

MALE WITH BUTOH TATTOOS AND DAY OF THE DEAD MAKEUP IN A **CANDLELIT ROOM**, ORANGE PALETTE, WARM RIM LIGHT, WARM FILL, WARM LOW KEY LIGHT, BACKLIT, VAPORWAVE, STARING AT VIEWER, MONOCHROMATIC, 135MM LENS [MIDJOURNEY 5.1]



Daylight: 10000 K Moonlight: 4100 K Candlelight: 2000 K

### COLOR TEMPERATURE TESTS, GIRL WITH A PEARL EARRING:

WITH DIFFERENT LIGHT SOURCES AND DESCRIPTORS, YOU CAN GET DIFFERENT COLOR PROFILES.



### COLOR TEMPERATURE TESTS, GIRL WITH A PEARL EARRING:

WITH DIFFERENT LIGHT SOURCES AND DESCRIPTORS, YOU CAN GET DIFFERENT COLOR PROFILES.



Chiaroscuro Moonlight Sunlight Bloom

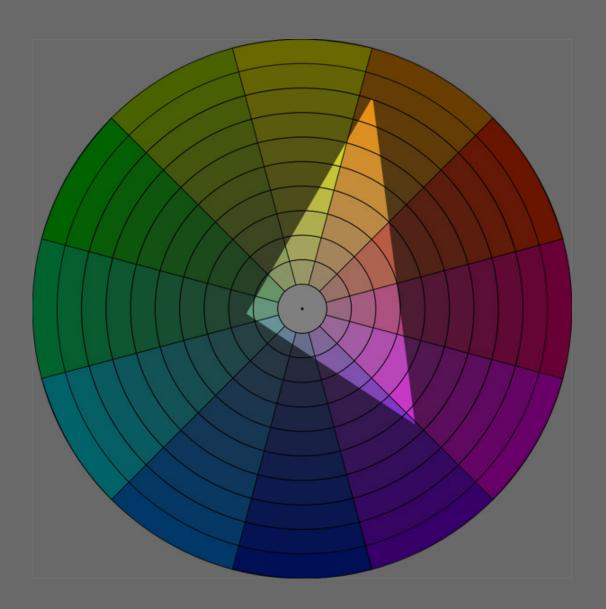
#### What is gamut masking?

**Gamut masking** is an approach to color formalized by James Gurney, based on the idea that any color scheme can be expressed as shapes cut out from the color wheel.

It originates in the world of traditional painting, as a form of planning and premixing palettes. However, it translates well into digital art, enabling you to explore and analyze color, plan color schemes and guide your color choices.

How does it work? You draw one or multiple shapes on top of the color wheel. You limit your color choices to colors inside the shapes. By leaving colors out, you establish a relationship between the colors, thus creating harmony.

https://docs.krita.org/en/user\_manual/gamut\_masks.html



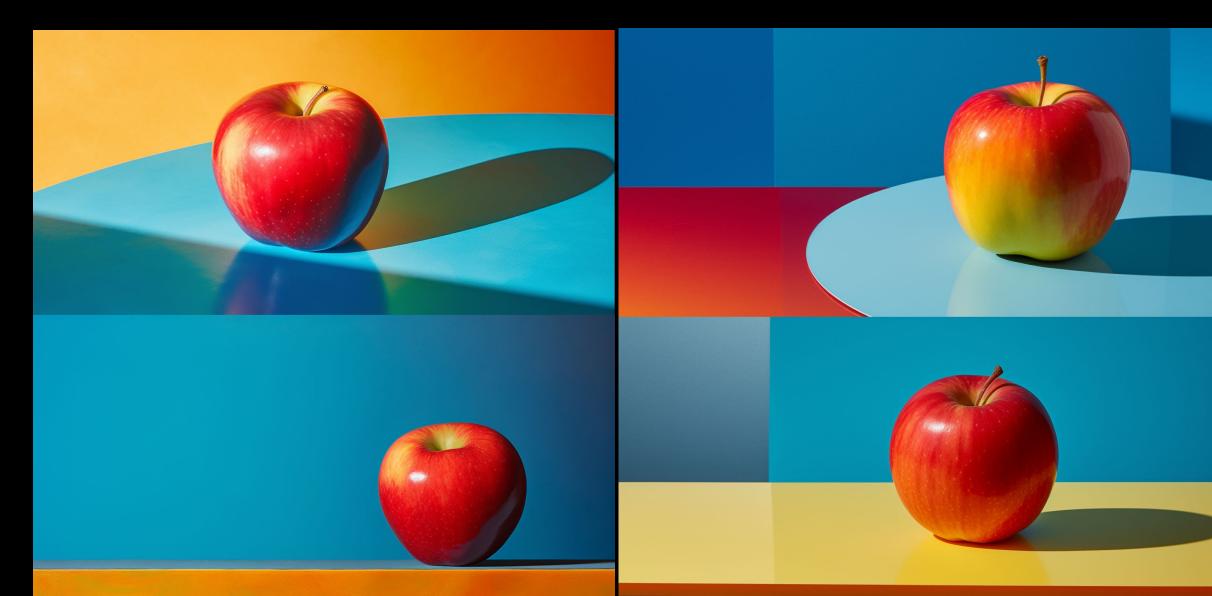
### GAMUT MASKING TESTS, SIMPLE STILL LIFE:

CLOSE-UP OF AN APPLE DIRECTLY IN THE MIDDLE OF A BLUE TABLE, BOUNCED LIGHT, COLOR SPECTRUM IS EQUAL TO GAMUT MASK IN THE **[LOWER LEFT SIDE]**OR LOWER RIGHT SIDE] OF THE COLOR WHEEL, STYLE OF CEZANNE AND WILBUR NIEWALD --AR 2:1 [MIDJOURNEY 5.2]



### GAMUT MASKING TESTS, SIMPLE STILL LIFE:

CLOSE-UP OF AN APPLE DIRECTLY IN THE MIDDLE OF A BLUE TABLE, BOUNCED LIGHT, COLOR SPECTRUM IS EQUAL TO GAMUT MASK IN THE [UPPER LEFT SIDE OR UPPER RIGHT SIDE] OF THE COLOR WHEEL, STYLE OF CEZANNE AND WILBUR NIEWALD --AR 2:1 [MIDJOURNEY 5.2]



### CONCLUSIONS FOR USING COLOR IN MIDJOURNEY:

YOU CANNOT SPECIFY THE HEXCODE OR PENTONE COLORS WHEN CREATING AN IMAGE; HOWEVER, YOU CAN ACHIEVE A CLOSE APPROXIMATION OF THE COMMON COLORS BY USING DESCRIPTORS. THAT SAID, MIDJOURNEY MAY NOT BE ABLE TO PARSE THE NUANCES OF TINTS OR SHADES OF A PARTICULAR COLOR. MIDJOURNEY DOES NOT UNDERSTAND COLOR TEMPERATURE AS EXPRESSED IN THE KELVIN TEMPERATURE SCALE, BUT IT IS ABLE TO APPROXIMATE THE LOOK OF NUMEROUS LIGHTING CONDITIONS THAT PRODUCE A SPECTRUM OF WARM AND COOL COLORS. MIDJOURNEY DOES NOT UNDERSTAND GAMUT MASKING, NO MATTER WHICH QUADRANT OF THE COLOR WHEEL YOU CHOOSE TO MASK. LASTLY, PHOTOSHOP IS THE GOLD STANDARD FOR ADJUSTING COLORS, FROM USING THE HUE, VALUE, AND SATURATION SLIDERS TO MANIPULATING CHANNELS AND PLAYING WITH GRADIENTS.

EXTREME CLOSE-UP OF BILL MURRAY LAYING IN A FIELD OF COLORFUL FLOWERS, WES ANDERSON WESTERN, BLUE AND YELLOW OUTFIT, PASTEL PALETTE, 35MM ANAMORPHIC, CARL ZEISS PLANAR 50MM F/0.7 --AR 3:1 [MIDJOURNEY 5.2]



### **FILM**

While we have advanced to the digital age, film processes have been carried over. As with lenses and camera types, different film 'stocks' can give added mood and texture to your digital images. More importantly, you can use specific film stocks for specific color looks.



#### What is film stock?

Film stock is a physical analog medium used for recording images made from celluloid and coated with light-sensitive gelatin emulsion. Light is used to capture an image onto the film; it is later developed under a specific chemical process and produces the images. Film stock comes in different sizes and styles; they are also differentiated by their chemical make-up, size of film grain, and color retention.

#### Film stock characteristics:

- Textured physical celluloid
- High quality images (depending on the size and type)
- Film grain (amount can vary depending on the film size)

https://www.studiobinder.com/blog/ what-is-film-stock-definition/



#### **Black and White**

There are plenty of options for **black and white**, which include brands like Kodak, Fujifilm, and Illford. In general, though, when using black and white, you have to figure out how deep you want your blacks to look, as some black and white film will lean towards gray.

One important thing to note about black and white is panchromatic film stock, which has been in use for a long time and is now the norm. Though it might be the standard in black and white photography, panchromatic film is special in how it renders B&W imagery in a way that mimics the way our eyes see things. So, for example, if you're looking at a tri-color flag in black and white, the three "colors" will be varying levels of black, grey, or white.

https://www.studiobinder.com/blog/what-is-film-stock-definition/



### DAGUERROTYPE VS. MIDJOURNEY:

**DAGUERREOTYPE**, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --SEED 2335089805 --AR 3:2 [MIDJOURNEY 5.1]



### **TINTYPE VS. MIDJOURNEY:**

HTTPS://S.MJ.RUN/UQCDDZ4PP80 RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, TINTYPE, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, TINTYPE, BLACK AND WHITE, FOCUS ON ATMOSPHERIC EFFECTS --SEED 2940970430 --AR 3:2 [MIDJOURNEY 5.1]



### SUPER-XX VS. MIDJOURNEY:

SUPER-XX BLACK AND WHITE, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://www.hollywoodreporter.com/news/general-news/citizen-kane-review-1941-movie-998891/



### PLUS-X 80D VS. MIDJOURNEY:

RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, PLUS-X 80D/64T 5231/7231 NEG. FILM STOCK, BLACK AND WHITE, DETAILED COSTUMES, ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://wall.alphacoders.com/by\_sub\_category.php?id=199943&name=Schindler%27s+List+Wallpapers



Color film stock comes in many different types from brands like Kodak and Fujifilm. Specific to Kodak is Ektachrome film stock, which has been used since the 1940s. It was originally discontinued in the early 2010s, but in the last few years, Kodak has brought it back for all to enjoy.

Another one of the popular types of film stock is Tungsten film. Where other color stocks might stick to an orange hue, Tungsten film features a cooler blue look. This makes it fairly ideal for low light settings, but it can also be used in regular daylight. In fact, Tungsten film is famous for being used in "day for night" scenes, since the blue hue can make any daytime setting almost look like nighttime. Since you would be dealing with color, it's important to understand how different stock types will bring out different shades in your images (overexposing vs underexposing). One type of film might bring out the greens while the other brings out the reds; in some cases, a stock might make skin tones look too saturated.

Technicolor film stock is a notable example of spectacular color usage in cinema, which helped pave the way for more color films later on.



### **POLAROID VS. MIDJOURNEY:**

RETRO **POLAROID** LOOK, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --SEED 2335089805 --AR 3:2 [MIDJOURNEY 5.1]

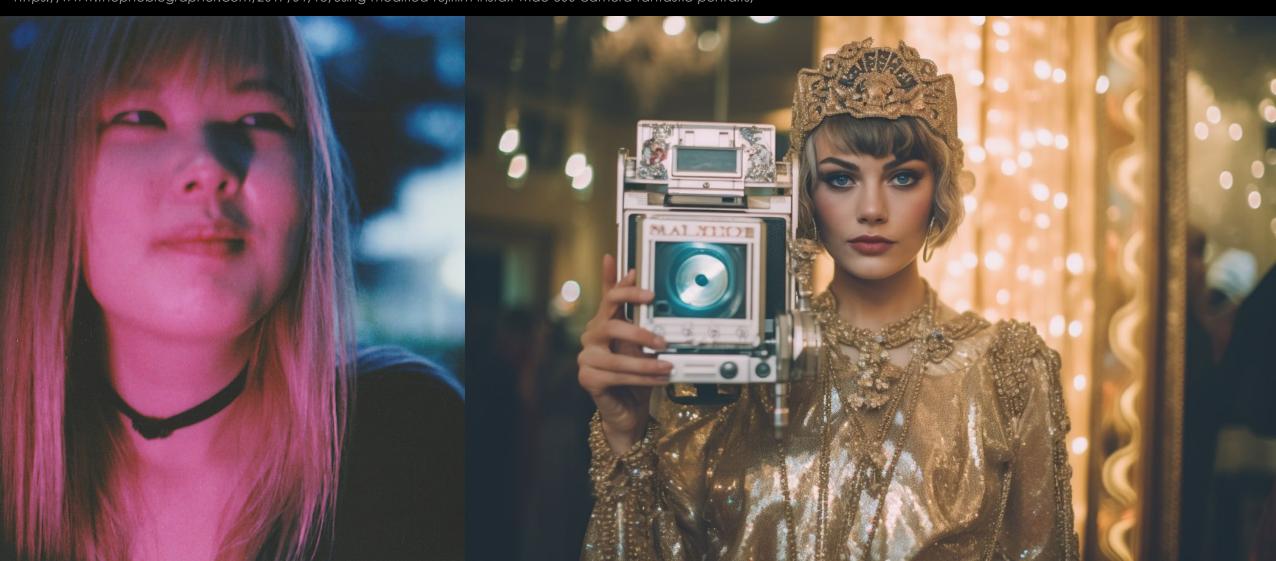




### **FUJIFILM INSTAX VS. MIDJOURNEY:**

INSTAX FILM, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS, --SEED 2335089805 --AR 3:2 [MIDJOURNEY 5.1]

https://www.thephoblographer.com/2017/04/18/using-modified-fujifilm-instax-wide-300-camera-fantastic-portraits/



### **FUJIFILM SUSPIRIA VS. MIDJOURNEY:**

FUJIFILM SUSPIRIA, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://www.lomography.com/films/871910950-fuji-superia-100-35mm/photos



### KODAK EKTACHROME VS. MIDJOURNEY:

**EXTACHROME FILM**, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS, --SEED 2335089805 --AR 3:2 [MIDJOURNEY 5.1]





### LOMOGRAPHY REDSCALE XR 35 MM VS. MIDJOURNEY:

RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, LOMOGRAPHY REDSCALE XR 50-200 35MM, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://shop.lomography.com/us/lomography-redscale-xr-35-mm-iso-50-200/



### KODAK AEROCHROME VS. MIDJOURNEY:

KODAK AEROCHROME, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://kolarivision.com/infrared-photography-contest/the-real-digital-aerochrome/



### **FUJIFILM VELVIA VS. MIDJOURNEY:**

**VELVIA FILM** LOOK, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS, --SEED 2335089805 --AR 3:2 [MIDJOURNEY 5.1]

Instagram@lucilewis



### KODAK GOLD 200 VS. MIDJOURNEY:

RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, KODAK GOLD 200, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://carmencitafilmlab.com/blog/new-film-kodak-gold-120-is-back/



### KODAK KODACHROME VS. MIDJOURNEY:

KODACHROME, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://www.npr.org/sections/pictureshow/2010/07/23/128728114/kodachrome

https://www.pinterest.com/pin/59672763796856058/



### TECHNICOLOR VS. MIDJOURNEY:

**40'S TECHNICOLOR**, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://fyeah-wizard-of-oz.tumblr.com/post/36641774210/amp



### **KODAK VISION3 200T VS. MIDJOURNEY:**

KODAK VISION3 200T COLOR NEGATIVE FILM 5213, RETRO SPACE TRAVELER, ARTIS LINFA, SYDNEY, AUSTRALIA, IN THE STYLE OF ART NOUVEAU, CANON EOS 5D MARK IV, MADE OF CRYSTALS, ANIMATED FILM PIONEER, DETAILED COSTUMES, FOCUS ON ATMOSPHERIC EFFECTS --AR 3:2 [MIDJOURNEY 5.1]

https://www.hollywoodreporter.com/movies/movie-reviews/asteroid-city-review-scarlett-johansson-wes-anderson-1235497955/

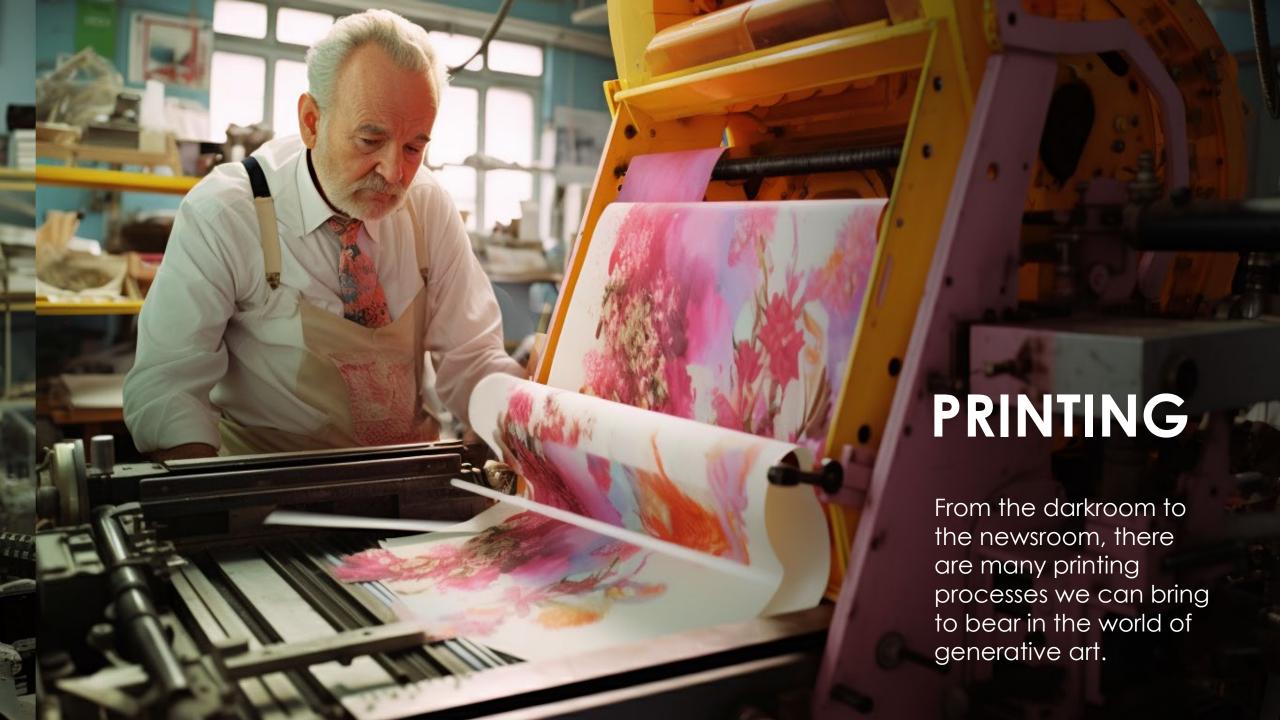


### CONCLUSIONS FOR USING FILM STOCKS IN MIDJOURNEY:

WITH VERY FEW REPOLLS, I WAS ABLE TO CAPTURE THE SIGNATURE LOOK OF MOST COMMON FILM STOCKS. ONLY RARE FILM STOCKS, SUCH AS REVOLOG STREAK 200 AND PSYCHEDELIC BLUES 400 FAILED TO MOVE THE NEEDLE. KNOWLEDGE OF FILM STOCKS CAN BE CRITICAL IN COLOR MANAGEMENT, WORKING IN CONCERT WITH THE CAMERAS AND LENSES THAT MIDJOURNEY RECOGNIZES (WHICH WERE TESTED IN THE PREVIOUS MODULE),

A MAN FROM A BLACK AND WHITE PHOTO FROM THE 20'S STEPPING INTO 3D INTO COLOR FROM THE 50'S, **EKTACHROME**, DUTCH ANGLE, VIBRANT COLORS, WEARING TUXEDO --AR 2:1 [MIDJOURNEY 5.2]



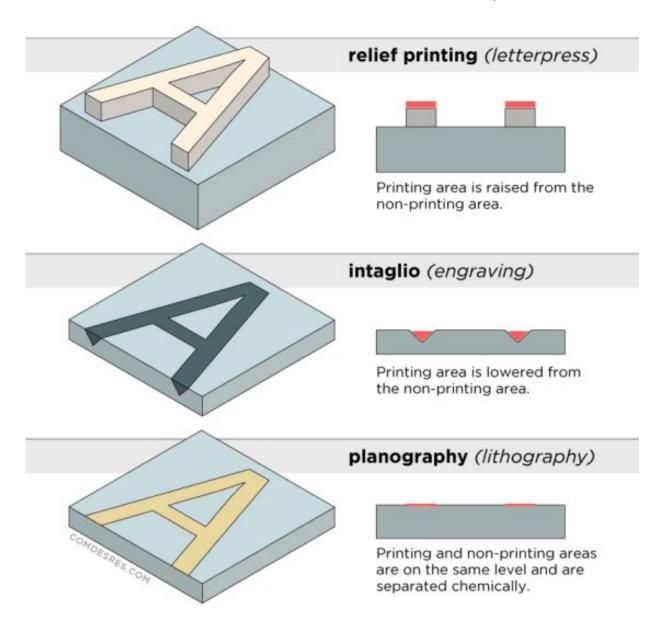


#### 3 Common Types of Printing

Relief printing: This is a form of printmaking in which the image to be printed is raised from the surface. Pieces of material are removed from the surface using sharp tools called gouges. This creates a surface similar to a stamp and is sometimes referred to as "block printing". Examples of relief-printing processes include woodcut, anastatic printing (also called relief etching), linocut, and metal cut.

**Intaglio or Gravure Printing:** The ink in gravure printing is transferred from carved micro cavities and not from a relief. These cavities, embedded in the printing cylinder, form the printing pattern.

**Planagraphy:** Lithography and offset lithography are planographic processes that rely on the property that water will not mix with oil. The image is created by applying a tusche (greasy substance) to a plate or stone. The term lithography comes from litho, for stone, and graph to draw. Certain parts of the semi-absorbent surface being printed on can be made receptive to ink while others (the blank parts) reject it.



### Photographic Printing Techniques of the 1800's

In 1839 a new means of visual representation was announced to a startled world: photography. Although the medium was immediately and enthusiastically embraced by the public at large, photographers themselves spent the ensuing decades experimenting with techniques and debating the nature of this new invention. The printed works in this section suggest the range of questions addressed by these earliest practitioners. Was photography best understood as an art or a science? What subjects should photographs depict, what purpose should they serve, and what should they look like? Should photographers work within the aesthetics established in other arts, such as painting, or explore characteristics that seemed unique to the medium? This first generation of photographers became part scientists as they mastered a baffling array of new processes and learned how to handle their equipment and material. Yet they also grappled with aesthetic issues, such as how to convey the tone, texture, and detail of multicolored reality in a monochrome medium. They often explored the same subjects that had fascinated artists for centuries — portraits, landscapes, genre scenes, and still lifes — but they also discovered and exploited the distinctive ways in which the camera frames and presents the world.



### Photography as Art at the Dawn of the 20th Century

In the later nineteenth century, photography spread in its popularity, and inventions like the Kodak #1 camera (1888) made it accessible to the upper-middle class consumer; the Kodak Brownie camera, which cost far less, reached the middle class by 1900. In the sciences (and pseudo-sciences), photographs gained credibility as objective evidence because they could document people, places, and events. Photographers like Eadweard Muybridge created portfolios of photographs to measure human and animal locomotion. In the arts, the medium was valued for its replication of exact details, and for its reproduction of artworks for publication. But photographers struggled for artistic recognition throughout the century. It was not until in Paris's Universal Exposition of 1859, twenty years after the invention of the medium, that photography and "art" (painting, engraving, and sculpture) were displayed next to one another for the first time; separate entrances to each exhibition space, however, preserved a physical and symbolic distinction between the two groups. After all, photographs are mechanically reproduced images: Kodak's marketing strategy ("You press the button, we do the rest,") points directly to the "effortlessness" of the medium.



### What is heliography?

Heliography is the photographic process invented, and named thus, by Joseph Nicéphore Niépce around 1822, which he used to make the earliest known surviving photograph from nature, View from the Window at Le Gras (1826 or 1827), and the first realization of photoresist as means to reproduce artworks through inventions of photolithography and photogravure.

Nicéphore Niépce began experiments with the aim of achieving a photo-etched printmaking technique in 1811. He knew that the acid-resistant Bitumen of Judea used in etching hardened with exposure to light. In experiments he coated it on plates of glass, zinc, copper and silver-surfaced copper, pewter and limestone (lithography), and found the surface exposed to the most light resisted dissolution in oil of lavender and petroleum, so that the uncoated shadow areas might be traditionally treated through acid etching and aquatint to print black ink



# HELIOGRAPH, NICÉPHORE NIÉPCE TEST: A HELIOGRAPH IN THE STYLE OF NICÉPHORE NIÉPCE, VIEW OF A FRENCH GARDEN PLAZA, BLACK AND WHITE, SFUMATO, TENEBRIST LIGHTING -- AR 2:1

[MIDJOURNEY 5.2]

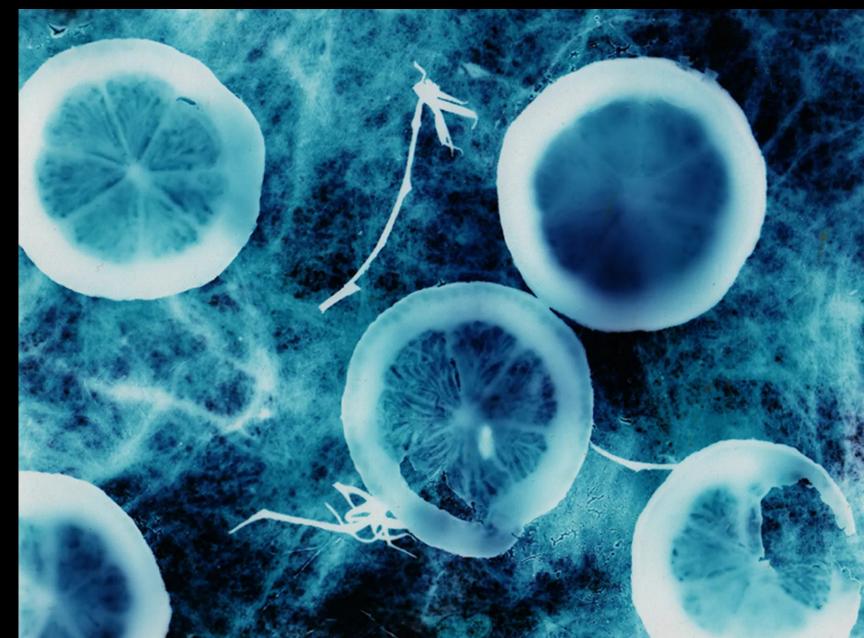


#### What is a photogram?

A **photogram** is a photographic image made without a camera by placing objects directly onto the surface of a light-sensitive material such as photographic paper and then exposing it to light.

The usual result is a negative shadow image that shows variations in tone that depends upon the transparency of the objects used. Areas of the paper that have received no light appear white; those exposed for a shorter time or through transparent or semi-transparent objects appear grey, while fully-exposed areas are black in the final print.

The technique is sometimes called cameraless photography and was created in the 1830s.



#### Wedgwood and the Dubious Leaf

Thomas Wedgwood was an English photographer and inventor. He is most widely known as an early experimenter in the field of photography.

He is the first person known to have thought of creating permanent pictures by capturing camera images on material coated with a light-sensitive chemical. His practical experiments yielded only shadow image photograms that were not light-fast, but his conceptual breakthrough and partial success have led some historians to call him "the first photographer".

In 2008, there were widespread news reports that one of Wedgwood's photographs had surfaced and was about to be sold at auction. The photogram, as shadow photographs are now called, showed the silhouette and internal structure of a leaf and was marked in one corner with what appeared to be the letter "W". Originally unattributed, then attributed to Talbot, an essay by Talbot expert Larry Schaaf, included in the auction catalog, rejected that attribution but suggested that it could actually be by Thomas Wedgwood and date from the 1790s.



## PHOTOGRAM, WAYANG KULIT:

WAYANG KULIT, PHOTOGRAM, SILHOUETTES, GRAPHICAL BEAUTY, CLOSE-UP OF SITA -- AR 3:2 [MIDJOURNEY 5.2]



#### What is a salt print?

The salt print was the dominant paper-based photographic process for producing positive prints (from negatives) from 1839 **until approximately 1860**. The salted paper technique was created by English scientist and inventor Henry Fox Talbot. He made what he called "sensitive paper" for "photogenic drawing" by wetting a sheet of writing paper with a weak solution of ordinary table salt (sodium chloride), blotting and drying it, then brushing one side with a strong solution of silver nitrate. This produced a tenacious coating of silver chloride in an especially light-sensitive chemical condition. The paper darkened where it was exposed to light. When the darkening was judged to be sufficient, the exposure was ended and the result was stabilized by applying a strong solution of salt, which altered the chemical balance and made the paper only slightly sensitive to additional exposure. In 1839, washing with a solution of sodium thiosulfate ("hypo") was found to be the most effective way to make the results truly light-fast.

https://en.wikipedia.org/wiki/Salt\_print

https://medium.com/@abelart/midjourney-alternative-photographic-techniques-eba7a8062e4a



## SALT PRINT, DEATH & TRANSFIGURATION:

**SALT PRINT, PHOTO PROCESS, GUERNICA MEETS WYETH'S CHRISTINA'S WORLD IN THE 5TH DIMENSION, COUNT UGOLINO AND HIS CHILDREN IN FRONT OF A BARN, CLOSE-UP, WARM KEY LIGHT, COOL FILL LIGHT, ANDREW WYETH STYLE, CAUSTICS, GOD RAYS, SHROUD OF TURIN --AR 2:1 [MIDJOURNEY 5.2]** 



## SALT PRINT, DEATH & TRANSFIGURATION:

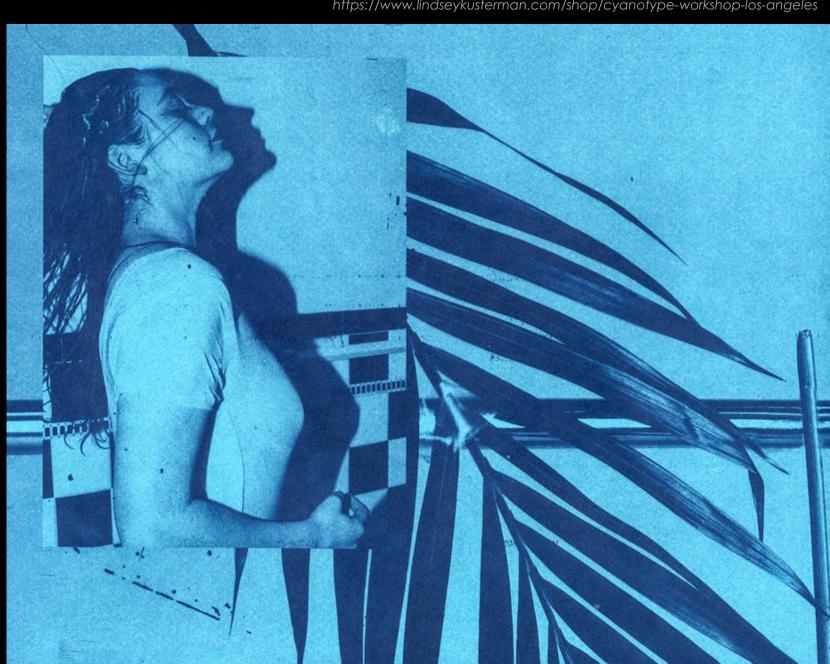
**SALT PRINT**, PHOTO PROCESS, GUERNICA MEETS WYETH'S CHRISTINA'S WORLD IN THE 5TH DIMENSION, COUNT UGOLINO AND HIS CHILDREN IN FRONT OF A BARN, CLOSE-UP, WARM KEY LIGHT, COOL FILL LIGHT, ANDREW WYETH STYLE, CAUSTICS, GOD RAYS, SHROUD OF TURIN --AR 2:1 [MIDJOURNEY 5.2]



### What is a cyanotype?

The cyanotype is a slow-reacting, economical photographic printing formulation sensitive to a limited near ultraviolet and blue light spectrum, the range 300 nm to 400 nm known as UVA radiation. It produces a cyanblue print used for art as monochrome imagery applicable on a range of supports, and for reprography in the form of blueprints. For any purpose, the process usually uses two chemicals: ferric ammonium citrate or ferric ammonium oxalate, and potassium ferricyanide, and only water to develop and fix. **Announced** in 1842, it is still in use.

https://en.wikipedia.org/wiki/Cyanotype



## CYANOTYPE, VEGAS SERIES:

CYANOTYPE, MALE ASIAN VOGUE MODEL IN PROFILE IN SMOKE FILLED CASINO, STYLE OF PAULA SCHER, MONOCHROMATIC BLUE PALETTE, LEYENDECKER SMOKE --AR 2:1 [MIDJOURNEY NIJI 5]



# What is the collodion process?

The **collodion process** is an early photographic process. The collodion process, mostly synonymous with the "collodion wet plate process", requires the photographic material to be coated, sensitized, exposed, and developed within the span of about fifteen minutes, necessitating a portable darkroom for use in the field. Collodion is normally used in its wet form, but it can also be used in its dry form, at the cost of greatly increased exposure time. The increased exposure time made the dry form unsuitable for the usual portraiture work of most professional photographers of the 19th century. The use of the dry form was mostly confined to landscape photography and other special applications where minutes-long exposure times were tolerable.

The process was discovered in 1851.

1867. Collodion wet plate process. GERONA.- Puente de Isabel II. Ministry of Education, Culture and Sport (Spain).



## **COLLODION WET PLATE, PONTE VECCHIO:**

COLLODION WET PLATE OF THE PONTE VECCHIO IN NEGATIVE, DUTCH ANGLE, CHIAROSCURO, QUANTIFIED PHOTON CAPTURE --AR 2:1 [MIDJOURNEY 5.2]



### What is photogravure?

Photogravure is a process for printing photographs (patented in 1852), also sometimes used for reproductive intaglio printmaking. It is a photo-mechanical process whereby a copper plate is grained (adding a pattern to the plate) and then coated with a light-sensitive gelatin tissue which had been exposed to a film positive, and then etched, resulting in a high quality intaglio plate that can reproduce detailed continuous tones of a photograph.

The process was important in 19th-century photography, but by the 20th century was only used by some fine art photographers. By the mid-century it was almost extinct, but has seen a limited revival.



THE VANISHING RACE - 17 - BURDEN BEARER - PHOTOGRAVURE - 1913

## PHOTOGRAVURE PRINT, DUWAMISH SERIES:

PHOTOGRAVURE SEPIA PRINT OF A NATIVE AMERICAN, CONTRE-JOUR, STYLE OF ANDREW WYETH, GOLDEN HOUR, SUBSURFACE SCATTERING, CLOSE-UP, VOLUMETRIC LIGHTING --AR 2:1 [MIDJOURNEY 5.2]



#### What is gum bichromate?

Gum bichromate printing is a multi-layered process that combines watercolor pigments and a light-sensitive bichromate emulsion. This technique allows for artistic expression and experimentation with color, resulting in dreamy, painterly prints with a soft and ethereal quality.

Gum bichromate is a photographic printing process invented in the early days of photography when, in 1839, Mungo Ponton discovered that dichromates are light sensitive. William Henry Fox Talbot later found that sensitized dichromated colloids such as gelatin and gum arabic became insoluble in water after exposure to sunlight. Alphonse Poitevin added carbon pigment to the colloids in 1855, creating the first carbon print. In 1858, John Pouncy used colored pigment with gum arabic to create the first color images.

Gum bichromate printing was patented in 1855.



https://en.wikipedia.org/wiki/Gum\_bichromate

## GUM BICHROMATE PRINT, LUPA NOCTIS:

**GUM BICHROMATE PRINT,** BLACK WOLVES HOWLING IN THE FOREST, ANDREW WYETH STYLE, DEGAS STYLE, DRAMATIC, MONOCHROMATIC BLUE TONES, IMPRESSIONISTIC, ACCURATE PROPORTIONS, SMOKY --AR 2:1 [MIDJOURNEY 5.2]



https://artandsoulphoto.net/home/color-carbon-printing/

A carbon print is a photographic print with an image consisting of pigmented gelatin, rather than of silver or other metallic particles suspended in a uniform layer of gelatin, as in typical black-and-white prints, or of chromogenic dyes, as in typical photographic color prints.

In the original version of the printing process, carbon tissue (a temporary support sheet coated with a layer of gelatin mixed with a pigment—originally carbon black, from which the name derives) is bathed in a potassium dichromate sensitizing solution, dried, then exposed to strong ultraviolet light through a photographic negative, hardening the gelatin in proportion to the amount of light reaching it. The tissue is then developed by treatment with warm water, which dissolves the unhardened gelatin. The resulting pigment image is physically transferred to a final support surface, either directly or indirectly.

The carbon process was discovered in 1855.



## CARBON PRINT, FRIDA KAHLO:

CARBON PHOTOGRAPHIC PRINT, FRIDA KAHLO DANCING AT COYOCAN, FRACTURED MOTION BLUR, ANDREW WYETH STYLE, FILM GRAIN, CLOSE-UP, DE-STAURATED BLUE AND GREEN PALETTE --AR 2:1 [MIDJOURNEY 5.2]



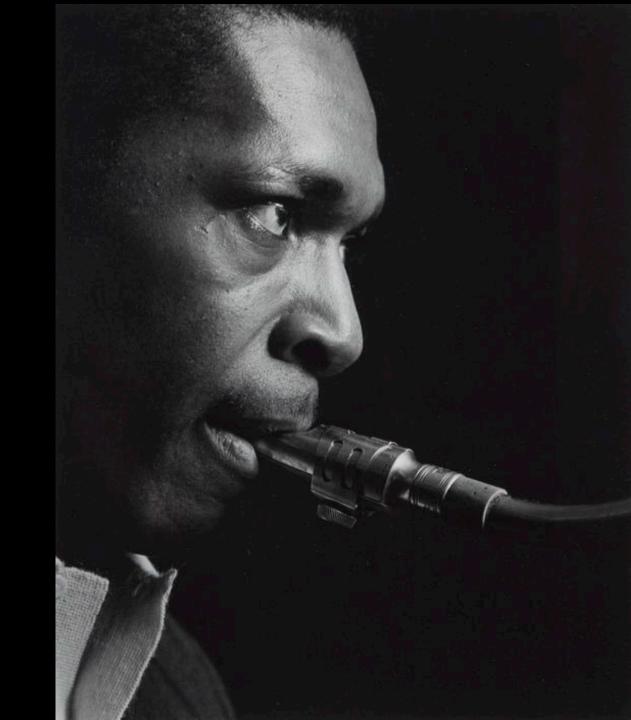
#### What is a gelatin silver print?

The main component in this process is, of course, the **gelatin silver print** paper (**the process invented in 1873**). This paper features light-sensitive silver salts embedded in gelatin. The silver halides capture photons and darken when treated with the developer. It results in the negative, wherein the bright areas are black, and the dark areas are clear. After exposure and development of the negative in a chemical bath, these silver compounds ultimately form the positive image.

The best part about gelatin silver prints is that the resultant photographs have a smooth, even image surface. To further enhance this, some photographers add additional chemicals to the gelatin silver prints.

https://thedarkroom.com/a-guide-to-gelatin-silver-prints/

Chuck Stewart, American (B. 1927) John Coltrane, silver gelatin print. https://www.linkauctiongalleries.com/



## GELATIN SILVER PRINT, IMPROVISATIONS:

GELATIN SILVER PRINT, BLACK AND WHITE, EXTREME CLOSEUP OF CHARLIE BIRD PARKER PLAYING SAX --AR 2:1 [MIDJOURNEY 5.2]



### What are platinotypes?

Platinotypes, or platinum prints, are renowned for their tonal richness, longevity, and exquisite detail. These prints are created using a photosensitive solution of platinum and palladium salts, resulting in images with a wide tonal range and a distinctively warm, matte appearance.

Made by a monochrome printing process, Platinum prints, also called platinotypes, are photographic prints that provide the greatest tonal range of any printing method using chemical development. Dissimilar from the silver print process, platinum lies on the paper surface, while silver lies in a gelatin or albumen emulsion that coats the paper. As a result, since no gelatin emulsion is used, the final platinum image is absolutely matte with a deposit of platinum (and/or palladium, its sister element which is also used in most platinum photographs) absorbed slightly into the paper. Most platinum printing ended around 1914, as the platinum was needed to manufacture high explosives for World War I.

Platinum prints were patented in 1873.

https://medium.com/@abelart/midjourney-alternative-photographic-techniques

https://www.npg.org.uk/collections/explore/glossary-of-art-terms/platinotype



## PLATINOTYPE, VIA SACRA:

PLATINOTYPE, ACHROMATIC, ANCIENT ROME, WOMAN HOLDING CANDLE, IMPRESSIONISTIC, STYLE OF JENNY SAVILLE, SUBSURFACE SCATTERING, DAPPLED LIGHT, VOLUMETRIC LIGHTING --AR 2:1 [MIDJOURNEY 5.2]



### Photographic Printing Techniques of the 1900's

So what transforms the perception of photography in the early twentieth century? Social and cultural change—on a massive, unprecedented scale. Like everyone else, artists were radically affected by industrialization, political revolution, trench warfare, airplanes, talking motion pictures, radios, automobiles, and much more—and they wanted to create art that was as radical and "new" as modern life itself. If we consider the work of the Cubists and Futurists, we often think of their works in terms of simultaneity and speed, destruction and reconstruction. Dadaists, too, challenged the boundaries of traditional art with performances, poetry, installations, and photomontage that use the materials of everyday culture instead of paint, ink, canvas, or bronze. By the early 1920s, technology becomes a vehicle of progress and change, and instills hope in many after the devastations of World War I. For avant-garde artists, photography becomes appealing for its associations with technology, the everyday, and science—precisely the reasons it was denigrated a half-century earlier. The camera's technology of mechanical reproduction made it the fastest, most modern, and arguably, the most relevant form of visual representation in the post-WWI era. Photography, then, seemed to offer more than a new method of image-making—it offered the chance to change paradigms of vision and representation.



# What is Autochrome Lumière?

The Autochrome Lumière was an early color photography process patented in 1903 by the Lumière brothers in France and first marketed in 1907. Autochrome was an additive color "mosaic screen plate" process. It was the principal color photography process in use before the advent of subtractive color film in the mid-1930s.

Prior to the Lumière brothers, Louis Ducos du Hauron utilized the separation technique to create color images on paper with screen plates, producing natural colors through superimposition, which would become the foundation of all commercial color photography



## AUTOCHROME LUMIÈRE PRINT, DEATH & TRANSFIGURATION:

PLATINOTYPE, ACHROMATIC, ANCIENT ROME, WOMAN HOLDING CANDLE, IMPRESSIONISTIC, STYLE OF JENNY SAVILLE, SUBSURFACE SCATTERING, DAPPLED LIGHT, VOLUMETRIC LIGHTING --AR 2:1 [MIDJOURNEY 5.2]



#### What is bromoil?

Bromoil is an intriguing process that combines photography and painting. It involves bleaching the photographic image and then inking it with printing ink to create a distinctive pictorial effect. The resulting prints possess a soft, painterly quality with rich tones and textures.

The bromoil process is based on the fact that when a silver gelatin print is chemically treated with a solution containing a dichromate salt, the gelatin hardens in proportion to the amount of silver present. It is also based on the fact that oil and water repel one another as in lithography.

Bromoil printing was invented in 1907.



http://www.graphicsatlas.org/identification/?process\_id=372

## **BROMOIL PRINT, DEMENTIA AND ISOLATION:**

BROMOIL PORTRAIT OF A GRIEVING MAN EMERGING FROM A PALIMPSEST OF HOLOGRAPHIC GRAFFITI AND QUILTS INTERPOLATING FROM 2D TO 3D, SANSKRIT HOLOGRAMS, HUD DISPLAY, BOUNCED LIGHT, CONTRE JOUR, STYLE OF HOKUSAI AND FRAGONARD --AR 2:1 [MIDJOURNEY 5.2]



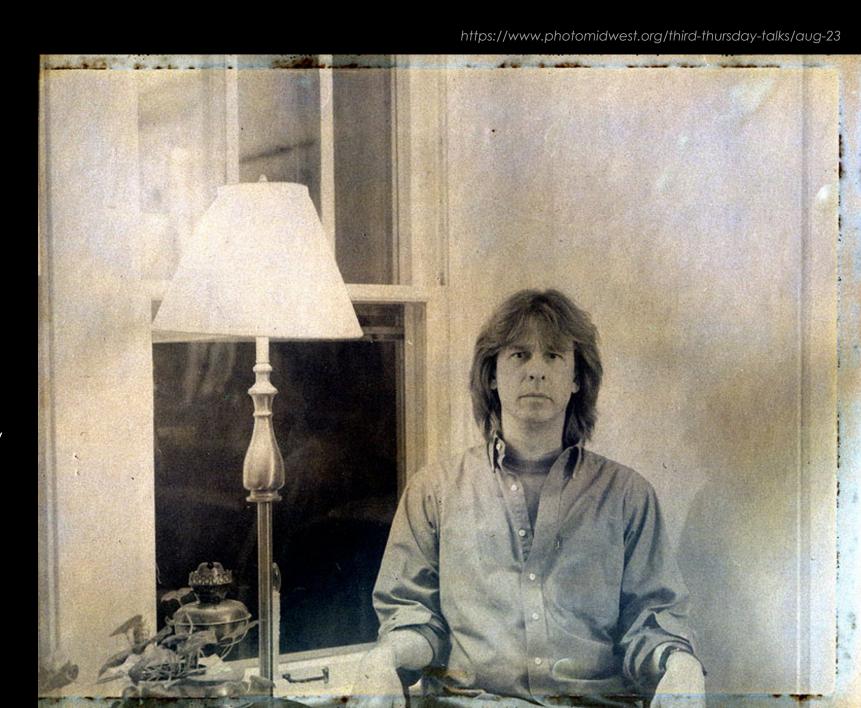
#### What is a resinotype?

The **resinotype** had its maximum diffusion in the period **1922-1935**. Its inventor, Rodolfo Namias adapted and enhanced the well known powder process though the variation introduced by Sobacchi in 1879 looks much more similar.

#### Namias wrote that:

"The resinotype was born from the observation of an anomaly. In my researches on the chemistry of the transformation of the silver image for a better application of bromoil, I noted that, using an ink made very hard mixing it with lamp black, the ink was better retained by the swollen parts of the image rather than the more hardened ones. From this I had the idea that a not insolubilised gelatine could be able to retain a resinous and greasy particulate matter better than the insolubilised gelatin."

https://www.alternativephotography.com/ the-resinotype-process/



## RESINOTYPE PRINT, LUPA NOCTIS:

RESINOTYPE, BLACK WOLF RETURNS TO GAZE UPON MY FACE ON SMOKELESS NIGHTS, TO GRACE MY WINDOW FRAME AND BLESS THE MOONLIT GRASS WHEN NIGHT DESCENDS, ANDREW WYETH STYLE, DEGAS STYLE, DRAMATIC, MONOCHROMATIC BLUE TONES, IMPRESSIONISTIC --AR 2:1 [MIDJOURNEY 5.2]



### What is a chromogenic print?

The dominant photographic color process of the 20th century is made up of three gelatin layers containing cyan, magenta, and yellow organic dyes. Together, these dyes produce a full-color image. From 1935 to the present day, the chromogenic process has been used to create a range of print, transparency, and film materials.

Common branded products such as Kodacolor prints, introduced by Kodak in 1942, use the chromogenic process, as do materials produced by other companies such as Fuji and Agfa. Used by both professionals and amateurs, chromogenic prints, also known as "C prints," can be unstable and prone to color shift or fading.

Chromogenic prints are the result of printing a digital file on a continuous tone printer (Lambda Durst Printer) that uses chromogenic (silver based) paper.

https://www.moma.org/collection/terms/chromogenic-color-print

## CHROMOGENIC PRINT, IMPROVISATIONS:

EXTREME CLOSE-UP OF BAUHAUS POSTER OF CHICK COREA PLAYING PIANO, **CHROMOGENIC YELLOW PRINT**, FRACTURED MOTION BLUR, EMULSION PRINT WITH DIMENSIONAL FRAME CARRIAGE VISIBLE, MULTIPLE EXPOSURE --AR 2:1 [MIDJOURNEY NIJI 5]



# What is a Risograph?

RISO prints are made with a Risograph printer, invented in 1958. It looks like a photocopier, but works as a screen printer; using rich spot colors and stencils to create tactile and vibrant prints, affordably and with little impact to the environment.

Risograph printing has been used for high-volume printing in places like schools & political parties for many years, but over the past decade, it has undergone a resurgence with creatives adopting the process because of its tactile and unique results.

https://rsottostudio.com/pages/whatis-risograph-printing



## RISOGRAPH, SHIBUYA CROSSING:

RISOGRAPH OF SHIBUYA CROSSING AT TWILIGHT, STYLE OF CHUCK CLOSE, COLORFUL HAKAMA TEXTURES IN THE STYLE OF ST. CHAPELLE, WOMAN IN SILHOUETTE IN FOREGROUND WITH PINK HAT, SUBSURFACE SCATTERING --AR 2:1 [MIDJOURNEY 5.2]



#### What is a solargram?

**Solargraphy** is a concept and a photographic practice based on the observation of the sun path in the sky (different in each place on the Earth) and its effect on the landscape, captured by a specific procedure that combines pinhole photography and digital processing. **Invented in 1999**, solargraphy uses photographic paper without chemical processing, a pinhole camera and a scanner to create images that catch the daily journey of the sun along the sky with very long exposure times, from several hours to several years

https://en.wikipedia.org/wiki/Solarigraphy



## SOLARGRAM, SUBURBIA:

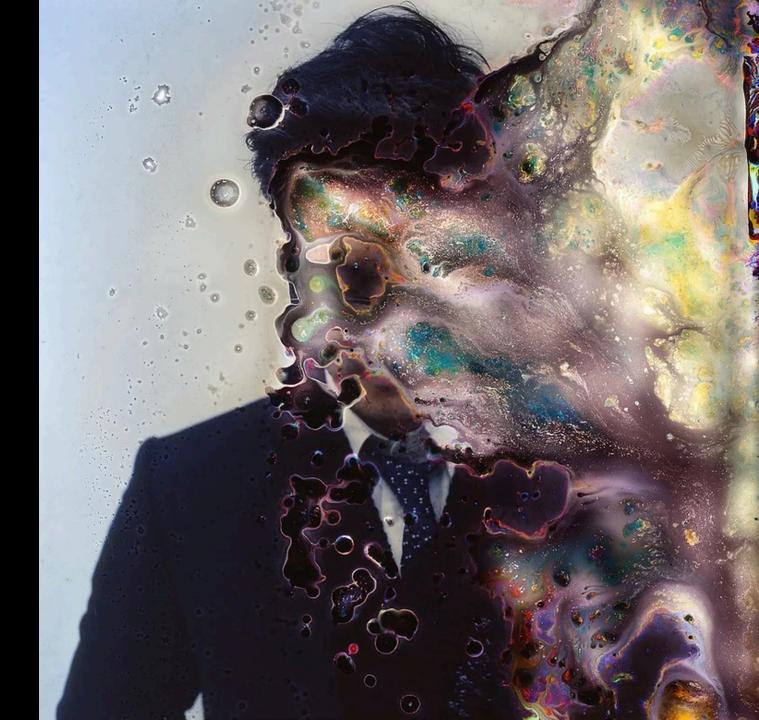
**SOLARGRAM** OF A WOMAN IN BATHROOM CRADLING AN ALIEN CHILD IMBUED WITH MAGICAL POWERS, OVER THE SHOULDER VIEW, STYLE OF GREGORY CREWDSON, KODAK AEROCHROME, DUTCH ANGLE, EXTREME CLOSE-UP --AR 2:1 [MIDJOURNEY 5.2]



# What is the damaged negative and print aesthetic?

Experimental photography through damaged negatives and printing methodologies has been widely explored in the last number of decades. Strategies include boiling negatives ('film soup'), bleaching negatives, storing film past its expiration date, purposely over-exposing or double exposing film, scratching the negative, adding bacteria in the development process, and microwaving the print. These methods create spontaneous and unexpected results in the camera, in the dark room, and beyond. Exposed frame carriages and visible film sprockets are also desirable artifacts that suggest an analog approach to photographic image-making, which is antithetical in many ways to the more prescribed methods and deliverables of digital photography.

https://www.seunghwan-oh.com/impermanence



## DAMAGED NEGATIVE + PRINT, VISIONES FRACTAE:

VISIBLE DAMAGED AND SCRATCHED FILM NEGATIVE SPROCKET HOLES, FRANZ KLINE STYLE, COUNT UGOLINO CHASING A CHILD, GRITTY DE-SATURATED ANALOG 35MM, FILM SOUP, BOILED EMULSION, STYLE OF SEUNG-HWAN OH, GLEN LUCHFORD AND JOSH LEE, EXPIRED FILM, MICROWAVABLE POLAROID --AR 2:1 [MIDJOURNEY 5.2]



## DAMAGED NEGATIVE + PRINT, IMPROVISATIONS:

CLOSE-UP OF BAUHAUS STYLE POSTER OF CHARLIE BIRD PARKER PLAYING SAX, CHROMOGENIC BLUE PRINT, FRACTURED MOTION BLUR, **BOILED EMULSION PRINT WITH DIMENSIONAL FRAME CARRIAGE VISIBLE**, RUSSIAN CONSTRUCTIVISM, MULTIPLE EXPOSURE --AR 2:1 [MIDJOURNEY NIJI 5]



## CONCLUSIONS FOR PRINTING MODES IN MIDJOURNEY:

WITH VERY FEW REROLLS, I WAS ABLE TO CAPTURE THE SIGNATURE LOOK OF MOST COMMON PRINTING AND DEVELOPING METHODS. KNOWLEDGE OF PHOTOGRAPHIC PRINTING AND FILM DEVELOPMENT METHODS CAN BE CRITICAL IN COLOR MANAGEMENT, WORKING IN CONCERT WITH FILM STOCKS, AS WELL AS THE CAMERAS AND LENSES THAT MIDJOURNEY RECOGNIZES (WHICH WERE TESTED IN THE PREVIOUS MODULE),

BILL MURRAY FROM A WES ANDERSON MOVIE IN BLUE AND RED PEERING OVER A LARGE BLUE BOOK AT THE VIEWER, KODAK VISION3 200T COLOR NEGATIVE FILM 5213 -- AR 2:1 [MIDJOURNEY 5.2]



## **ACKNOWLEDGMENTS:**

MANY OF MY LIVE-ACTION PHOTOS TAKEN IN THIS SERIES CAN BE VIEWED AT JAZNO.COM. THANK YOU, STUDIO BINDER SERIES, WHICH CAN BE FOUND AT HTTPS://WWW.STUDIOBINDER.COM/BLOG (THE MOST COMPREHENSIVE REPOSITORY OF FILM AND PHOTOGRAPHY TUTORIALS ON THE WEB). AND OF COURSE, A NOD TO WIKIPEDIA, FOR PROVIDING A FAIR AMOUNT OF CONTENT/CONTEXT (ALL IMAGES AND TEXT HAVE BEEN ATTRIBUTED ON RESPECTIVE SLIDES, UNLESS CREATIVE COMMONS). AND THANKS TO GIL ALTER FROM THE MIDJOURNEY: PROMPT TRICKS FORUM FOR HIS INSPIRATIONAL RESEARCH.

The next lecture in this series is **Camera Basics for Generative Art V**, where we will cover lighting and light effects.

