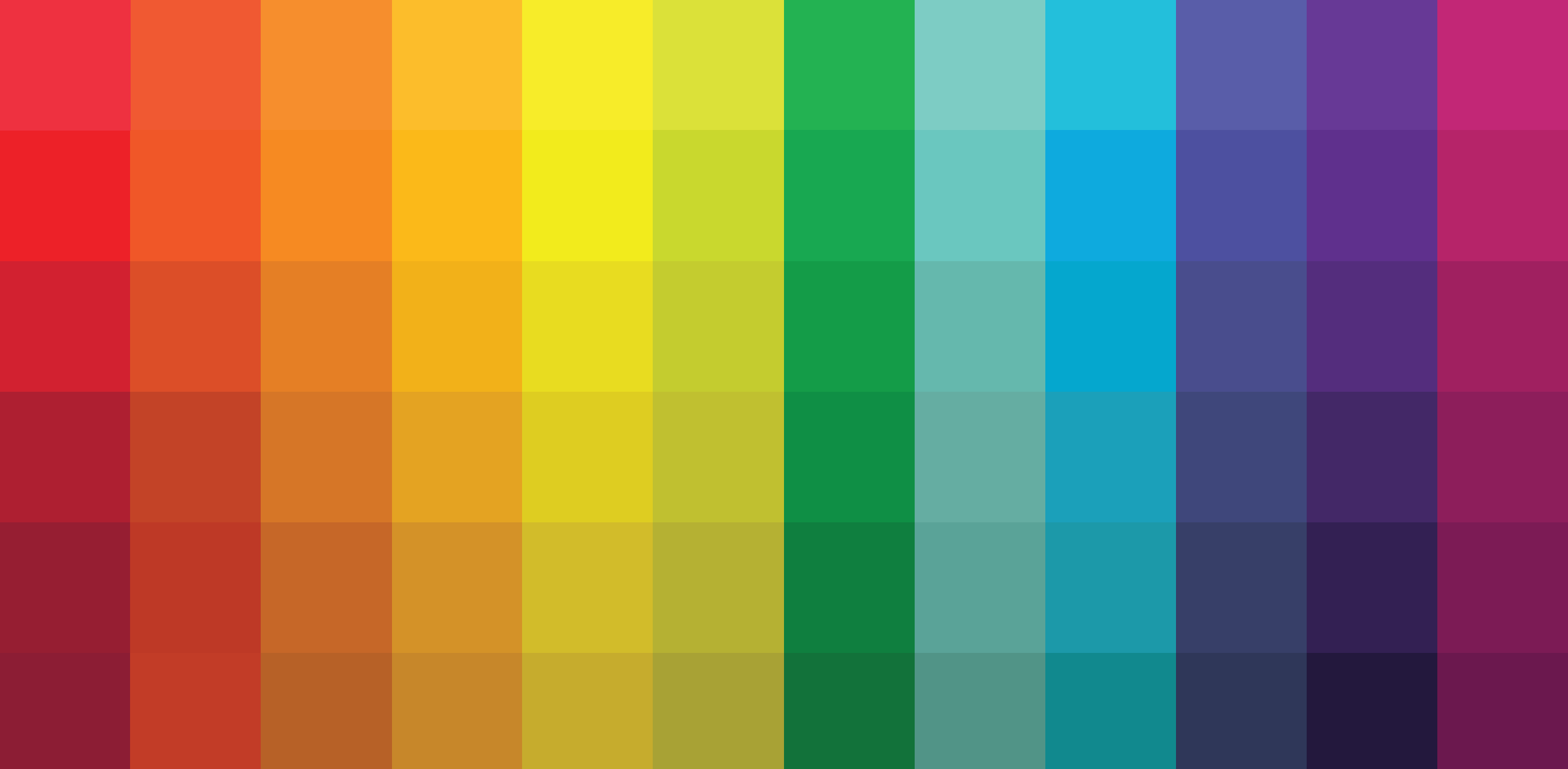




# color

an exploration of  
the relationships  
between colors

emily celona



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# what is color?

**Color is an unavoidable phenomenon.** It defines and differentiates; it secures meanings and significances. Color has a long and complex history that is not controlled by either sciences or arts. Artistic descriptions must engage, at least on some level, with the quantified thought associated with our scientific understanding of color.

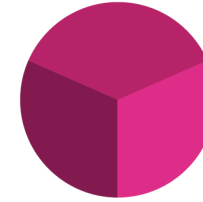
*Every perception of color is an illusion. We do not see colors as they really are. In our perception, they alter one another.*

Josef Albers

# the color wheel

The color wheel is the basis of color theory because it shows the relationship between the colors.

Color combinations determine the relative positions of different colors in order to find colors that create a pleasing visual effect.



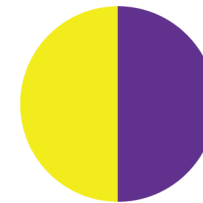
## monochromatic

Three shades, tones and tints of one base color. This is a versatile color combination that creates a harmonious look.



## analogous

Three colors that are side by side on the color wheel. To balance an analogous color scheme, choose one dominant color, and use the others as accents.



## complementary

Two colors that are on opposite sides of the color wheel. Together, these colors will appear brighter and more prominent.



## triadic

Three colors that are evenly spaced on the color wheel. This combination creates bold, vibrant color palettes.



## tetradic

Four colors that are evenly spaced on the color wheel. Let one color be dominant and use the others as accents.



## split

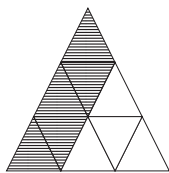
In addition to the base color, it uses the two colors adjacent to its complement. This color scheme has less tension than the complementary scheme.

# color theories:

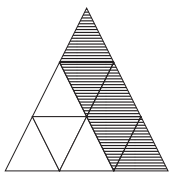
## the equilateral triangle

In an equilateral triangle are 3 primaries, 3 secondaries, and 3 tertiaries.

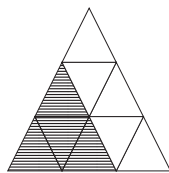
Containing the strongest color contrasts, the first of the three trios appears most separated at the extreme ends—in the 3 corners. Yellow and blue appropriately hold the base. As red occurs high off at the apex, again separated but in a middle place. The less opposite secondaries are in the middle of the outer edges, and the closest, or least different, tertiaries naturally meet still more in the center. Additional groupings show the complex relationship between colors.



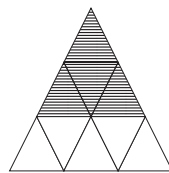
lucid



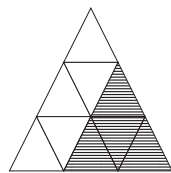
serious



serene

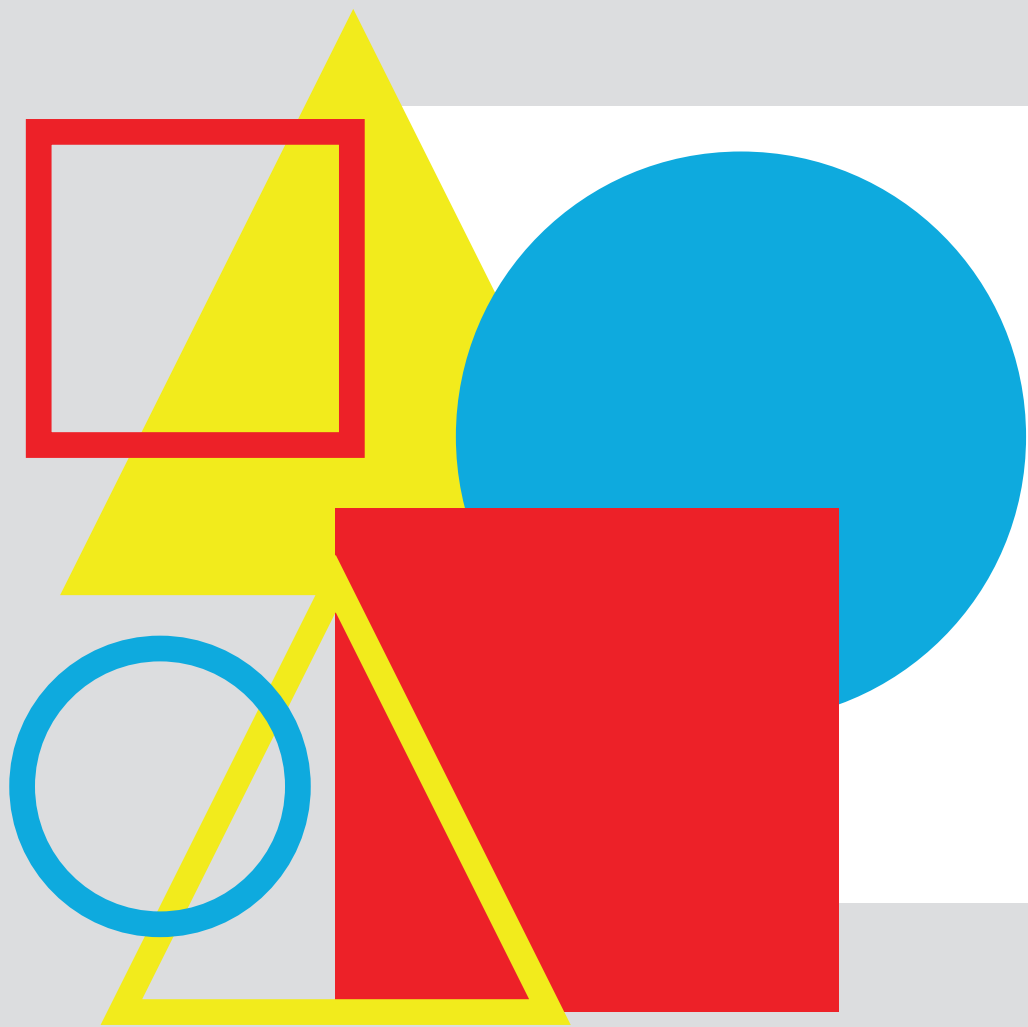


mighty



melancholic





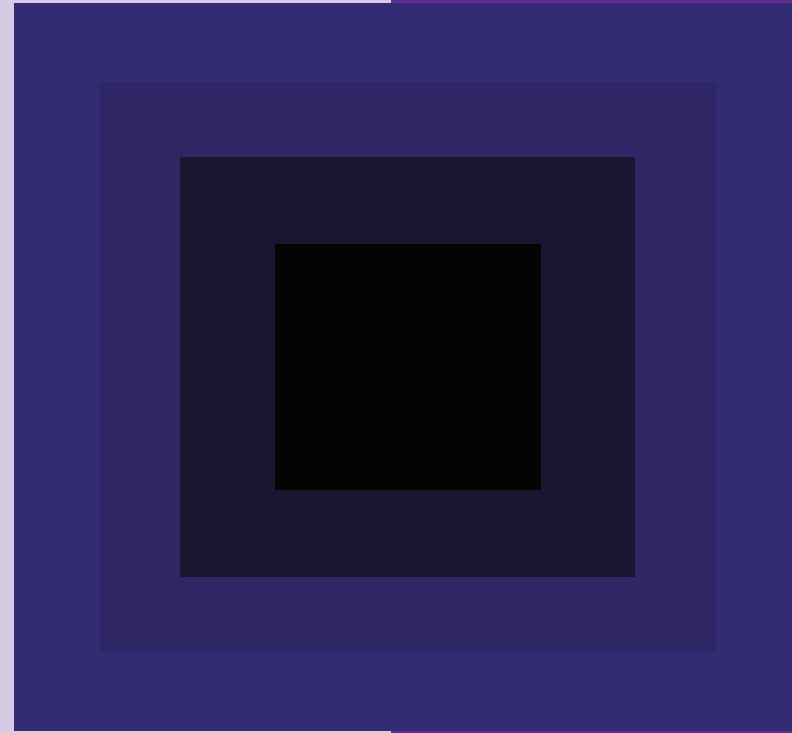
## color theories: correspondence of colors & forms

Isolating color from form is a virtual impossibility, except under certain experimental conditions. Color is in constant interaction with lines and shapes. This creates a unique relationship in which color becomes a nonverbal language in which the correspondence between color and form creates inherent meaning.

# the experience of color

**Colors are sensations, not abstractions or ideas.**

The beginning of every color experience is a physiological response to a stimulus of light. Color is sensed by the eye, but the perception of color takes place in the mind. This is not necessarily at a conscious level. Colors are understood in context—they are experienced at different levels of awareness depending on how and where they are seen.





# additive and subtractive mixtures

In this illusionary mixture, the colors appears to show through one another. With their contrasting results of gaining and of losing light, these studies explain a basic difference in mixture: direct color (light) and its opposite (reflected color) are produced by pigment.

# the bezold effect

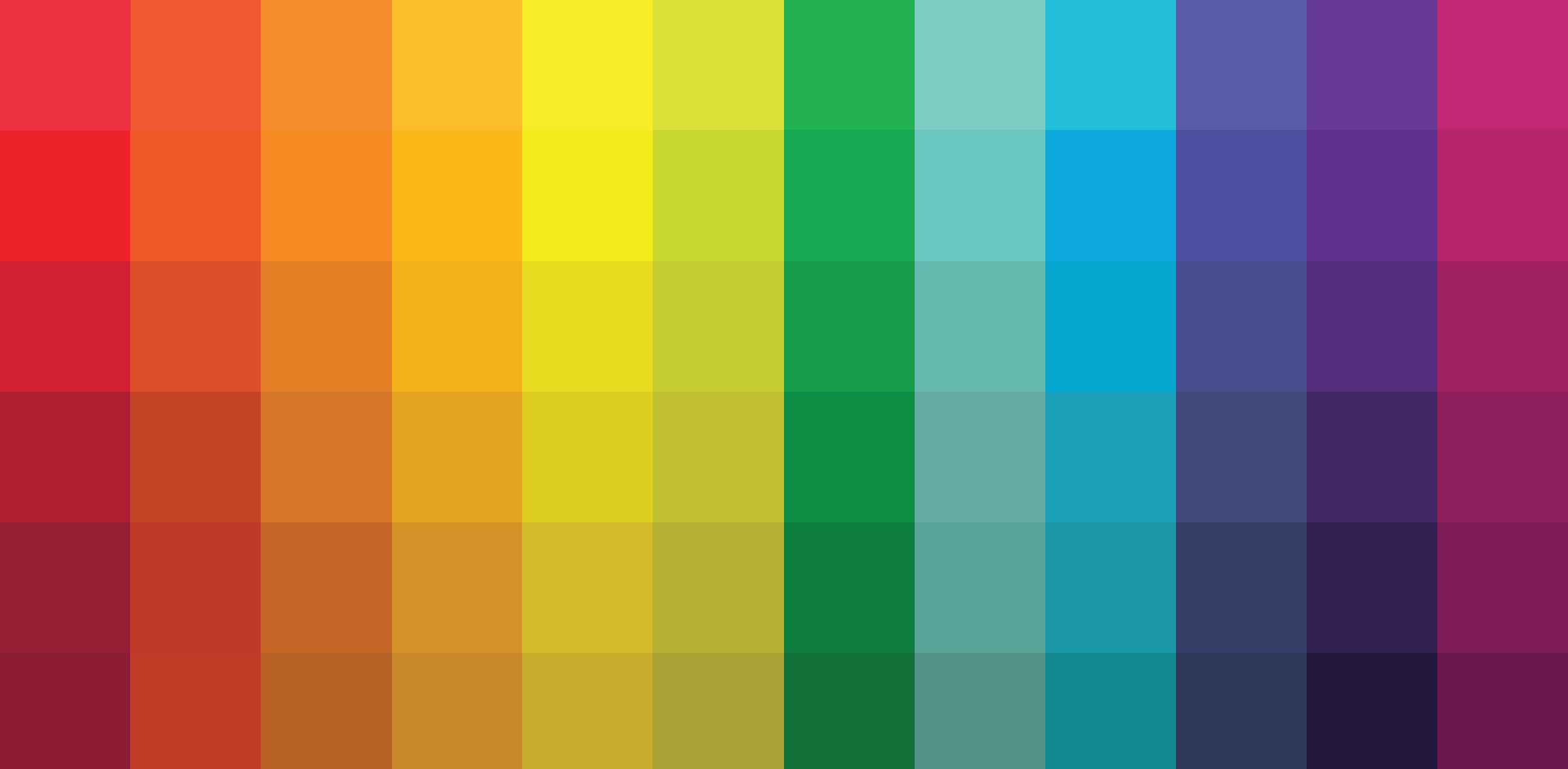
Wilhelm von Bezold discovered that strong colors, when evenly distributed, change the way our eyes perceive them. This effect creates an optical illusion in which one color appears as two different colors due to the adjacent color, often appearing as a lighter or darker color.





# color intervals and transformation

A color interval is the distance in light intensity between one color and another. Color transformation is an exercise intended to sensitize the eye to the distinctions of light intensity between colors. The relationship between the lightness and darkness of the colors in both sets are the same even though the colors are different.





## **Color: An Exploration of the Relationships Between Colors**

Color is an unavoidable phenomenon that is present in all aspects of our lives. The interactions between colors influence the way in which we perceive and understand inherent meanings, creating a non-verbal language that is complex and fascinating. The formation of relationships between various colors is explored throughout this book, centering on the use of design and historical research sources to provide a brief overview of what color is and detail the complex color theory principles from well-known early 20th century artists Wassily Kandinsky, Johannes Itten, and Josef Albers.