



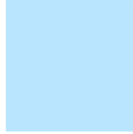










## The effect of colour

Did you know that the favourite colour for most people, independent of cultural background, is blue? Did you also know, that in study, it has been proven that blue has a calming effect on stressed people? A saturated red colour however, can raise the blood pressure and make one work faster. Young children tend to prefer bright colours. As we grow older the colour preferences often change into more muted colours. The actual colours we like differ from person to person and from culture to culture.

### YOU AND COLOUR

What word would you connect with a specific colour? Take a look at the colours below and find the word that you think belongs to each colour. Write the number that is in front of the word in the blank box beneath each colour. To make it easier for you to find the right word there are a few extras words to choose from. Ask your colleague to do the test too. Did you have a similar result?

							
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- |              |           |            |               |              |             |
|--------------|-----------|------------|---------------|--------------|-------------|
| 1. Beautiful | 2. Ugly   | 3. Cold    | 4. Warm       | 5. Fast      | 6. Slow     |
| 7. Kind      | 8. Mean   | 9. Male    | 10. Female    | 11. Happy    | 12. Serious |
| 13. Old      | 14. Young | 15. Health | 16. Illness   | 17. Lively   | 18. Passive |
| 19. Near     | 20. Far   | 21. Safe   | 22. Dangerous | 23. Jealousy | 24. Truth   |

Do you think a person from a different culture would have the same result as you? In the western world white is a colour considered pure, clean and innocent. Traditionally, white is the colour of wedding dresses. However, in the east, white is the colour of mourning.

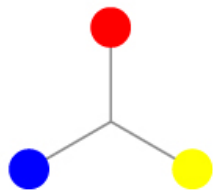
## THE SCIENCE BEHIND COLOUR

We wouldn't be able to see colour if there was no light. Light hits a surface and reflects some wavelengths and absorbs others. We see the green colour because the surface reflects the green wavelength and absorbs all others. White surfaces reflect all light waves and black absorbs them. Inside the eye we have nerve cells that are sensitive to degrees of light wavelength. The cells send the information to the brain where it is processed and recognised.

There are three primary colours of light – red, blue and green. When you mix primary colours you get what is called a secondary colour. For magenta mix red and blue, for cyan mix green and blue, and for yellow mix green and red. If you mix the three primary colours together you end up with white.

For those of us working with printing there is a different set of primary colours – the one for pigment. In the pigment colour wheel the first hues<sup>1</sup> we see are the primary colours; red, yellow and blue. The secondary hues are purple, green and orange. The third are called tertiary and consists of six hues: red-orange, yellow-orange, yellow-green, blue-green, blue-violet and red-violet.

*Primary*



*Secondary*



*Tertiary*



*Colour wheel*



The primary, secondary and tertiary colours have no black, white or grey in them. This means that the colours are fully saturated. The word saturation describes the intensity of a hue.

All other colours have a measure of white, grey or black in them and are described as having lighter or darker value. When there is a white value in a colour they are named tints, when black is added it is a shade.

## COLOUR HARMONY

A harmonious colour scheme is pleasing to the eye and will feel balanced. When you choose colours for a design you do not want colour chaos nor do you want a combination that is so bland nobody will notice it. By giving the audience colour harmony you give them a sense of order.

### Analogue colour

One way to find a harmonious colour scheme is to look at the colour wheel and pick out any three hues that are side-by-side. This combination is called an analogue colour scheme.

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<sup>1</sup> Hue is a different name for colour

## Complementary colour

A second option is a complementary colour scheme. Complementary colours are hues on the opposite side of each other in the colour wheel: red – green, yellow – purple, orange – blue. These opposites intensify and balance one another and make the each colour look brighter and more intense.

## Split-complementary colour

Split-complementary colours are found by choosing a colour, finding its opposite and selecting hues to the left and right, these hues are the analogue colours to the complimentary colour.

## Triad colour

Three hues at the same distance from the same point are called triadic colours. Choose triadic colours to create a design that is both colourful and balanced.

*Analogue*



*Complementary*



*Split-complementary*



*Triad*



## Monotone achromatic

Colour schemes employing only greyscale hues, ranging from black to white, is called monotone achromatic. When combined with a bright colour this colour scheme can be quite effective.

## Monotone chromatic

Monotone chromatic is a single colour in variation of tint, shade and saturation. You can create very interesting work using this type of colour combination. To add some spice to your design use a complementary colour.

*Monotone chromatic*



*Monotone achromatic*



## HOW TO USE COLOUR

There are really no set rules anymore as to what colour you can put together. Or even the number of colours one should use in a design. Most of you have probably seen some amazing examples of colour use that would have been considered awful only 40 years ago. The combination of blue and green was considered to be a big no-no in the 50s. Today I think most people think a design with those two colours are quite nice.

When designing and deciding on which colours to use, it is important to think of the context that they will be used in. A book for children is probably going to attract more young readers if it has pictures in a bright or lighter colour scheme. A bar specialising in whiskey would most likely draw a bigger crowd if designed with rich dark brown, dark red and gold hues. Choose colour based on your target group, your message and the setting where your design will be seen or used.

With colour you can:

- show similarities and differences
- link objects or text together
- emphasis an object or text
- attract attention
- convey an emotion
- change the perception of space

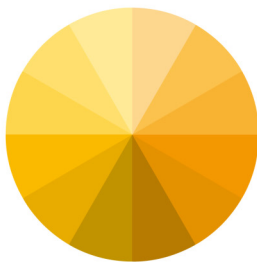
Colour can also be used to give a specific meaning to a design. Red as on the stop sign, green as in the traffic light 'safe' to drive and yellow as the warning sign you see for road work.

If you need a simple guide for colour choice it is recommended to stick with three different hues: a main (primary) colour, a support (secondary) colour and a highlight colour for emphasizing headlines, graphics, lines etc. The highlighter should be used sparingly to help you lift the design. The secondary hue is often an analogue colour, and the highlight colour a complementary or a split-complementary colour to the primary hue.

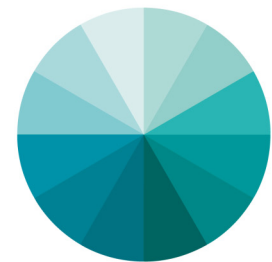
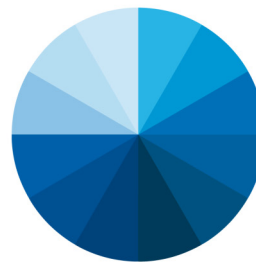
### Colours and emotions

Colours with red in them are considered warm. Colours with blue in them are considered cold.

*Warm colours*



*Cold colours*



### Common associations with colour

- **Black:** power, evil, death, formality, sophistication, elegance, style, mourning, anger, sadness, unhappiness, sexuality, fear, depth, rebellion.
- **Grey:** elegance, respect, boredom, decay, old age, dust, wisdom, pollution, neutrality.
- **White:** reverence, purity, innocence, truth, snow, winter, peace, cleanliness, hygienic. Eastern cultures: sterility, coldness, mourning.

- **Brown:** wood, stability, calm, nature, richness, rustic, tradition, dirt, filth, heaviness, poverty, earth, dependability, simplicity, sad, masculine.
- **Beige:** neutral, calm, relaxing.
- **Yellow:** joy, happiness, optimism, idealism, imagination, sunshine, summer, hope, betrayal, jealousy. Eastern cultures: sacred, imperial. In Japan: courage, in Egypt: mourning. A bright yellow is the most difficult colour for the eye to take in and can be overpowering if used in large quantities.
- **Orange:** energy, balance, warmth, enthusiasm, vibrancy, attention, flamboyancy, happiness, attraction, success, encouragement, stimulation, heat, fascination, creativity, sunshine, determination.
- **Red:** fire, blood, energy, war, danger, strength, power, determination, passion, desire, love, speed, violence, anger. In China red symbolizes celebration and fortune, in India it is the sign of purity.
- **Pink:** spring, gratitude, appreciation, admiration, sympathy, femininity, health, love, marriage, sex, joy, innocence, purity.
- **Purple:** royalty, luxury, wealth, femininity, romance, envy, sensuality, spirituality, creativity, ceremony, mystery, wisdom, enlightenment, arrogance, profanity, confusion, pride, cruelty. In Thailand it is the colour widows in mourning are using.
- **Blue:** water, sky, calmness, trust, dignity, ice, loyalty, cold, conservatism, air, royalty, nobility, confidence, unity, stability, order, tranquillity, cleanliness, order, security, depression. In China blue is associated with immortality, for Hindus with Krishna, in the Middle East it's a protective colour and for Jewish people it symbolizes holiness. Blue is the favourite colour for most people, independent of their culture and country of origin.
- **Green:** nature, calm, refreshing, youth, environment, health, renewal, vigour, inexperience, spring, fertility, envy, misfortune. Dark green: masculine, conservative, wealth. A popular colour, one of the most common favourite colours.

Remember: choosing the right colour can have a huge impact on your sale success!

## Sources

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