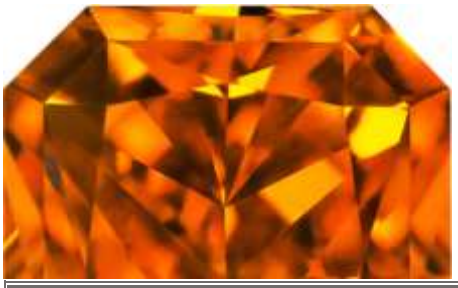


KULSEN & HENNIG
DOMINIK KULSEN
Nature's Brilliant Colours

Newsletter No. 37 06/2019

A tomato may be red, but which red is it?

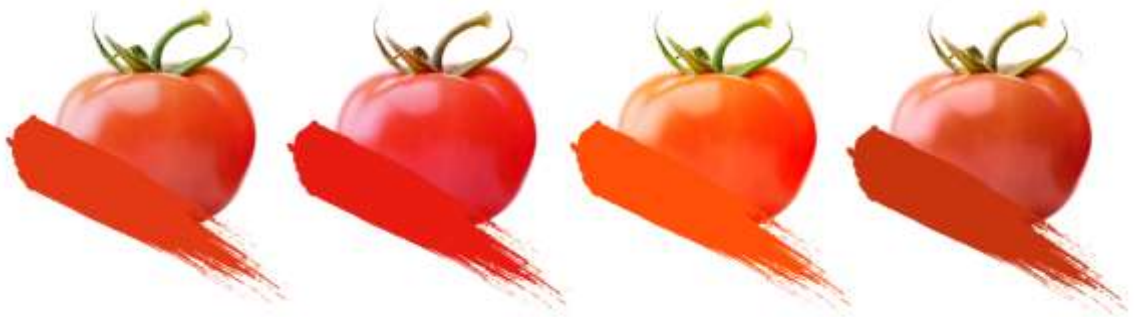
In this Edition:

In a former life, I took a course on colours at the art school in Basel. For our first exercise, we were given a box of watercolours and told to fill in four individual squares, each with a different colour: sky blue, grass green, lemon yellow, and tomato red. The students all mixed their own colours based on their individual colour perceptions. When we had finished, we sat down and compared our results – there were 10 different "sky blues", 10 different "grass greens", 10 different "lemon yellows" and 10 different "tomato reds"!

This anecdote shows us just how much colour perception changes from one person to another. In this newsletter, we will discuss the sensitive issue of colour vision and the description of colours.

We hope this edition of our newsletter will provide you with new inspiration!

Happy reading,
Juliane Hennig

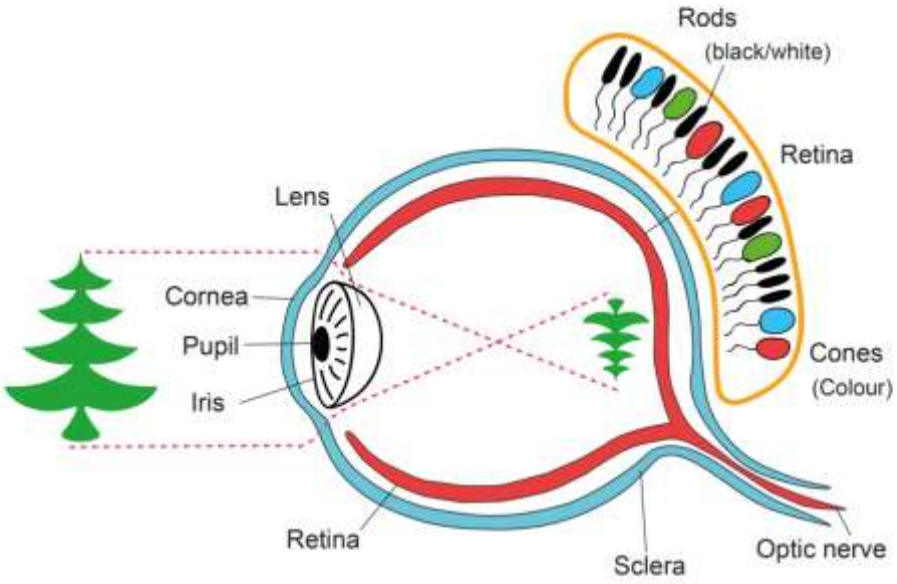


How Do We See Colours?

Light is the key to being able to perceive colours. Objects get their colour by either absorbing or reflecting wavelengths of light differently. The impression of colour is created by the object's ability to reflect certain portions of light more strongly than others. Water, for example, appears blue to us because the red, yellow and green parts of the sunlight are absorbed very quickly and the blue part is reflected the most.

Read more about this topic in our newsletter about light ...

The easiest way to describe **the way our eyes work** is by looking at the incoming rays of light that hit our eye when we see an object:



1. The rays of light pass through the cornea. The cornea "bends" the light rays and protects the eye from foreign bodies and injuries.

2. Next, the light passes through to the pupil. In darkness, the pupil enlarges to allow as much light as possible to pass through. In bright light, however, it constricts to limit the amount of light that passes through the eye at once.

3. The lens is located behind the pupil. It focuses the incident light.

4. The focused light beam then hits the retina. Ideally, the light rays converge exactly on the retina. In the case of defective vision, however, the focus is either too far forward in the eye or too far back in the eye.
   ⇒ The retina is located on the inside of the eyeball and is full of photosensitive cells that are named for their shapes - rods and cones. The rods primarily distinguish between light and dark, while the cones react to colour.

5. When the light rays hit the retina, the image is initially upside down, and this is how it is sent to the brain via the optic nerve.

6. The brain then processes the points of light and turns the image the right way up.

It is only once the brain has received and processed the information coming from the eyes that an image is produced.

Although the visual process is the same for everyone, **the way in which colours are**

perceived is in fact very different from one individual to the next. In addition to organic and physical factors, **personal experience**, **age**, **interests** and **mood** can also play an important role. Two people may indeed be looking at the same thing at the same time, but they are extremely likely to have two very different perceptions of what they are actually seeing. Colour is therefore exceedingly subjective and difficult, if not impossible, to measure objectively, making it all the more challenging to describe the colour of a diamond!

A Practical Example:

Every week, we receive requests for diamonds with colours such as sherry, cinnamon, cognac, honey, or even lemon yellow. The first thing we do over the phone is to try to understand exactly which colour the customer is really looking for:

"For you, is cognac more of a dark brown or a rich, deep orange? When you say 'honey coloured', are you thinking more of canola honey or pine honey? Are you looking for a warmer yellow like the colour of sunflowers, or a lemony yellow; and would that be a ripe lemon or one that is still slightly green? Ok, green – a bright, grassy green with a lot of yellow or a camouflage green with more grey and brown?"

Cognac / Sherry / Cinnamon / Amber / Fawn

1. Fancy Deep Yellow Orange
2. Fancy Deep Brown Orange
3. C5 (Dark Champagne)

Lemon Yellow / Canary Yellow / Chick Yellow

1. Fancy Intense Yellow
2. Fancy Yellow
3. Fancy Light Yellow

Apple Green / Fir Green / Grass Green

1. Fancy Dark Brown-Greenish Yellow
2. Fancy Vivid Yellow Green
3. Fancy Grayish Yellowish Green

Olive / Khaki / Camouflage / Machine Green / Military Green

1. Fancy Brownish Greenish Yellow
2. Fancy Deep Yellowish Green
3. Fancy Deep Yellow Green

Mouse Grey / Pigeon Grey / Elephant Grey / Taupe

1. Fancy Light Gray
2. Fancy Gray
3. Fancy Brownish Gray

Our now widely used **colour charts** have proven to be particularly useful in determining the desired colours. They can also be extremely helpful in discussions with end-customers in order

to familiarize them with the multitude of shades of Natural Fancy Coloured Diamonds.

Here, you can receive our colour charts free of charge.

In addition, searching the Internet for colours and images can sometimes help better determine the colour you are looking for. For example, the **Pantone Colour Matching System**, an international reference in the world of colour, is a tremendous resource. It should be noted, however, that computer screens reflect colours differently.

We would be happy to advise you over the phone and discuss how to find the perfect colour for the Natural Fancy Coloured Diamonds you are looking for. Given, however, that Natural Fancy Coloured Diamonds only unfold their full potential when seen in real life, a final decision can only be made when you have the diamonds before you and can admire them yourself.
We will gladly put together a suitable **selection** from which you can choose your favourites!

Colour Trends for Spring and Summer 2019

Hoping these summery images will inspire you, we wish you a colourful summer!


Marquise / Fancy Deep Yellowish Orange
Pearshape / Fancy Deep Brownish Orange
Radiant / Fancy Vivid Yellow-Orange
Brilliant / Fancy Light Orange

You will receive our next newsletter in autumn 2019.

Past newsletters can be found in our **Newsletter Archives**.

More information is available in our **Data Protection Statement**.

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