

Goethe's Approach to Colour:

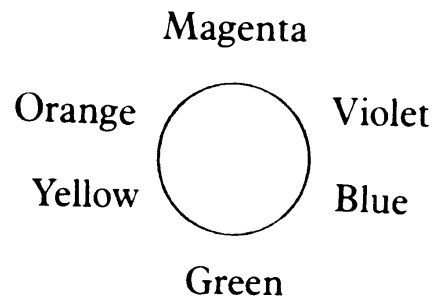
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Junemann/Weitmann, Hawthorn Press, UK 1994

Before starting painting lessons, teachers must prepare themselves by doing artistic exercises. Goethe's approach to colour, upon which Rudolf Steiner's indications for painting lessons are based, offers a starting point. Goethean optics, which form the foundations of this, are important later, for physics lessons. A brief sketch follows of the way the Goethean colour circle arises out of the prismatic bands of colour.

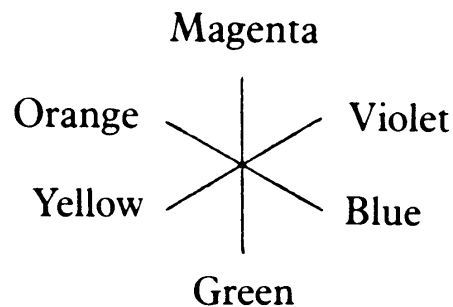
Goethe calls yellow and blue archetypal colour phenomena. Yellow is the nearest colour to light. It arises when light shines through an opaque medium and puts up a resistance to the oncoming darkness. If the darkness get denser orange and red arise. The light battles its way through the different gradations of opaqueness. We can observe this in sunrise and sunset. Blue is closest to darkness. If light shines through an opaque medium and lightens it up then violet and blue shades arise. If we observe the distant hills in a landscape they appear blue through the illuminated haze lying in front of the dark background of wooded hillside. The Goethean colour circle is based on these opposites in accordance with the principle of polarity and intensification.

On looking through a prism a yellow-red band can be seen when darkness encroaches on light. A violet-blue band appears where light rays edge into darkness. This can be demonstrated by means of a simple experiment: if a white panel is placed onto a black background and observed through a prism on one side yellow will be seen passing over to red where the white borders on the black, and on the other side blue passing over to violet. If the prism is drawn far enough away so that the two coloured edges overlap, then green arises in the middle. If a black panel is placed onto a white background, on the side where the black borders on the white the opposite phenomena of red will be seen passing over to yellow and on the other side violet passing over to blue. If the prism is again drawn away as before magenta appears. From even further back the coloured edges will overlap even more, and the magenta will lighten up to 'peach blossom'.

This phenomenon can be studied with wedge-shaped panels when all the transitions can simultaneously be viewed whilst standing in the same place. In order to see at a glance all these colours in their totality and in their mutual relationships Goethe arranged the coloured bands in a circle.

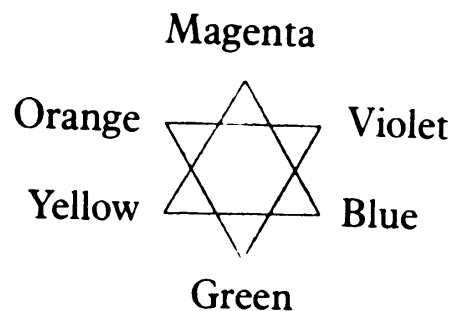


With this sixfold colour circle he developed his theory of harmony: when the human eye is surrounded by a colour it becomes active and instinctively produces the opposite colour the complementary colour. Red produces green, the colour circle, i.e. the pairs that stand opposite one another, are called harmonious. This is their order:



The second principle of classification is when colours are characteristic. This is what Goethe calls the colour pairs red-yellow, yellow-blue, blue-red. You arrive at these if you leave out a colour and jump to the next. We call these combinations characteristic because they all have something significant which makes a special impression; it does not, however, satisfy us, because what is characteristic only arises when a part separates itself from the whole, still having a relation to it, but without resolving itself into it.

The characteristic combinations in the colour circle all give a different impression. Yellow and blue contain the contrast between radiance and shadow, yellow and red express gaiety and splendour. With red and blue the polarity of active and passive is seen at its purest. All these colour combinations lack the third colour. The need is felt to mix them together and arrive at a balance. This produces three further pairs of colours: orange-green, green-violet, violet-orange.

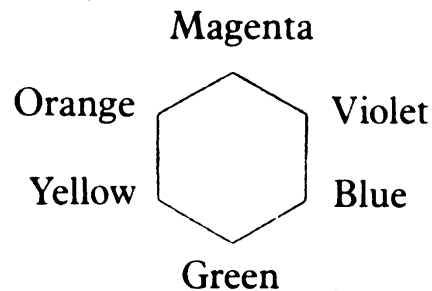


Philipp Otto Runge describes this group as harmonious contrasts. Goethe puts orange-violet with the characteristic colour pairs. A final grouping results from taking the colour pairs that are beside one another in the colour circle: yellow-orange, orange-red, red-violet, and so on.

One may well call these combinations non-characteristic, for they are too close to each other to produce a noticeable effect. He adds that the adjacent pairs yellow-orange, orange-magenta, magenta-violet are still to a certain extent justified because they indicate progression, although this is scarcely appreciable,

whilst he calls yellow-green 'vulgarly cheerful' and blue-green 'vulgarly

objectionable'. Runge called them monotonous. We should bear in mind, however, that in Goethe's time 'vulgar' meant something general, everyday or trivial, and 'objectionable' meant reluctant. You have to keep looking at these colour combinations, moving your eye back and forth between one colour and its partner, in order to get at its specific quality and its minute progression.



In order to paint the colour interval yellow-green you discover that you can vary it all according to whether you take the green more in a blue or a yellow direction, and the yellow more in a red or a green direction. Nature offers us ample opportunity to study the widest range of different yellow-greens. In spring flowers among the green range from the most delicate yellow to the strongest gold, such as primroses, cowslips, forsythia, daffodils, dandelions, marsh marigolds and crocuses. Sunlight makes the radiant character of yellow even stronger. In comparison, green has a shadowy effect, even when the light is shining on it. Little attention is paid to the juxtaposition of these colour impressions in nature. The blue of the sky, or perhaps a house or a wall in the background, add to these yellow-green combinations and soften the effect. When the combination yellow-green is painted, the lack of tension in the relationship between them, which Goethe calls 'vulgarly cheerful', is more predominant and awakens the need to complete the combination.

In summer the colours blue and green are most apparent. If the sky were not blue but yellow or red, as the sky is for a short while in the morning or the evening, our feeling of wellbeing would be totally different. Yellow and red are more stimulating colours, whereas the combination of green-blue is relaxing while restoring and refreshing us. Green painted next to blue can have an unattractive look. In Nature, however, its lack of tension has a beneficial effect on the eye.

In the prismatic experiment mentioned above, with the white panel on black, the mixture of the polarity yellow and blue appeared at the lowest level as green. With the black panel on white the yellow-blue polarity increased and passed through the combinations of orange-red and violet-blue leading to the process that

generates magenta. Goethe maintains that the combination of yellow and blue to green gives real satisfaction to the eye, whereas the combination of orange and violet to magenta gives the eye ideal satisfaction.

A painter cannot really reproduce these prismatic colours with chemical ones, but can only make something approximate. Magenta remains an ideal colour, and a mixture of yellow-red and blue-red is nothing like it.