JSS 1 Note

Week 1: Colour 1

What is Colour?

Colour is a pigment applied on a surface to make it more appealing to the senses. It is what results when a ray of light from the sun passes through the glass prism.

Colour is very vital to human because of its ability to express the aesthetic sense of beauty. It is easier to remember the colour of am object than its shape or form.

The remarkable discovery of Sir. Isaac Newton has shown that colour is present in light. He discovered the colour spectrum which is the sequential arrangement of colour such as the "rainbow" through the use of prism.

The colour of the spectrum are: red, orange, yellow, green, blue, indigo and violet (ROYGBIV).

colour spectrum

The visible spectrum of colours that we can see ranges between red at one end and violet at the other end. This is what we see when we look at a rainbow. Although the colours in fact gradually change from one to another as you move through the spectrum we could say that there are six noticeably different colours from red to violet.

Arranging hues in a colour circle

It will be noticed that the two ends of the visible spectrum have some similarity since violet has a reddish look about it. So by joining the two ends of the spectrum together we can make a circular arrangement of colours. This diagram is known as a

colour circle or colour wheel. Each of these colours around the circle is called a ‘hue’.

Primary, secondary and tertiary colours

If we are going to create these colours from mixing paints or pigments then some of the colours will be found to be more important than others. This is because whereas some of the colours in the spectrum can be made by mixing you cannot mix a pure red, yellow or blue. For this reason red, yellow and blue are called primary colours.

However it is possible to mix orange (from red and yellow), green (from yellow and blue) and violet (from blue and red). Orange, green and violet are therefore called secondary colours. You will notice that on the colour circle the secondary colours come between the primary colours that could be used to mix them. For example orange comes between red and orange and could be mixed from these colours.

Of course you could divide the colour circle into as many segments as you like, each one only slightly different from the next. For example, you could have a colour called ‘red-orange’ between red and orange. These ‘in-between’ colours are sometimes called ‘tertiary’ colours although the word can also have other meanings in terms of colour.

Complementary colours

The best way to make a colour really stand out is to put it next to another colour that is completely different from it. The differences between the two colours will then be very noticeable and each one will appear to be emphasised. Such pairs of colours are known as ‘complementary colours’

For colours to be different as possible from each other they need to have completely different ‘ingredient’ colours. For example the colour that is most different to green is red. Green can be said to be a mixture of blue and yellow but a true primary red has no blue or yellow in it.

One advantage of arranging colours in a circular diagram is to show what the complementary of each colour is. On the colour circle complementary colours are arranged opposite to each other. For example red is on the opposite side of the circle to gr

The contrast between complementary colours can be seen in nature, where many berries and fruits are red so that they stand out against the green of the foliage, attracting birds to eat and spread the seeds.

Differences in lightness and darkness between hues

If you look at the ‘hues’ on the colour circle it is obvious that some (e.g. violet) are dark in themselves, whilst others (e.g. yellow) are light in themselves. The colour circle can be seen as being divided into a darker half (centred on the violet) and a lighter half (centred on the yellow). Putting together areas of violet and yellow will therefore result in a contrast of dark and light colours as well as a contrast of complementary colours.

Dark colours tend to be stronger than light ones. You need to be careful therefore when a adding a dark colour to a light one. For example when adding red to yellow to make orange a very small amount will very quickly stain or darken the yellow. Add the darker colour gradually until you have the mix you want.

Warm and cool colours

Another way of looking at ‘hues’ is to see them as ‘warm’ or ‘cool’ colours. The colour circle can be seen as being divided into a

warm half (centred on the orange) and a cool half (centred on the blue). If a warm and a cool colour are placed next to each other the difference between them in terms of warmth or coolness will be more apparent. Putting together areas of orange and blue will therefore result in a contrast of warm against cool as well as a contrast of complementary colours.

The choice of the dominant colours in a composition will have a major effect on the way that the work looks when finished. A painting consisting predominantly of blues will have a cool, reflective or melancholic feel. On the other hand a picture consisting mainly of red, orange or yellow will tend to produce a hot, busy, or happy feel.

Colour in composition

By placing complementary colours adjacent to one another in your picture, you may be able to create a more pleasing composition because the colours will enhance each other. Creating complementary colour contrast can also help to make different elements in the picture stand out from each other in a way that is similar to exploiting contrasts of tone.

When creating a composition using complementary colours remember that these may include light and dark shades of those colours as well as saturated or dull versions of them. For example a dark blue-grey may work well against a pale orange tint.

Classes of colour (in summary)

1. Primary colours
2. Secondary colours
3. Tertiary colours
4. Neutral colours
5. Complementary colours
6. Intermediate colours

Other aspects of colour include:

1. Colour wheel
2. Cool colours
3. Warm colours
4. Monochrome
5. Polychrome
6. Tint
7. Hue
8. Intensity
9. Value
10. Impasto, etc