

Colour Analysis

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Introduction

Colour has always been a topic of great fascination to mankind, examples can be found in Neolithic cave painting, Egyptian temples and illuminated manuscripts as well as in modern times.

Most people concern themselves with the practical aspects of colour such as choosing paint for decorating, buying clothes, or even what plants to grow in the garden.

Philosophers have realised that there are other attributes that can be attached to colour and in their researches have attempted to find out the cryptic meaning and symbolism of colours and how colour creates such emotional responses from people.

Colour is a vast subject, so in this short paper I will limit myself to describing a technique called Colour Analysis which draws on both the practical and emotional aspects of colour, explain how it works and what uses it may be put to.

Colour analysis

Colour analysis is a technique that enables people to project a favourable image of themselves, by selecting the colours to wear that best compliment the natural colouring of their skin, hair and eyes. Not surprisingly this is a subject that is of greatest interest to women and would at first view appear to be an exercise in vanity, but I hope to demonstrate in this paper that this is a much more serious topic than it at first appears and will also hopefully be of interest to you all.

Basic colour physics.

From our school physics lessons we know that when white light is directed through a prism, the light is split up into the colours of the spectrum. When measured using a spectrophotometer we find that the colours, visible to the naked eye, have wavelengths that fall between 380 to 740 nanometres. To a physicist a colour is a constant defined by the wavelengths of light that produce it.

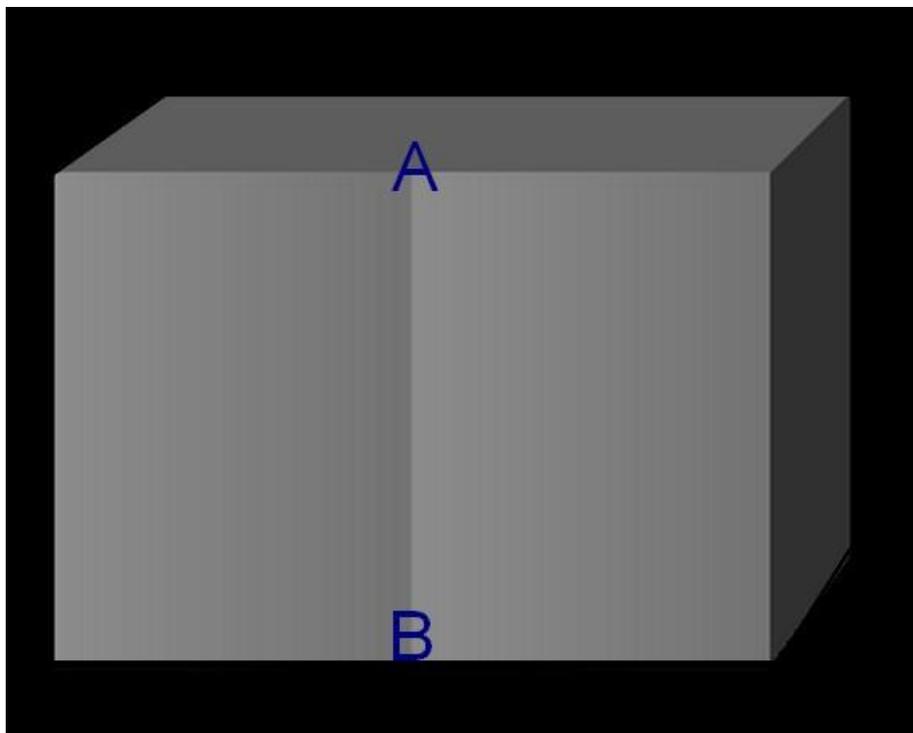
By this definition it would seem logical that how someone looks would also be unchanging regardless of what that person is wears.

Basic colour perception.

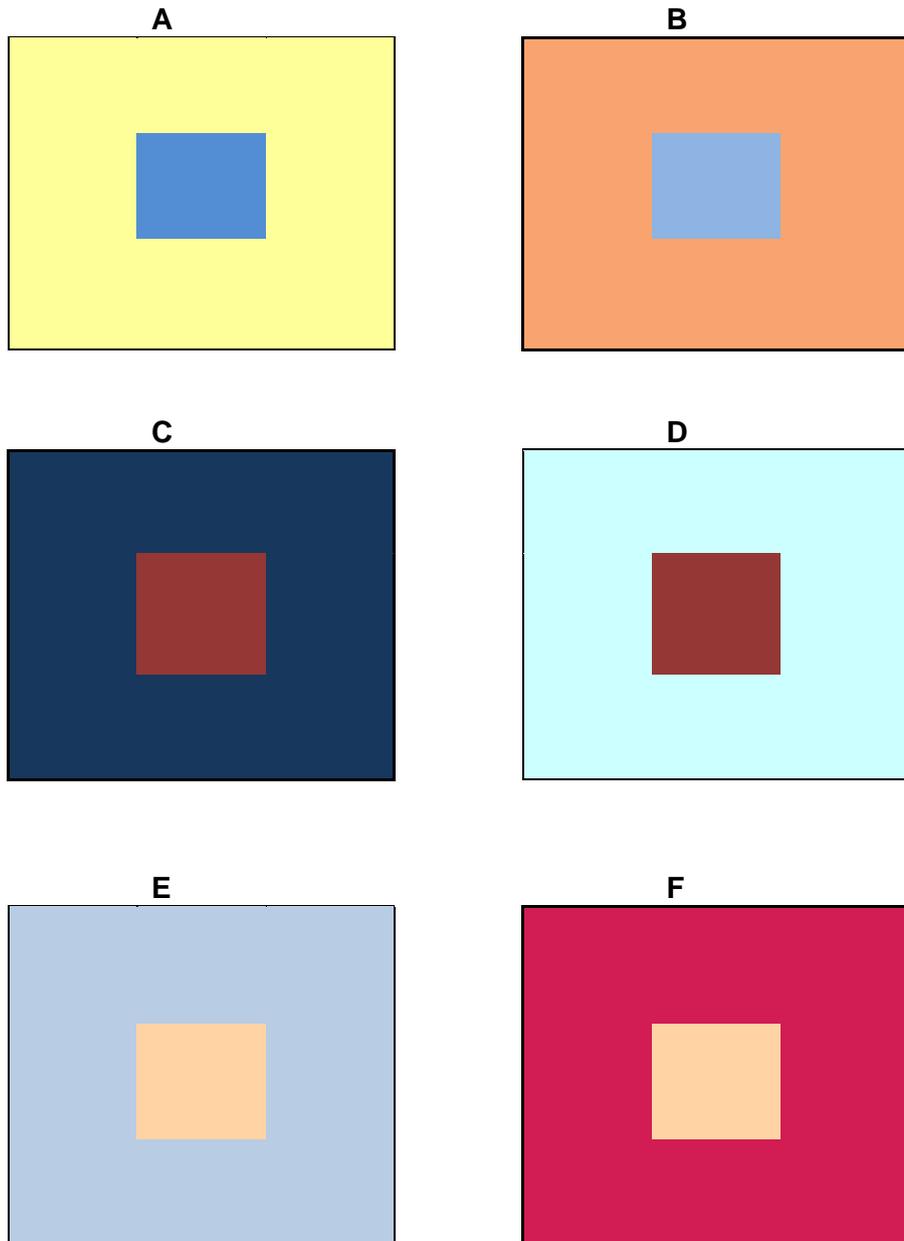
The human eye is a wonder of evolution but it does have certain physical limitations. It gathers more information than the brain can process. In order to cope with this flood of information it is forced to take short cuts by making assumptions based on past experience. This is why optical illusions work. The eye is also more sensitive to some colours than others e.g. humans can see far more shades of yellow than shades of blue.

Artists, designers and people working in colour have discovered to both their advantage and disadvantage that due to the way the brain interprets what the eye sees, a colour can appear to change depending on how and where it is viewed.

Michel Eugene Chevreul (1786-1889) was the director of a distinguished French manufacturer of tapestries and carpet. He was asked to produce a carpet that contained a shade of yellow that matched the yellow curtains that were to be hung in the same room. When the carpet was installed the yellow of the curtains appeared not to match that in the carpet, but when the fabrics were placed side by side both yellows were indeed identical. The other colours in the design of the carpet, adjacent to the yellow had tricked the eye into perceiving it as a different shade.



In the illusion above, both sides of the shape are the same shade which can be shown by placing a pencil or piece of paper along line A - B



Artists use this effect to make light or dull colours look darker or brighter.

At one time the only way to obtain a long lasting blue pigment was to grind down aquamarine, a semi-precious stone. Artists tried to use as little aquamarine as possible because of the expense but knew that a very pale blue sky could be made to look darker by framing it with yellow tinted clouds.

In the coloured illustrations, the blue in the centre of “Square A” being surrounded by yellow, it’s opposite colour, looks darker and bluer than the blue in “Square B” which is surrounded by a different colour, even though both blues are in fact identical.

The pairs of Blues, Browns and Pinks, in the coloured illustrations are identical but because these matching pairs are surrounded by contrasting shades, just like

Chevreul's carpet, they do not appear to match. Chevreul studied this phenomenon for many years and published his findings in a book entitled "Of the law of simultaneous contrasts of colour."

This work had a profound effect on artists of the day, especially the impressionists but most notably Georges-Pierre Seurat and the artists of the pointillist movement.

The effect of a colour being perceived to change due to the presence of another colour adjacent to it forms the basis of "Colour Analysis".

The theory of colour analysis

As stated in the first paragraph of this paper, colour analysis is about enhancing a persons appearance by analysing there natural colouring and then identifying the range of colours that suit them the most.

The first studies of colour analysis for enhancing peoples looks were in America during the 1920/30s at a time when Hollywood and the film industry was starting to grow. It was very important for the film studios to make their "stars" look as glamorous as possible and created the public interest that would lure paying customers into cinemas. Some studios controlled almost every aspect of their performer's lives, ensuring they were always immaculately dressed in public and always shown in exotic locations. Naturally the public wanted to copy how film stars looked. Some people instinctively knew how to choose what was right for them, but for the vast majority trying to look like their favourite film star it was a bit more hit and miss.

By the 1970s sufficient work has been done to show why some people looked good in one set of colours but not another. It was found that people in general could be placed into one of four colour groupings. Using nature as a model these colour groups appeared to approximate to the colours of the seasons and were referred to as spring, summer, autumn and winter colour groups.

Close examination of skin shows that it has undertones of either yellow or blue, based on the amount of haemoglobin, melanin and carotene present.

Using a bit of artistic licence, people with blue undertones to their skin and light hair are described as "Summer" people and those with the same skin colour but dark hair "Winter" people.

Those with yellow undertones to their skin and light hair are described as "Spring" people while those with the same skin colour but dark hair "Autumn" people.

Winter and Summer people with blue undertones to their skin look better if the colours they wear also have blue undertones such as royal blue or purple.

Winter people have dark hair that contrasts sharply with their skin colour and they therefore look better in contrasting shades, whereas Summer people have hair and

eyes that have a softer colour and should wear colours that are softer and less intense. (This is demonstrated in the two sets of swatches I have brought with me).

Spring and Autumn people should wear yellow based colours. Autumn people should wear soft golds and russet colours, while spring people should wear the same but more intense versions of those colours.

How do you determine your colour group?

People who wish to have their colours analysed usually have a colour consultant do it for them and there are many companies that offer this service.

The consultant has a large number of coloured strips that are held against the skin of the face, the hair and the eyes. When the best match has been found for each, the colour numbers are phoned in to the company's headquarters, fed into a computer and the results phoned back to the consultant. The consultants make their money by selling the sets of coloured swatches that the customers need to use when buying clothes, or in the case of women, selling them make up that is based on their colours.

Does it work?

Yes.

The colour illustrations E and F have in their centres two identical shades of flesh pink. The colour surrounding E makes the skin tone look healthy and vibrant. The colour surrounding F makes the skin tone look pallid and dull. The same also applies to the two brown squares. C looks more vibrant and healthy than D.

People wearing their correct colours look younger, healthier, more vibrant and energetic.

This is what colour analysis sets out to achieve; but there is also another aspect of why carefully selecting which colours you wear may be important.

The emotional effect of colour.

Very few mammals have well defined colour vision as a result of being descended from proto-mammals that were mostly nocturnal and therefore had little need to see in colour. The primates (the group we belong to) re-evolved colour vision in order to be able to differentiate between ripe and unripe fruit, which was their staple diet. It is therefore not surprising then that the colours that stimulate us the most are the bright fruit or food colours. We also emotionally attach warmth to red, orange and yellow; coolness to blues and greys while green appears to be neutral.

Humans are social animals and like all social animals live in a hierarchical society. The factors that determine a person's position in the hierarchy are usually governed by how much influence they have in society based on their wealth, health and attractiveness. Colour analysis can make you appear to be from a higher stratum of society than perhaps you really are.

As well as trying to look your best, by carefully selecting which colours to wear you can also project different images of yourself to fit with different social situations. In general, if you wish to appear younger wear lighter, brighter colours. To appear more mature and authoritative wear darker colours that are more subdued and neutral.

In business, men often need to project a variety of images. Winter people, such as myself, are recommended to dress in a variety of ways to project the following traits:

Refined/sophisticated; Navy suit, white shirt, burgundy tie.

Competitive/gregarious; Charcoal suit, pale yellow shirt, bright red tie.

Authoritative/successful; Pinstripe or solid navy suit, pale blue shirt, bright or deep red tie.

Friendly/approachable; Medium grey suit, pale blue shirt, purple/blue tie.

There are also recommended combinations to make one appear more trustworthy, creative or intelligent.

Needless to say people who work in film and television are very careful to project a good visual image of themselves as they rely on their looks for work. If you go for a job interview, it is often quoted that a candidate has 12 seconds to make an impact or not get the job, so the more positive signals you can project from your appearance may be a key factor in your success.

What may be less known and possibly something they would not care to reveal, is that politicians have used colour analysis for years to improve their public image. The next time you see a politician making a statement on television, try comparing the verbal sound bite with the subliminal message he is trying to convey by how he is dressed, possibly using the clothing recommendations illustrated above. You will find remarkable similarities.

Conclusions

Since the dawn of history people have used colour to send out signals about themselves. Men from primitive societies painted their bodies to make themselves look stronger, more masculine or more fearsome to their enemies; women, to look healthy, fertile and more desirable.

People today are not very different to their early ancestors and also like to project positive images of themselves through dress and colour.

Colour analysis to the majority of people who use it, is a useful tool to make one look good, feel more confident and project a positive image of one's self to the world.

However when used by image makers and politicians it becomes a powerful but subtle tool of manipulation to sell products or gain votes.

In our society, when we use colour and it's symbolism in our ceremonies, it is easy to underestimate just how significant the effect of colour is on many aspects of our lives.

I hope this short paper has given you a glimpse of one of those aspects.