

The Importance of Colour in Human Life

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ABSTRACT

Colour is much more than electromagnetic wavelengths and also much more than simply decoration. This interesting medium which you can look at from many, very different view points as physiology, psychology, medicine, physics, colour metrics, chemistry, colour theory, colour and environment, colour design and colour planning, fashion, food, or art and personal experiences and last not least colour education. All these themes definitely influence us – human beings – both consciously and unconsciously. There it is our duty to dedicate the maximum of our attention to these subjects and their effects on human life.

Key words: Colour and human response, Colour environment fashion and food

INTRODUCTION

Looking back to the very beginning of the universe, when “The Creator” did his first act, he separated darkness from light! Appearing this event in religion in the first place, it indicates its definite importance to life! .And - without light, there is no life and no colour. All living creatures on this planet, from plants and animals to humans, react to light and therefore in consequence also to colour. Our bodies tell us if we feel well and relaxed in certain surroundings or if we have problems, for example, in concentrating or in orientating ourselves or if we suffer from headaches or nervousness. Many people think their reasons for feeling unwell might be the air conditioning, stress at work or due to personal problems, but often it is because being in an unbalanced environment with too strong or too weak colour contrasts.

COLOUR AND NATURE

When examining carefully the intensity in the saturation of colours that surround us, we have to learn, that Nature presents us in the main with less saturated tones, and shows us highly saturated colours only on small surfaces such as flowers, or for short periods of time such as in rainbows, at sunrise or sunset and with the strong colours of autumn. As a consequence we have to accept that the human body is not created to absorb stimuli with high chroma for long periods of time.

COLOUR AND HUMAN RESPONSE

This is a young branch of colour science. Its researches into the physical and psychological reactions of colour stimuli offer some very interesting answers, e.g.: How does colour touch us through eye and skin; Why do we feel the effect of a colour impression? Why does the body show us whether we feel relaxed or stressed in a space? Prof. Fritz Hollwich of the University of Muenster in Germany, was nominated 1956 for the Nobel Prize for Medicine having discovered the energetic part of the visual path. He found out that we humans have got two paths in our visual capacity: 25% is used for the optical part of our vision, but 75% for the energetic path, which goes to the pituitary or hypophysis gland. This little gland reacts to colour stimuli with the production of hormones. This effect shows clearly that colour is much more than decoration and we should definitely respect this reaction in our body! When I began my activity as a colour designer, I came across some research

which was published in the German magazine “FARBE /Colour” and which impressed me deeply: a group of blind, deaf and both-blind and deaf children were examined for their reactions and behaviour to colour. They were exposed in a room to highly saturated colours such as Indian yellow, orange, ivory white and black. To get clear results, independent from personal interpretation, the children were watched by video cameras and examined both before and after the experiment by medical doctors. All the children became noisy, nervous, and were not able to concentrate on their exercises. Also their blood pressure got higher. It is interesting to note that this reaction happened also to the blind and deaf children, who definitely could neither hear nor see. But the children calmed down when they were brought to a room, painted in two tones of blue and in two tones of grey brown. The discovery of neurotransmitters in the human skin was the key to understanding the notable response to the strong colour stimuli on the children in the first place and the changed response to the diminished saturation of colour in the second part of the study

COLOUR AND ENVIRONMENT

Less saturation of colour also means less contrast between colours. In modern architecture we have at least two main colour problems; overstimulation or understimulation experienced as monotony. Each extreme gives stress to the body because monotony can be dangerous. Attention is rarely paid to this negative influence.

I would like to present briefly the result of a study, carried out at the Technical University of Stuttgart, in Germany. Students of the University were asked to examine the reaction of their bodies to low stimulation. They were made to sit in a completely dark space, in a comfortable temperature but with no noise or smells. They were carefully watched by a medical team and infrared cameras. How long do you think the experiment lasted? After only 8 minutes the experiment had to be stopped, because the students were ready to collapse ! Proving that too little or no stimuli can definitely harm us. And how is our “normal architectural environment“ presented to us ? In colours of white, beige, grey, grey again and black. Isn't that pure monotony? And therefore potentially harmful.

Colour is never a question of trend or personal taste. It is an absolutely necessity for a balanced surrounding. From kindergartens, schools, homes for retired people, offices, and hospitals, to colour in towns and public spaces; colour plays an important role for orientation, safety, optical order, identity, help for concentration or relaxation and to diminish stress. Finally I would like to show you two airports – a black one and a white one: The 1st one has black floors, black marble wainscots up to a height of 1.5 meters and black seats and benches in the area of the boarding gates. Interestingly, during winter or in the artificial light you do not see either the chairs or the benches and of course not at all when seen against the light. The 2nd airport is an absolute contrast. It is white where ever you look, and the very shiny surface of the floor and the extensive use of glass with its effect of high reflection disorients the eyes of the passengers instead of helping them find their way.

COLOUR AND FOOD

When I prepared a lecture on Colour and Food for an event in Korea last year, I was surprised by the enormous effect which colour has on us in this section of our life! It is not important to offer expensive food in a buffet you can stimulate the appetite of your guests by using colour and special colour combinations; e.g. for the table cloth, the plates (both form and colour), the table napkins and the colour contrasts of the food itself. Also by using the right or wrong light too you can immediately influence the result! Let me illustrate this topic with a few examples: If you have a white tablecloth, a common white plate with white rice on it, you will not have much problem in eating very little, if you are on a diet. You will not take much interest in this kind of food. But if we change the colour and perhaps also the form of the plate adding some Curcuma spices to the rice, the effect will be completely different. And if you try to arrange the food in a creative way it will be a pleasure not only to look at, but also to eat with joy.

COLOUR AND FASHION

Which are the colours that are connected to our emotions? As Kandinskij said in 1909 the colour that you wear the most can tell you who you are. When your preferred colour envelops your skin, you feel strong, confident and completely at ease. This is part of the beauty of fashion. The key is to feel well in the second skin we choose for ourselves. Here follows a description of colour psychology that keeps into account the research by Max Luscher, one of the first to initiate the use of colour tests to evaluate people's emotions and feelings in front of different colours and how colours impact on us.

Wearing colours, what meanings do the colours have? Why do they have meanings and why does this affect us? **Red:** symbolically stands for blood, physical and mental energy. If you choose to wear red it is because you wish to express dynamism and energy. You tend to be an energetic person who fully appreciates life and is goal driven. People who wear red enjoy the spotlight. **Yellow:** the symbol of light, of knowledge and of energy both intellectually and nervous. If you choose to wear yellow it is because you wish to express joy and vivacity. You are an outgoing person who likes to shine, especially within social contexts. The colour yellow is linked to the sense of identity and extroversion and is chosen by individuals with strong personalities. **Green:** You wish to express a desire for renewal. It expresses stability, strength, tenacity, constancy, with perseverance, psychological balance, self esteem, You are a balanced and self-controlled person with strong values. The wearer of green looks for balance and introspection. Wearing green helps a very active mind to relax, it eases moments of anxiety and tension prior to a test. **Blue:** you wish to express calm and serenity. You are a person with strong intuition and depth of thought. The wearer of blue is calm, satisfied, with inner peace, harmony, solitude, wisdom, loyalty, confidence, and tidiness. It is elegant and refined expressing emotional calm and self-control. **Brown:** is a solid colour, bodily, material, it symbolizes ones physical being. This colour helps people to be practical and not to lose focus. When worn, it can represent a desire to not put oneself in the spotlight but can also be perceived as dreary. **Black:** is a non colour, denial, opposition behind which there could be a desire to claim a power. It expresses austerity, power and mystery. Within social and cultural contexts the wearer of black is often perceived as important and powerful, priests, nuns and judges are an example of this perception. Black is one of the most frequently worn colour by all during day, evening and night. The secret to the colour black's appeal is that it is discreet, deep, fashionable, elegant and minimalist. Black stands alongside many different emotional states, in many circumstances and thru ought all seasons. Elegant, mysterious and refined, black is the preferred colour for occasions. Mysterious and inaccessible as is the depth of our subconscious. Black also shields the wearer who wishes not to be noticed. **Grey:** is a neutral colour chosen by those who wish to distance themselves from emotions and life and prefer to not get involved. The individuals who choose to wear grey place a barrier/ shield between themselves and the rest of the world. **White:** you wish to communicate positivity, you are a person who is open to novelties. The colour white encompasses all the colours of the spectrum. It marks the line between phases of life. It revitalizes the organism, it is fresh, bright, brings energy. The wearer of white expresses distinction, security and pride.

The University of Padova has proven through studies that positive emotions are always connected to light colours, particularly yellow and orange, whilst negative emotions are connected to dark colours such as grey, brown and black. The degree of saturation in a colour also is to be taken into account, the richer the colour, the most positive the emotion. In essence there is no such thing as a forbidden colour for a woman to wear. Nothing must be left to chance, the technique of colour analysis is a tool for this. According to the psychologist and psychotherapist Gaia Vincenzi who helps pair the right tones of colours that harmonize with a persons features (skin, eyes, hair, eyebrows)

The colours we choose every day express a part of our being. "an image is worth more than a thousand words"? An image of a person a lot more than words especially through colours. Colour has an impact on people's moods, their perceptions and their choices. It is part of the way we are

programed, it is a mechanism within us that we are unable to control. Our primordial brain is the part of us that is set to help us survive. It is what makes us react instinctively. Human beings have developed and evolved through millions of years and colour has always represented a strong part of our perceptions. Within our emotional sphere colours have a very strong significance to us and they have a big role in expressing who we are within. The colours we wear on a daily basis say a lot about ourselves to others. If a woman wears a red dress she transpires irritation and strength and energy. In film the wearer of a red dress tends to be evil and unpleasant. A blue dress recalls solitude, wisdom, loyalty, trust, security and tidiness so is perceived in the exact opposite way to the red wearer. Fashion consultants often recommend wearing blue to job interviews as this colour recalls loyalty. As previously stated, blue has a calming effect and stimulate the brain is letting off calming hormones.

It is interesting to see, through newspapers and the internet how presidents wear different coloured ties according to the situation they are confronting themselves with. Why does a president choose the colour to be worn according to the nature of the function? Because the people who consult his image know very well what power colour has on people's perception. For example, if the function is a tribute, high chances are he will be wearing a blue tie, so as to underline the perception of strength and leadership. Blue represents loyalty dependability. (Figure 1). When there is a meeting with the European Union in which case he wishes to push the power of his country above the others he will choose a red tie that will express power and aggressiveness (Figure 2). In a situation where the president is looking for a compromise he will wear light brown to convey a sense of distance in a friendly manner as it is detached but neutral and does not have a negative or menacing outcome. Grey stands for timeless practicality and solidity, this is not only true for ties, but for jackets also (Figure 3).



Figure 1: Confidence



Figure 2: Power & conviction

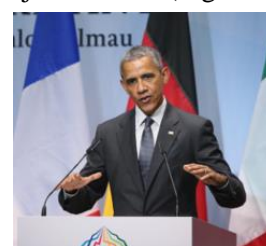


Figure 3: solidity

This is all important when emotionally weighing the perception of a person. Colour helps us transfer what we'd like to be, to introduce ourselves to others in a flattering, seductive manner, they help us to be accepted by others for who we are or wish to be in the moment.

COLOUR AND IACC EDUCATION

The International Association of Colour Consultants/ Designers, founded in 1958, is dedicated to focus its activity on education of the responsible careful use of colour especially in environmental design. A right and well balanced colour climate helps humans in their everyday working and private life, diminishing stress and supporting well-being. The research of the Munsell Foundation in 2014/2015 examined colour teaching institutions, and I am proud to inform you that the IACC was chosen as one of the four best in the world.

CONCLUSION

Colour is a medium of ultimate importance for our life. It has to be taken special care of all colour experts independently of any colour trend or personal taste. The responsible and conscious use of colour is a necessary service for all human beings to harmonise the visual influences and effects of the environment.

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