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COLOUR AND MAN- THROUGH THE EYES OF THE PSYCHO-ARTOLOGIST

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ABSTRACT: *This paper discusses the relationship between colour and man. It is assumed that the meaning of life is clear to all of us or that we all share certain assumptions about life in common. However, the same cannot be said of colour, even though we all have the capacity for perceiving colour. Therefore, an attempt is made to provide some insight into the meaning of colour, its various aspects and how we can use it to organize our lives in a meaningful way. The study adopted experimental approach to establish the relationship between man and colour. In addition, the critical and historical examination approach was employed to determine the effect of the experimental treatment. The study revealed that, if the colours in and around man is properly used, heals, restores, retains and maintains relationship*.

KEYWORDS: Colour, Man, Eyes, Psycho-Artologist

INTRODUCTION

When we talk about perceiving colours, it can be understood in two related senses, namely, the "literal and scientific" senses. Colour perception in the literal sense is what almost every human being is acquainted with. It is a natural gift, which is inmate in man. We do not need to be taught about it. It involves the ways through which man organizes his visual and sense of beauty to prevent himself from looking dirty, to avoid filthiness and make natural and social environment conducive and attractive thereby ensuring that he enjoys best in his life on earth.

In man's bid to live lovable, clean and attractive, he puts certain laws of thought into practice even in an unsystematic manner. It is for this reason that man is often said to rely on his native intelligence. For example, if one puts on red material or black material and encounters dangerous situations, he concludes that wearing red or black attract danger, he tries to avoid those colours of materials. It is obvious from the foregoing that, perception of colour is a natural attribute of man and everyone can perceive to an extent concerning certain colours for certain purposes. When people state their favourite colours it is not the result of mere fancy or caprice, but a deep subconscious instinct that motivates them. This notwithstanding, we also know from our daily experiences that our thoughts and perceptions fail from desired schema and fall into error due to lack of method or scheme. The proneness to error in thought and perception of colour raises the questions of whether theories can actually be laid down, which when adhered to; can help people in avoiding these errors. The possibility of establishing such theories and principles has led to perceiving colour in the scientific way.

Before we proceed to show the interrelationship between colour and man, it is necessary to note that colour differs from psychology; "the study of the mind about perception", but only an aspect of science of colour. Colour is life. Colour is light. Colour is energy.

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Historical Development and Various Aspects of Colour

Before the year 1200 artists used some basic earth colours; blacks, whites, yellows and browns. All were derived from bones, wood and the earth. Some other colours were obtained from pastes made from the powder of ground up minerals. They are bronze, red, blue, green and yellow.In the 1200's artists developed many more colours by combining mineral powders. Then, in 1800, artists drew upon cadmium, sulphur, charcoal, coal-tar and more. Artists in those days often mixed their own colours but today most artists rely on paint companies for read-made paints. During the 1800, artists worked out rules for making colours harmonious in a painting. In the 1900's artists started rejecting the theories. Today, artists feel free to use colour any way they want (Adams, 2001).

Subtractive Colour

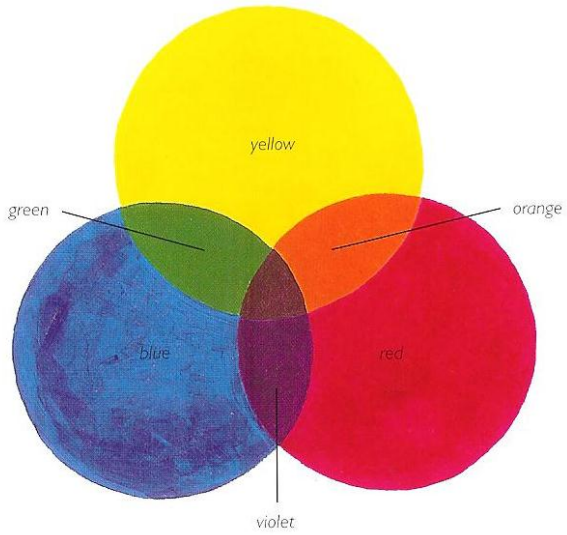

Fig. 1: Subtractive colour (Courtesy: Sidaway, 2002)

The various colours obtained were as a result of mixing of pigment of colours together. This is known as subtractive mixing or subtractive colour. This process of colour mixing is known to have started from the cave dwellers through to the modern period. Colour mixing process is scientific. That is, mixing different pigments of colour to have the desired result. There is yet another process of colour mixing which is termed the additive mixing or additive colour. This is the result observed by combining different coloured light waves. This is completely different from the results seen when different pigment colours are mixed together.

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Additive Colour

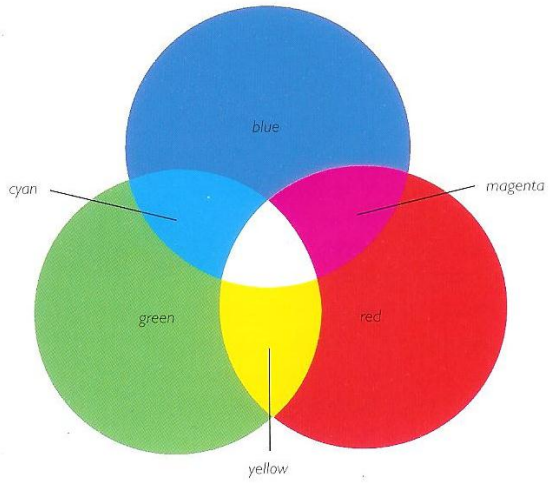
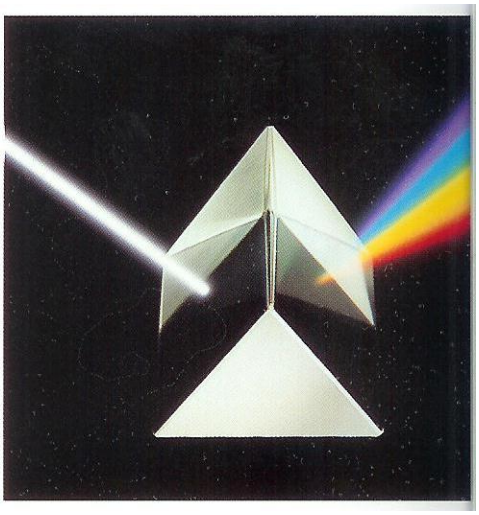


Fig. 2: Additive colour (Courtesy: Sidaway, 2002)

This colour scheme or study started when the English physicist Isaac Newton (1642 – 1727) in 1666, discovered that a ray of light, when passed through a glass prism, divided into the seven spectral hues of red, orange, yellow, green, blue, indigo, and violet. When passed back through another prism, these rays recombined to make white light. Light is a form of energy, or electromagnetic radiation able to be detected by the human eye. It has both wave and particle properties.



PRISM *White light when passed through a prism is divided into seven constituent colours (Courtesy: Sidaway, 2002)*

Its wavelength lies in the range from 4000 – 7000^0. These light waves are the visible constituents of light – known as the visible spectrum – and each has a different wavelength (Sidaway, 2002; Raju and Arora, 2006). According to Sidaway (2002) while everything is possessed of its own intrinsic colour, it is the existence of light that makes it possible for us to perceive that colour.

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"We see colour because, when light hits a surface; certain wavelengths are absorbed by the constituent material of that surface, while others are reflected. We see a blue surface because that surface reflects blue light waves and absorbs all the others. We see red surface because that surface reflects red light waves and absorbs all the others. We see black surface because it absorbs all light rays, and we see white surface because it reflects all the light rays. It is the different combinations of absorbed and reflected light waves that enable us to see different colours. This sensation of colour is transmitted through the eye to the brain. The inside layer at the back of the eye, the retina, is made up of nerve cells. These cells are sensitive to the varying light wavelengths. When we see a certain colour, these cells relay the colour wavelength information, via the optic nerve, to the brain where the information is assimilated and the colour is recognized" (Sidaway, 2002).

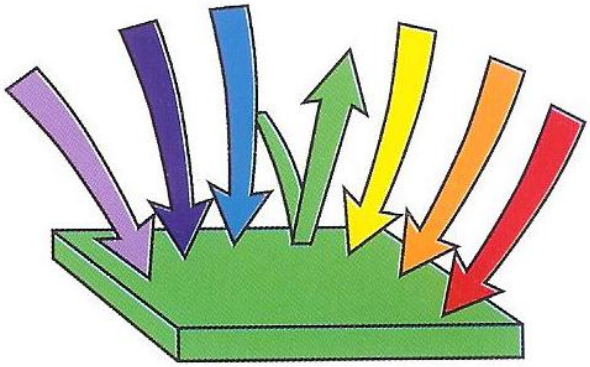

Fig. 3a: GREEN: green surface reflects the green wavelength light and absorbs all others

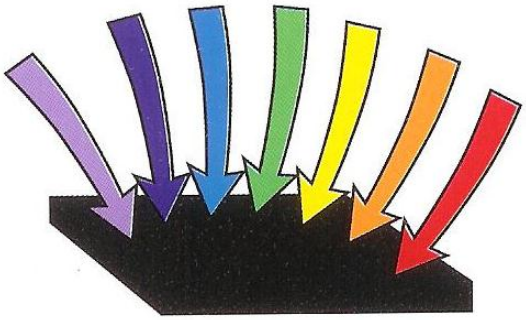

Fig. 3b: BLACK: A black surface absorbs all light waves

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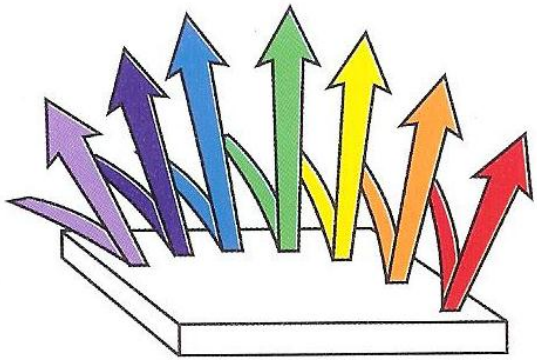

Fig. 3c: WHITE: A white surface reflects all light waves
(Courtesy: Sidaway, 2002)

Before Newton's theories on colour became known, Aristotle (C384-322 B.C) devised a theory which deduced that all colours could be made by adding black or white to yellow, red, purple, green or blue. This was agreed and sustained through the middle ages. During the Renaissance too, artists did not break away from the Aristotelian theory and ideas. Leonardo da Vinci's approach did not only describe an object's colour but also explain its source. He wrote;

"The blueness we see in the atmosphere is not intrinsic colour but caused by warn vapour evaporating in minute and insensible atoms on which the solar rays fall, rendering them luminous against the infinite darkness of the fiery sphere which lies beyond and includes its". He went further to arrange colours in order of importance: white, yellow, green, blue, red and black; and linked them to the elements; white with light, yellow with earth, green with water, blue with air, red with fire, and black with darkness (Sidaway, 2002).

Leonardo da Vinci and other artists of the Renaissance saw the close relationship between colours and the manifest elements of nature. According to Sidaway, before Newton's seminal experiments on light, Robert Boyle had written that red, yellow, and blue were the "simple" colours. But after several decades after Newton's theories were known, the German artist Jakob Christof le Blon in the 1720s wrote that "painting could represent all visible objects with three colours namely Yellow, Blue and Red; that all other colours can be obtained from these three colours.

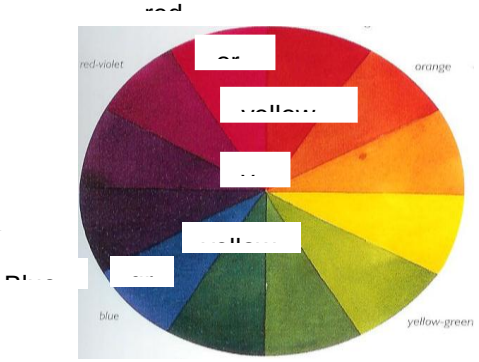

Fig. 4: Colour Wheel

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Colour Theory: Colour theory refers to colours in all the artists' media and they constitute the basic framework within which any analyses can take place. The colour wheel above shows primary, secondary, and tertiary colours of pigment. The primary colours are red, yellow, and blue. Secondary colours are made by mixing any two primary colours together, producing orange, green, and violet. A tertiary colour is produced by mixing a primary colour with the secondary colour nearest to it on the wheel. The tertiary colours here are red-orange, yellow-orange, blue-green, blue-violet, and red-violet.

It is said that, it was Le Blon who further recognised the difference between what he termed the "material" colours of the painter and the "impalpable" colours of light. These two different approaches; the subtractive and additive processes of colour mixing are the basic theories being used up till today. Colour is the greater energy by and through which everything came into existence including man. Surprise?

Who is Man?

Man is a complex being. He lives in the Spirit Realm, the intellectual and physical planes. Man is unconsciously controlled by this energy with rays of different wavelengths. Though, many believe that man's origin is from the dust as expressed in (Genesis 2:7). It is said from Bible history that "And the Lord God formed man from the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul". From this moment man ceased to exist in the world of gross matter. Man imbibed the super energy and assumed every quality of the creator. The vibrations of all the forces – "the elementals" of the creator are transmitted to man (the sculpture piece). The work (man) absorbs the personality of the creator (Mangiri, 2013). These forces – "elements" visible or invisible are different manifestations of the supreme personality which Leonardo da Vinci expressed in more finite and understandable context according to their wave-lengths as stated elsewhere in this paper.

How Does Man Perceive Colour?

Colour is seen, perceived and interpreted in various ways. Scientifically, it is proven that man sees colour because light waves are reflected from objects by the eyes. Science says, white light from the sun is really a combination of all colours. According to Ragans (1988) "light enters one's eyes and travels to a membrane of nerve tissue (the retina) at the back of one's eyes. These two types of cells react to the light. One type receives impression of light and dark. The other type receives colour.

Colours have the power to evoke specific emotional responses in the viewer - some personal, and some more universal. Personal experience or memories play a part in colour perception. Besides this, there are associative factors. Many have cultural, historical and religious associations. Many colours are associated with natural phenomena. These are sometimes based on either their warm or hot and coolness or coldness. These associations are not absolute; they change from culture to culture and as people grow older and are more awakened (more awareness and sensitive). Artists (painters) express their personal, cultural, historical and religious experiences to paint their figures and scenes. These are results of the mixing of pigments together for the desired purpose. This is important, but it is not the focus of this paper. The focus of this paper is the relevance of colour to man.

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Colour in Man

Man is made of the elemental energies. Colour is one of the elements – light. Colour is an integral part of our lives. Man came into existence by these energies (colours) through the word of mouth. These are deposited in a mould as it were by creative design and are principally guided by the super creator. When the process of procreation starts, the liquid gold (sperm) is poured into the mould – womb, thereby forming the image "MAN". During this formation process, the energies are distributed to different energy (colour) centres in the body of man. As man develops, the different constituent parts of the body absorbs the different wave-lengths into these centres, giving strength, and divine forces to his existence.

There are seven major light rays of life: Red, Orange, Yellow, Green, Blue, Indigo and Violet (Ouseley, 1981). The seven rays occupy the seven energy centres of the body – see figure 5.

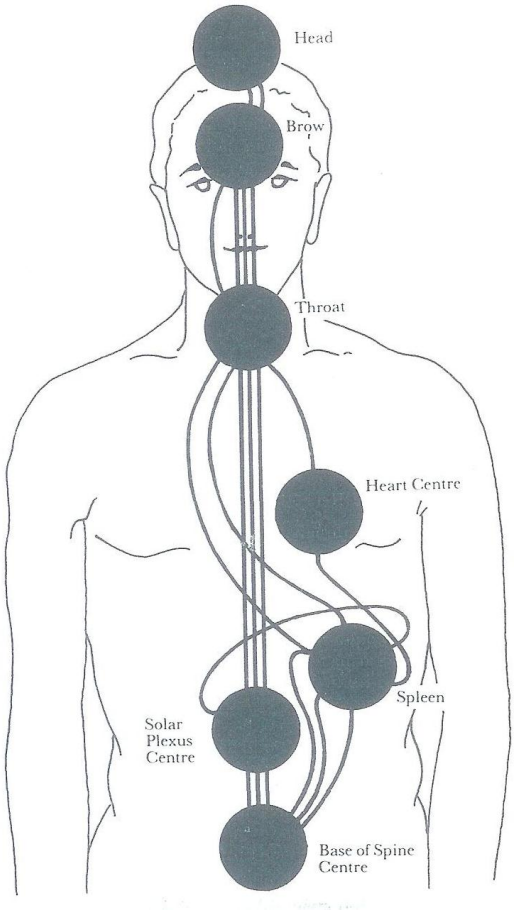

Fig. 5: Energy centres of the body.
Courtesy: The opening of the third eye by Dr. Douglas Baker, 1982

These energies are attracted to their corresponding energy points according to their wave-lengths. These influence man's behaviour and character according to his level of consciousness, i.e. depending on which energy (colour) is dominant in him or her. In corroboration, Anderson (1982) says colour expresses the way we think and then reacts back on us from our surroundings, either raising or lowering our spirits. This is the reason why, when people are asked of their favourite colours, they instinctively mention the colour that

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appeals to them. People perceive these energies according to their level of awareness. This happens unconsciously, but the fact remains that one is saturated by the colours (energies) that characterize ones formation.
Besides the distribution of the colour rays (energies), the assumed artistic primary colours Blue, Yellow, and Red correspond to the tripartite man – the spirit, soul (mind) and body of man. These colours are not different from the colours mentioned above but from these, one could describe, analyse and evaluate every creature of his level of awareness in the spiritual, intellectual, or material levels.

Functionalism of Colour Rays

The notion of functionalism in this paper is directly related to its perceived meaning. Here functionalism is taken on its existential base of the role of the transformational process of colour. Truly, the effect or the function of the organs of the body, respond copiously to the theory of connectionism which expresses certain degree of intense focus or by thought projection. The absorbing of colour is not limited to projections alone but through visual shapes, images, formal and informal symbols and elements which include the visible and the invisible. The first encounter of man and the art piece takes place within the senses. The sensory cells are connected to each energy centre which become activated. As these energy centres receive input, their activation level change. The flow of the colour rays into the body is through a natural rhythmic pattern which every creature benefits. Take for instance the animals both of the bush or forest and the domesticated; when they fall sick or injured, what they naturally do is to come out of their hiding to stay under the sun light. They do this for few occasions and they stand on their feet again. This happens because their bodies absorb the light energies which activate, invigorate the depleted members or organs. This happens to every creature unconsciously including man. The basics of the function of light – colour rays is its ability to express a historical, cultural, intellectual and spiritual antecedent which culminate in the respective functional values that evoke specific emotional responses and other areas it connotes.

Technology has brought to bear new ways of functional utility of colour that infuse into the appropriate energy centre with power and vitality. At this point, it is good to understand how colour affects the human body. Colour energy is taken to the body through:

i. Breath
ii. Food
iii. Coloured bulbs
iv. Artistic paintings
v. Coloured fabrics
vi. Domestic paintings

Although, colour is one of the primary sources of health care product, many people neglect its essential qualities. Research has shown that breathing and thinking colour many had regained health, youthfulness, marriage, and beauty (Clark and Martine, 1976).According to Ouseley (1981) “we are surrounded on all sides by the invisible radiations of the sun and the cosmic rays and that the air we breathe is permeated with the forces of light and colour”. This energy is extracted from the food we eat, from the water we drink and most of all from the air we breathe. Ouseley says: When we absorb large quantities of air we enjoy good health and vitality. The fresh air consists of much more than just oxygen and other chemical ingredients. It contains radiations from the sun, from the far-off stars and planets as well as from the earth.

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This therefore means that when an individual takes deep rhythmic breath with visualisation of the rays absorbing them into the body helps to build and develop him or her.
Polarised Foods: According to Ouseley (1981) one of the best ways of absorbing colour is the judicious use of vegetables, fruits and liquids that have been sun-charged. Fruits and vegetables are the direct result of the sun's radiation. Therefore, colour healers study the different groups of vegetables and fruits and classify them according to the rays to which they belong. He further says:

People need a constant replenishment of the particular rate of energy indicated by their ray. Thus people who are polarised to orange ray and who are thereby especially prone to suffer from nervous debility, kidney and spleen troubles, require plenty of orange ray, vegetables and fruits, such as carrots, Swedes, oranges, peaches. The juices and liquid extracts from these foods – groups are also highly valuable.

The science of colour rest on the laws of light as manifested in the seven major rays, and every individual has his particular colour according to his quality of thought, character and development. The acceptance and utilisation of colour has become very significant to man. Right now through technology the rays of coloured bulbs are used to flood the affected area of patients with great remarkable successes. We cannot but recognise the influence of colour on mental patients. Many successes abound recorded by art therapists particularly colour therapists who use art media and the creative process to explore the patients inner feelings, reconcile emotional conflicts, reduce anxiety and other psychiatric problems. Interior designers pay close attention to the relationship, when they consider the colour schemes for a waiting and consulting rooms in the hospitals, residential sitting and bedrooms, decorative patterns in hotels and offices. This is because, the different colour variations and the wave lengths account for our reactions to them.

What one wears affects and influences ones behaviour and character. Experiment carried out proves that the colour of the dress one wears changes the life-style and attracts people to oneself. A lady came for counselling; that no man approaches her for marriage. I asked the lady what colour of dresses she wears; it was discovered that the lady wears dull and cool colour dresses. I told the lady to change her wardrobe to bright colours. The lady did and within a short period, suitors trooped in; and eventually married the man of her dream. The colours brightened her looks, changed her mood and became more cheerful and loving.

Martine (1976) narrated her experience:
She said, she was crossing the street; she slipped, fell and broke her leg. When she reached the hospital in great pain, x-rays showed the broken leg was cracked in several places, and both ankles were sprained. The doctor put her leg in a cast and Martine insisted on returning home to care for her children. He warned her that, due to her age, she would be in the case from six weeks to two months, probably longer. As described it, "I began to breathe orange colour to eliminate pain and it worked. I did not need to take the pain killers and tranquilizers the doctor had given me". According to her, on her next visit to the hospital the doctor said, you really must live right. You are almost ready to come out of the cast. I cannot believe it but there it is.

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Colour is a force of immeasurable and infinite power. It has the power to attract to itself of its kind. Each major colour has seven intrinsic elements which applied appropriately gives the desired result. These elements are:

1. A physical or material element
2. A vital – giving power (life force)
3. A psychological element
4. An harmonising, unifying element
5. A specific healing element
6. An element of inspiration and intuition
7. A spiritual or higher – consciousness element

These elements have corresponding relatedness with the seven major rays known in an ordinary sense which are:

i. Red
ii. Orange
iii. Yellow
iv. Green
v. Blue
vi. Indigo
vii. Violet

CONCLUSION

This paper traces the historical development of colour by artists and scientists, how colour is perceived by man and how man is made up of colour energy – the white light. The development of man and his creative use of colour as part of his life has ever provided a more symbiotic and functional need. Colour is a cosmic power and therefore a vital force. It works through and in us, in every nerve, cells and muscles. It radiates upon us from the atmosphere. Colour is an active power, which exerts tremendous influence on the consciousness, the spirit and the soul. The health of mind and body is based upon the body obtaining a balanced flow of colour energy according to their requirements. The influence of colour energy is observable in our lives – the behaviour and character through and from the air, water, foods, artworks, vegetables and fruits, designer wears and the structured environment. This enables the body to rebuild, restore and revitalize every organ in order to maintain its health and freedom from disease. The paper also indentifies that the sun radiates white light – waves capable of being resolved into seven main constituent parts of different wave-lengths.

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