# Using Abstract Color Paintings Expressing Feelings to Design Textile Prints Showing Emotional Human Factors of Design and Considering Differences of Color Perception between Humans 

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#### Abstract

This research is a Practice led research. It is made of two parts. First some experimental art paintings were made by the artist, based on abstract style, and using colors expressing various emotional feelings. These art paintings are made with power of human feelings and with the spiritual concentration to express these feelings especially into colors. These art paintings are made with the intention to express and also to transfer the spiritual mood of the concept in each case, to the viewers of art and the users of the final product. Next, these art paintings are being used to design textile prints that will keep, and even exaggerate these human emotional factors, that would provide emotional semantics to the users of the product. The designer of the textile prints will consider the slight differences between the colors on the canvas of the paintings, and the colors on the computer screens, and also the final colors on the output fabric material. The designer and the artist will also consider in the computer stage of design the differences of perception of colors between humans in order to avoid any wrong interpret of color that might lead to expressing a different mood, semantic massage, to the user. This experiment will include a final comparison between the colors in the art paintings and the colors on the final textile print products to measure how accurate the stages of production.


KeYwords: Colors perception, Abstract Color Paintings, Emotional Human, Repetition styles, Textile Prints.

## 1 <br> Introduction

Art painting is a unique experience, design work needs mental awareness of the concept of art. In this practice led experiment, some explanation of the concept of the work has been provided to the printing designer, to help understanding and keep representing the same concepts and feelings resulting, while working from these art works into designs.

## 2 Method

### 2.1 Abstract Color Paintings

Abstract art uses a visual language of form, color and line to create a composition which may exist with a degree of independence from visual references in the world [1].

The art paintings and the concept provided to the designer before starting to design [2];



Confusion of Heart


Night Sparkles


Rush

Fig. 1. Original paintings
(Figure 1) Activity; this painting represents the power of starting to move, activity of letting go, and opening up to freedom, all starting from a point in the center, that is the center of well and determination to achieve goals. The power of the centre is dark because all the power is concentrated in. At the explosion of power shows more vivid color like the cadmium yellow used and other light colors, like the pistachio, and other. Some brown lines show the direction of explosion, it is dark and concentrated as going out from the center. The small brush strokes like writing is achievements in reality after this activity rush, its in reds, that is the thing attractive to the eye, not the hard working of activity, being represented as a back ground.

Passion; This painting expresses feelings of love flowing rapidly from the heart that is hidden now by the feelings flowing every where and in all directions, dancing around the heart. All are representing the experiment in the light blue space of life in the background.

Confusion of heart; Confusion and emotional hesitation scattered the poor heart that became now like an empty cage with few week blood arteries and veins, not protecting any thing, but there is some light in the core, maybe from the soul, from faith, giving optimism to this situation.

Night Sparkles; This painting is a scene for a small place with the lights in the night glowing through the darkness, the leaves of the surrounding trees are moved $b$ the soft are, making the yellow lights even sparkle more in the darkness.

Rush; Rush is represented here in dark, un-straight sharp brush strakes, showing tension and hesitation at the same time. Separating strong opposite colors like red, green, cadmium yellow, white, and brown, ordered in a way that the strong struggle is between the red and green areas. The white space is in the centre of rush lines and spaces, expressing the final moment of release and settlement after all.

### 2.2 Different Styles of Repetition

The definition of repetition is a re-doing the thing time after time; we considered a kind of rhythm, which represents a repetition to a certain idea in certain way combining between change and unity [3]. The first degree of rhythm is repetition, which is the entrance of the artist to achieve the rhythm in design. The repetition may include the diversity so that the pattern of repetition is not automatic and boring, and the work of art does not lose its appeal and dynamics [4].

The repetition has multi manifestation start from simple to more complex, and from part to all, the parts are arranged in the colleges according to the multiple iterations.

The artist of textile printing used different Styles of Repetition such as Identical Repetition where shape, colour, size, texture and direction are repeated in a horizontal direction. This type of repetition is more unified in style.

Alternative Repetition has been more widely used. This type of repetition allows the artist to change for breaking the monotonous of repetitive elements which have one shape and one systems. In the sense that the form may be one alternated in the position and sometimes in direction.

The Progressive Repetition appears that the element increase or decrease one of its characterize regularly in one direction or centrally [3] such as progress from light colour to dark or range value of surface texture from fine to coarse The advantages of this kind that contain the change as alternative repetition, but more movement and given the impression of depth

The Status of Repetition which used by textile printing designer in design are also varied It is intended to trend repetitive element growth by analyzing the relationship part of the whole, One of these status is Refracted Repetition The motifs and colours which following the line in the direction of the refracted specific angles and may be different angles. In addition, Repetition in a vertical direction, Repetition in a diagonal direction the adjacent units iterates in the direction of the slant angle.

Repetition in the horizontal and vertical directions (Quarter) also used. Circle Repetition appeared in two different ways the first circle repeats in center, And the second Repetition in a circle direction by rotating around the square in the center of the design to make attention to it.

### 2.3 Design Styles

Designs and styles of repeatation in design making, in (Figure 2).


Fig. 2. Designs from the original paintings
Activity; 1: Alternative Repetition (alternating) in position and direction is vertical. 2: Diagonal repetition that suggests to fall and fall, meaning certain movement doing an activity, alternating repetition comes between two bands: the first is the center of well and determination to achieve the goal with dark color because it holds all the power stored inside in a small space so it is loaded with a lot at the starting and rush towards the goal and the launch of this determination shows the lightest dynamic colors such as light green, light yellow. The second is zigzag lines in red color, reddish-brown represent the achievements that are realized and filled with detail (the zigzag lines that resemble writing).

Passion; 1: Progressive repetition from the center where increasing brush strokes away from the center of the board in side horizontal and vertical flows so the overlap increases the red and grades. 2: Cyclic distribution in the middle (center) of the red color, and in the parties Brush strokes distributed in multiple directions at the form of arcs it means gradient from the dark red in the center to the lightest in outward direction.

Confusion of Heart; 1: Repeated in more than one direction. Horizontal: repeated alternating in space. Vertical: repeat alternating in the direction. 2: Repeated zigzag lines and colored spaces which Included in a vertical direction.

Sparkles of night; 1: Identical Horizontal repetition in shapes, colors, texture and direction. 2: Alternative repetition organized in a vertical direction, stressing on the movement of the refracted line.

Rush; 1: Repetitions around the horizontal and vertical axis in different direction .2: Regular quarter repetition in horizontal and vertical direction. 3: Repetition in circular direction for strong lines in black color and for spaces with contrasting red, green and yellow color by rotating around the square in the center of the design, the square appears in white color to reflect the arrival of the rush to the top in the white space that combines these lines and rallies to represent a moment of peace and stability in the end.

### 2.4 Correcting colors and Printing Samples

Colors have been scaned by an accurate spectrophotometer called "Gretag Macbeth Spectro Eye" (Figure 3), then all colors have been digitally corrected on the Photoshop software (Figure 4).


Fig. 3. Gretag Macbeth Spectro


Fig. 4. Correcting colors

The printing samples included two types of cloth: Master 400 g , and Satan 160 g , and a comparison between print and real paintings has been done to correct for printing option and reprint again (Figure 5) .


Fig. 5. Comparison to original paintings and printing materials

### 2.5 Designs in case of vision deficiency

Color vision deficiency, is the inability or decreased ability to see color, or perceive color differences, under normal lighting conditions. There is no actual blindness but there is a deficiency of color vision. [5] The most usual cause is a fault in the development of one or more sets of retinal cones that perceive color in light and transmit that information to the optic nerve.

We used guides for how color vision deficincy would see real color to modify the colors of the designs, and the paintings as well. Using the same software but with diferent tools to change specific colors, [6] where is an option to compare the real natural colors of the image and an editable one as the user modifies the colors and compares; shown at the colored lined of the tool box opened at (Figure 6), the results of how people with color deficiency would see the designs and paintings are shown in (Figure 7).


Fig. 6. Modify to color deficiency vision


Fig. 7. Color deficiency vision

## 3 Results and Discussion

Human Feelings expressed in works of art have been transferred into printed design products, with some color correction and compares.

People with vision deficiency will see different colors but with the contrast of hues and tones would still view the concept of the product.

Art paintings with simple, direct, and strong color, are good material for applied design.

## 4 Conclusions

Humans see color diferently, some humans have vision deficiency, but artist and designer can manage to prepare their work to get the meanings delivered better to these people.

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