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Color: Direct experience and manipulation

Philosopher of mind Frank Jackson used the following story to illustrate his counter-argument against physicalism, the position that human mental processes can be explained by facts expressible through physical language, like the biochemical account of color perception: Once upon a time there was a brilliant scientist named Mary, who was confined to a black and white environment since she was born. Nonetheless, she had learned everything about the theories of color. At last she left her small world and saw her first ripe tomato. She undoubtedly learned something new about color. To be specific, she experienced what it is like to experience red. If physicalism were true, she would have not have learned something new at all. Hence, physicalism must be false.

The objective of this essay is not concerned with cognitive science or philosophy of mind. Rather, I would like to direct readers' attention to one interesting aspect of the preceding story: Why color? The subject matter of Mary's study could be something else. One could ask, "Mary learns everything about the theory of love, but never has a companion. If one day she encounters her Valentine, will she learn anything new?" One could replace "color" or "love" with any topic. I believe that Professor Jackson did not choose color as the subject matter by accident, because color has a dominating and direct effect on human perception. One could argue about the definition of love and the difference between true love, lust, and infatuation; but, color perception is crystal clear.

By reviewing art and literature history, one can see how color captures the imagination of artists. The following quotations are just a few examples:

"The purest and most thoughtful minds are those which love color the most" (John Ruskin).

"Color is my day-long obsession, joy and torment." (Claude Monet).

"Color is the keyboard, the eyes are the harmonies, the soul is the piano with many strings. The artist is the hand that plays, touching one key or another, to cause vibrations in the soul." (Wassily Kandinsky).

"Color has taken hold of me; no longer do I have to chase after it. I know that it has hold of me forever. That is the significance of this blessed moment. Color and I are one." (Paul Klee).

"Colors in painting are like allurements for persuading the eyes, as the sweetness of meter functions in poetry." (Nicolas Poussin).

"It is coloring which brings the amateurs and the admirers to the more important perfections of art." (Jean Auguste Dominique Ingres).

"Painters who are not colorists produce illumination and not painting" (Eugene Delacroix).

Photographers are also fascinated by color. For instance,

"In my photography, color and composition are inseparable. I see in color." (William Albert Allard).

"In photography the way you treat color will help define composition and establish a definite mood." (Richard Platt).

"I realized that the sense of power and clarity that comes from seeing strong, saturated colors." (Galen Rowell).

"The bold use of color is essential to the creation of high-impact photographs: Color highly determines the way we respond to pictures." (Joe Marvullo).

Have you ever heard a writer say "letters are my day-long obsession, joy and torment" or "words have taken hold of me; no longer do I have to chase after them. I know that words have hold of me forever." It would make more sense if a writer praises manipulated elements in literature such as "sentence structure" and "rhetoric." However, please note that the preceding artists did not talk about manipulated elements, such as selection of pigment and saturation of hue. Rather they just mention the most basic element of art, which is simply color. Color is the building block of art. Why were the above artists so fascinated with color?

It is my conjecture that color has a dominating and direct effect on human aesthetical experience and thus the aesthetical value of color is beyond manipulation. Put it bluntly, as John Hedgecoe said, intuitively we respond more immediately to color than to shape. How the audience responds to color may be strongly determined by what has been embedded in the color.

It does not mean that artists do not need to manipulate colors in their works. On the contrary, a careful adjustment of hue, intensity, saturation, and harmony is essential to art, especially in photography. However, it is beyond the formal logic to explain why manipulation of colors in opposite directions is equally valid in contributing aesthetical values to art. The above notion may be too abstract. Let's look at some concrete examples. Figure 1 is a photo taken in Orleans Island,

Quebec during a trip in April, 2005. The scattering birds form a random yet uni but I felt that the composition was too busy. As a remedy, a monochromatic ha mood is created by reducing the colors. The technique is simple: applying a wa that all other colors are covered by a single tone of warm color.



Figure 1

Title:

Rhythm in the evening

Location:

Orleans Island, Quebec, Canada

Date:

2005 April

Equipment:

Fuji FinePix Pro S2

Figure 2 is altered based upon a similar rationale. The photo was recently taken Again, this group of Flamingos generates a crowded and distracting scene. In tl as Figure 1, some pictorial elements were **reduced** by decreasing the level of c and opacity.

These are very straight-forward techniques: reduction of color elements to com the complexity of the composition. Figure 3 is also a densely composed picture taken in Bandera volcano, New Mexico. The green and orange materials on the and moss, which are rare in the Southwest region. To enhance the photo, color was substantially **increased**, and as a result, the highlighted lichen and moss f appealing view. However, is it strange that a busy composition can also be resc increasing color elements in a picture?



Figure 2

Title:
Pink and white
Location:
SeaWorld, Orlando
Date:
2005 October
Equipment:
Nikon CoolPix 880

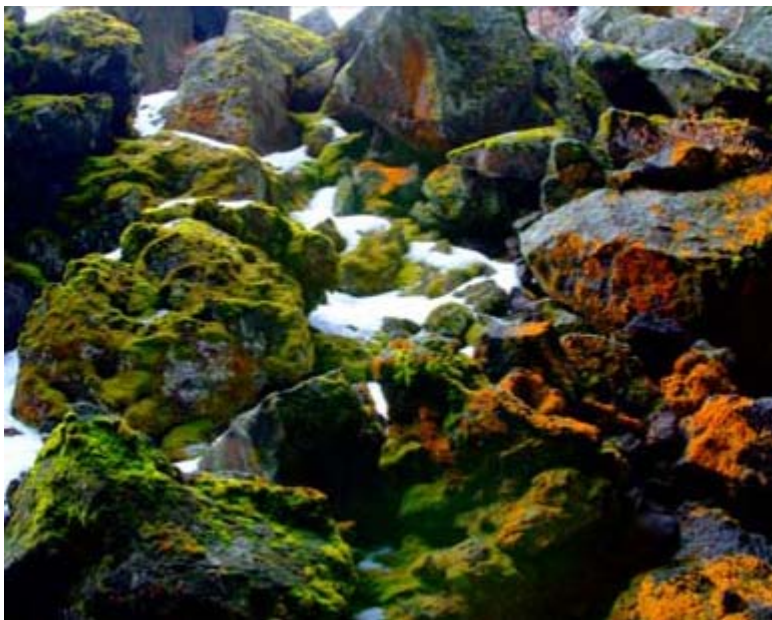


Figure 3

Title:
Division
Location :
Bandera volcano,
Mexico
Date:
2004 December
Equipment:
Fuji FinePix pro S

The image on Figure 4 was captured during a trip to Colorado Springs. Contrary to Figure 3, the problem of this picture, in my view, is its plain and simple composition. To make it more interesting, a sepia tone was added to the photo, and as a result, this monochromatic harmony mediates the weak composition. Figure 5 faces the same problem as Figure 4: an uninteresting composition. Surprisingly, after I increased the contrast, it is no less visually appealing than Figure 4 even though the two photos express different moods.



Figure 4

Title:
Pikes Peak
Location:
Pike Peak,
Colorado Springs, C
Date:
April 1998
Equipment:
Nikon N8008



Figure 5

Title:
Golden sand
Date:
2004 December
Location:
Great Sand Dune I
Colorado
Equipment:
Fuji FinePix pro S2

If you are puzzled now, you will be further confused by the enhancement of the composition of Figure 6 is much better than that of Figure 4 and Figure 5. A diagonal shaped curve divides the space on the picture diagonally. Nonetheless, the same over-saturation done on Figure 4 also seems to be effective in Figure 6.

Contradicting color manipulation techniques, as demonstrated above, serve the purpose of improving a photo with a crowded composition, a plain composition, and a simple composition. Why is this so? If the aforementioned brilliant scientist, Mary, studies the art of color enhancement, she will go crazy by these seemingly illogical phenomena. Jackson is right because no doubt Mary must learn something new after she experiments with color. Every artist, to some extent, is like Mary.

My tentative hypothesis is that color is so primary and dominant that it retains its aesthetic values no matter what contradicting manipulations are employed. It

the artist does not fully manipulate colors; instead colors control our perception and creativity. That's why Paul Klee said, "Color has taken hold of me; no longer do I have to chase after it. I know that it has hold of me forever."



Figure 6

Title:

Tears of Roaring Dune

Location:

Mountain Ming Sha (Roaring I
China

Date:

2005 June

Equipment:

Fuji FinePix Pro S2

by [Chong Ho Yu, Ph.D.](#)

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