SPECTACULAR SPECTRUM

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ABSTRACT

To develop a speculative art and architectural artifact based on the RYB Color Model, which attempts to produce an environment that engages and challenges the individual's perception of color. The artifact is constructed of 3 Pixel Filaments (red, yellow, blue plastic strips) composed in varying degrees of mixture patterns, which are populated onto a surface based on the parameters of Blend, Angle, and Distance.

Blending is the process of combining any pair of colors from the RYB Color Model to produce the effect of additional colors. By populating the surface with RYB Pixel Filaments in a set dimension and proximity to one another, green, purple and orange are achieved. The blending parameters are always constant. **Angle** is the parameter that configures the folds to produce the surfaces the patterns are populated onto. The angle of the surface creates, subsequently produces an opportunity to create additional degrees of color. **Distance** is the space between the individual and the artifact. The artifact is initially exposed at a distance, and as the individual comes closer, their perception of the varying degrees of color changes. The effect is the greater the distance, the more color spectrum the individual can perceive. The shorter the distance between the individual and the artifact, the less color spectrum the individual perceive. When you get closer you discover that the color spectrum is only made up of three colors.

We engaged the concept of color and the many levels it operates within. Through this artifact, we can begin to push for a critical discourse regarding the history of color and its cultural significance to art and architecture. The installation is both about color and the many industries it shapes; architecture, art, fashion, graphic design, and industrial design, color being the link between all these creative fields. Additionally, the installation will act as an educational model, by distilling the color spectrum into three simple components. The only limits here are one's own eyes, and their respective capacity to indulge in the performance of color we have achieved.

INTRODUCTION

From the primary colors, a continuous spectrum is formed. How the spectrum is divided into distinct colors is a matter of historical and cultural demand. From Isaac Newton's seven prismatic colors, to an almost immeasurable quantity, culture has continued to distill new colors for a variety of uses. The iconographic presence of color is pertinent to cultural linkages and the periods, which they represent. As our culture advances, so too, does our color palette.

MATERIALS AND METHODS

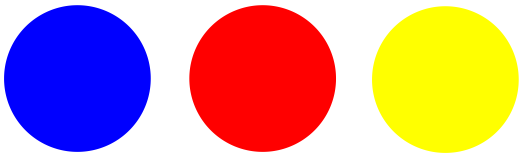

Figure 1. RYB Color Model

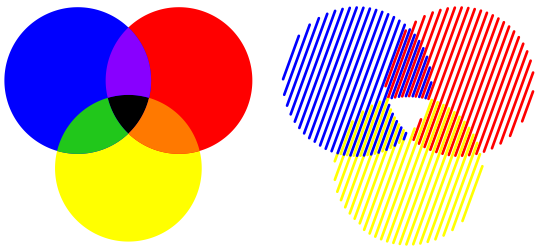

Figure 2. RYB Primary Mixture / Hatched Color Dissolution

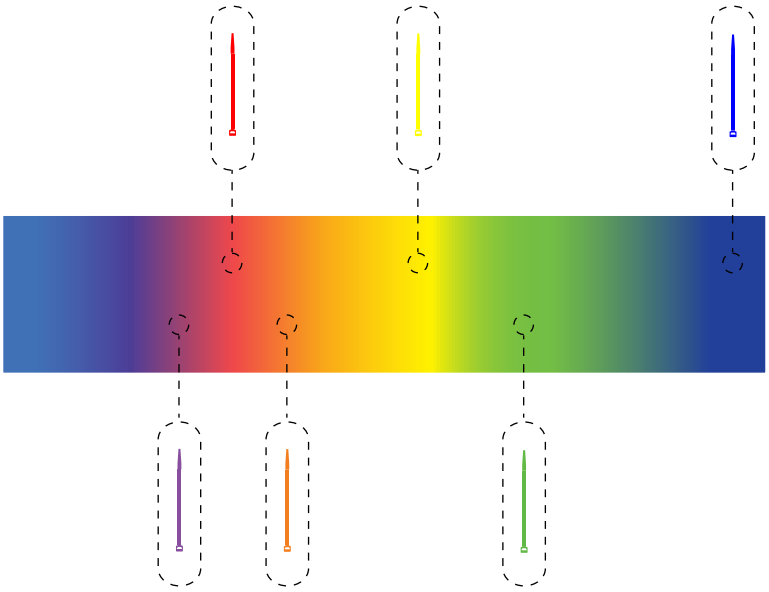

Figure 3. RYB Color Spectrum / Primary Pixel Filaments

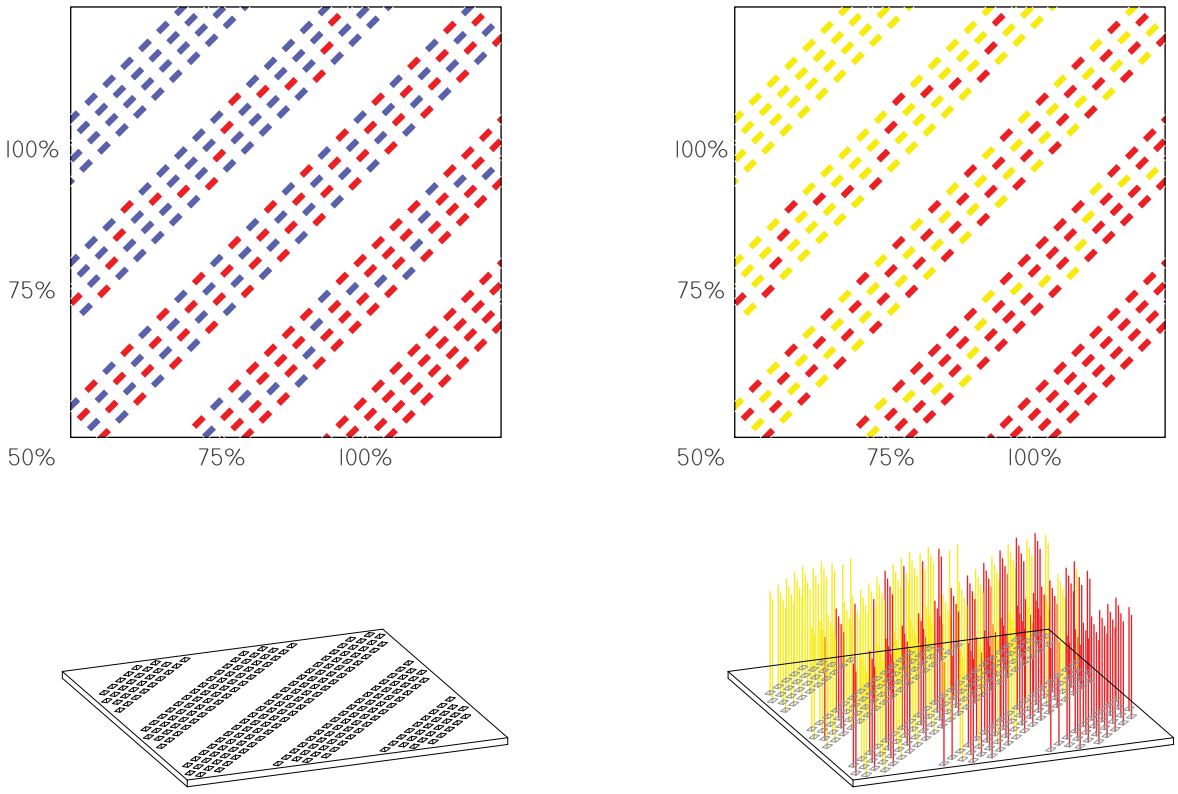

Figure 4. Blending Patterns Percentages

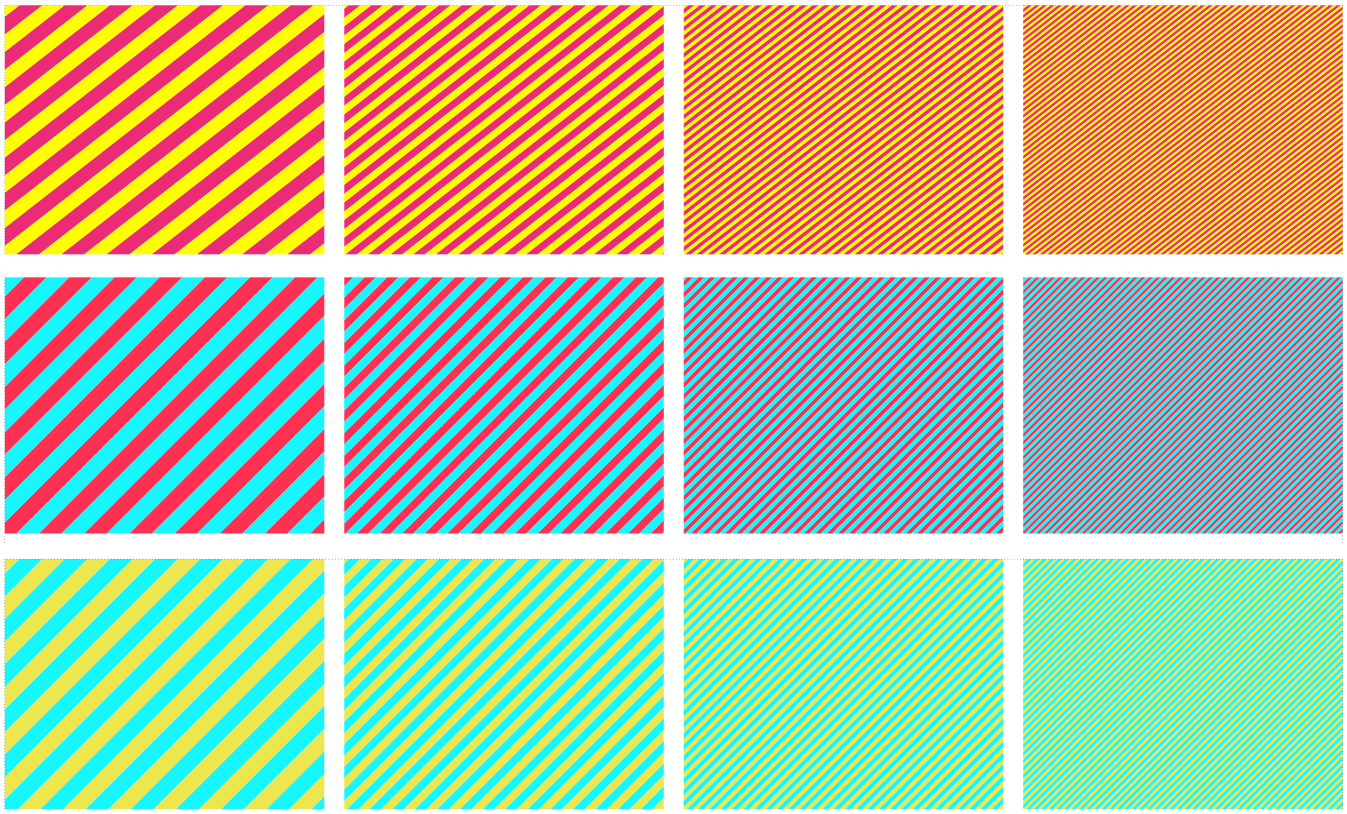

Figure 5. Color pairs at varying scales in Color Model

Figure 6. Color pairs at varying scales in Organic Model

Figure 7. Exterior view of artifact

Figure 8. Exterior view of artifact

REFERENCES

Albers, Josef. *Interaction of Color*. New Haven: Yale University Press, 1975.

Swirnoff. Lois. *Dimensional Color*. New York: W.W.Norton & Company, Inc., 2003.