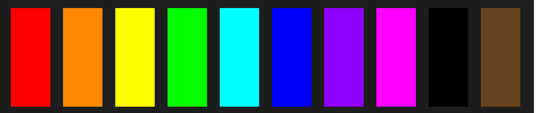
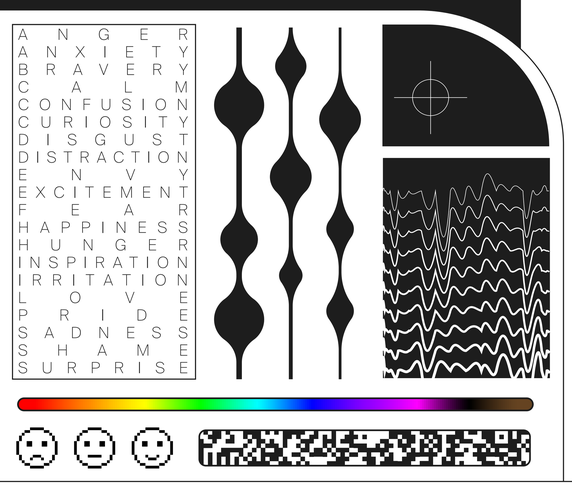
EMOTION IN COLOR
COLOR IN EMOTION

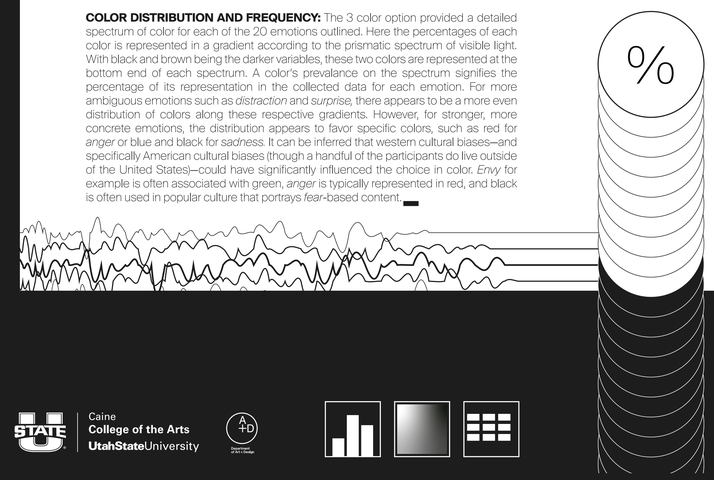


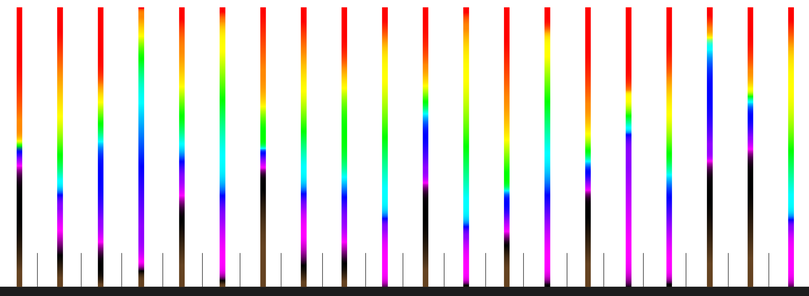
"Color is a power which directly influences the soul."
—Wassily Kandinsky

IN THIS STUDY, surveys were provided to 78 participants to determine what colors they associated with which emotions. 20 emotions were provided: anger, anxiety, bravery, calm, confusion, curiosity, disgust, distraction, envy, excitement, fear, happiness, hunger, inspiration, irritation, love, pride, sadness, shame, and surprise. The 10 color choices given for each color were as follows: red (#FF0000), orange (#FF8800), yellow (#FFFF00), green (#00FF00), cyan (#00FFFF), blue (#0000FF), violet (#8F00FF), magenta (#FF00FF), black (#000000), and brown (#654321). Both RGB and CMYK color groups were included to span the spectrum of light as well as the two common secondary colors, orange and violet. Black and brown were added as darker variables to contrast the otherwise bright and vibrant color palette. Participants were instructed to select 3 colors from the provided color palette that they most closely associated with each emotion. The order of colors was sorted randomly from question-to-question in order to ensure a more accurate representation and curtail any possible bias of colors that would be overly represented at the top of the selection.



COLOR DISTRIBUTION AND FREQUENCY: The 3 color option provided a detailed spectrum of color for each of the 20 emotions outlined. Here the percentages of each color is represented in a gradient according to the prismatic spectrum of visible light. With black and brown being the darker variables, these two colors are represented at the bottom end of each spectrum. A color's prevalance on the spectrum signifies the percentage of its representation in the collected data for each emotion. For more ambiguous emotions such as *distraction* and *surprise*, there appears to be a more even distribution of colors along these respective gradients. However, for stronger, more concrete emotions, the distribution appears to favor specific colors, such as red for *anger* or blue and black for *sadness*. It can be inferred that western cultural biases—and specifically American cultural biases (though a handful of the participants do live outside of the United States)—could have significantly influenced the choice in color. *Envy* for example is often associated with green, *anger* is typically represented in red, and black is often used in popular culture that portrays *fear*-based content.





EMOTION

To represent the color association expressed in the collected data, each emotion is represented with three colors:

COLOR COMBO 1: The percentage score for each color was translated into an opacity for the respective color. The color opacities were then layered over each other according to percentage with the highest percentage layered at the top and the lowest percentage layered at the bottom.

COLOR COMBO 2: As with Color Combo 1, each color was reduced in opacity and layered over each other with the highest scoring colors layered at the top and the lowest scoring colors layered at the bottom. However, *all* colors were reduced to an opacity of 50%. This provided a more vibrant representation complimentary to the colors found in Color Combo 1.

DOMINANT COLOR: This segment represents the highest scoring color for the emotion in question. For emotions where the highest percentage is shared between two colors, equal representation is provided on the chart.

GRADIENT COMBINATION: The three colors represented in Color Combo 1, Color Combo 2 and Dominant Color are combined into a gradient to establish a mixed and potentially more accurate representation of the data collected for each emotion.

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