## Week 11 Play and Stillness

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Folio Object: https://www.youtube.com/watch?v=5KoUKvoZJ88\&ab_channel=VidaZhang

## Context:

To think stillness, first come out of my mind is persistence of vision. The most common experiment is we draw continuous drawings on the edge of the book, and then when we turn the pages quickly, we can see the moving content we draw. But I want to do the color experiment: we stare at one color for a long time, and then look elsewhere, and the opposite color of that color will appear. For example, look at the green for a long time, and then look elsewhere, and red will appear. We need to keep our eyes still on the picture, and our eyes will help us fill in the color in our mind when there is a blank picture. This phenomenon is so interesting. Most visual games require our eyes to focus on a certain point while we are still.

The purple ball in the video is created by the rapid flashing of red, green and blue light. When they gather at a point, we see purple, but when the ball is swinging we can clearly see three colors. This makes me wonder if purple can be obtained from red green and blue. But based on the rule of the three primary colors, purple is formed through blue and red. This inspired me to think in a reverse way.
I want to make a small game to test and explore the reversibility of persistence of vision by combining the duration of visual retention and memory.

## Method:

Original: Draw a picture with several different colors. Player 1 stares at the dot in the image for 20 seconds, then immediately looks at another white image. Then say the color he/she see on the white paper. Player 2 needs to record these colors, and paint it in the board. After drawing, stare at the picture he/she drew for 20 seconds, look at the white picture and say the color he/she sees. Player 1 draws the color. And at the end, compare with the original picture to test whether it is the same color.

Fixed: Players can memorize the persistence of vision by flipping through the picture repeatedly.

## Response:

During playing the game, we found that when there are too many colors, it is difficult to remember all the colors at once. Because when you look at white, as long as the eyeball moves, it shortens the persistence of vision. This bothers me a lot. So I changed the rules of the game. Also, what surprise me is not all colors have complementary colors (I'm not sure). Because when I drawn brown, back to the white paper I can't see any color, it just white.

## Reflection:

This game helped me demonstrate that persistence of vision is not reversible. Because the colors you see when you stay are not as vivid as they are drawn. It's looks more like a layer
of fog with a light color. When the color described by Player 1 is not correct by itself, Player 2 will only be wrong. In addition, compared to other colors, red, green, purple and yellow are more visible for clear persistence of vision. This is an interesting discovery. In the end, it's fun to look at visually disorienting pictures occasionally, and looking at a color and then back to white paper for long periods of time can be very tiresome for the eyes.

## Related works: Persistence Of Vision

https://www.youtube.com/watch?v=bcstc1ozczQ\&ab_channel=Veritasium

