COLOR THEORY: Week 7

"We might know all the scientific information about how we come to see a color, but only the visual experience of it reveals the color's essential nature (and thus the philosophical position is sometimes termed revelation theory). With color, they say, experience is not merely the best teacher; it is the only one."

— from *On Color* by David Scott Kastan with Stephen Farthing

Notes, clarifications, and additional information

- The color "orange" originally was called red-yellow. The name orange didn't exist until oranges were imported to Europe in the 16th century. The word "orange" comes from the Sanskrit word for an orange, "naranga." The "n" at the beginning of the word was dropped over time.

- What is the difference between violet and purple? Violet is a spectral color. It exists at one end of the spectrum while red is at the other end. Red and violet can't overlap because they are at opposite ends of the light spectrum. Purple is made from red and blue and is seen when green light is absorbed, and red and blue light are reflected.

- There are numerous documentaries about art and artists available through streaming services. Two of the most compelling about the high-end art gallery world are: *Made You Look: A True Story About Fake Art* about the forgery scandal which brought down the famed Knoedler Gallery in New York and *Blurred Lines* about the commodity of contemporary art in the intersection of the artist, gallery, auction house, and collector.

Dimensionality

Varying colors within shapes can turn them from appearing two-dimensional to three-dimensional.

If you create a cube with the front, side, and top all the same color, it will appear two-dimensional. If you change two of the sides to have different colors, the cube will appear three-dimensional.

If you apply an imagined, consistent light source then use different values of the same hue, the cube will appear as a three-dimensional cube.

The illusion of dimension can be created in any geometric shape using multiple values (tints and shades) of a single hue.

Arranging shapes to appear over or under each other is created using reflections (tints) and shadows (shades).

Highlights and shadows

Many representational artworks (including illustrations and logos) don't display the source of light directly, but you can ascertain the direction by studying the highlights and shadows in the work. The highlights and shadows will indicate the intensity, direction, angle, and distance of the light.

Space: Positive and negative

Positive space is the subject of an artwork. Negative space is the space around or between the subject; it is space with no subject. Negative space is as clearly defined as positive space. Negative space can be as or more compelling than positive space.

Time of day or season

Applying the illusion of dimension and adjusting the effect of light in a composition will create the effect of viewing the subject/object at different times of the day or year. Monet's series of the Rouen Cathedral demonstrate this beautifully. Using an identical view, his selection of hues create the impression of the cathedral in spring, summer, fall, etc. Likewise, on a sunny day, the color of objects will appear saturated in the morning, lighter or whiter (unsaturated) mid-day, and darker or more saturated in the evening.

Undertones

Many colors, especially white and neutral colors, have an undertone. The more saturated a color is, the less likely it is to have an undertone. To identify an undertone, compare the color against similar colors. For example, grays often have an undertone of any of the colors on the color wheel. Find a neutral gray (a mix of only black and white) and compare your gray to it. This will help to bring out the underlying tone. You can also place a neutral against saturated hues one at a time. When placed against red, the green undertone in a gray will be visible.

Horizon line and eye level

(Entire section from the website of the National Portrait Gallery, United Kingdom)

Anyone who has ever been to the seaside will have seen a **horizon** (as long as it wasn't foggy). This is the line you see far away, out to sea. It's the line where the water stops, and the sky starts. There are horizon lines everywhere, but usually you don't see them because something like a hill or a tree or a house is in the way.

You always see the horizon line at your eye level. In fact, if you change your eye level (by standing up, or sitting down) the **horizon line** changes too, and follows your eye level. Your eye level always follows you around everywhere because it's your eye level. If you sit on the floor the horizon is at your eye level. If you stand up, it's at your eye level. If you stand on top of a very tall building, or look out of the window of an aeroplane, the horizon is still at your eye level. It's only everything else that appears to change in relation to your eye level. The fact is, that everything looks the way it does from your point of view because you see it in relation to yourself. So, if you are sitting looking out of the window of an airliner everything is going to look shorter than you because at this moment you are taller (or higher) than everything else.

Everything always gets smaller as it gets closer to the horizon, or your eye level, because it's getting further away from you.

Your eye level is always on the horizon line because what you are really looking for is the edge of our planet where it begins to curve out of sight. If you go to the seaside, you will sometimes see ships disappearing over the edge of the horizon. If you are higher up you still see the horizon, you are just looking a bit further over the edge of the world. Because the world is round, the horizon line is really a curve, but the world is huge, so this curve is so big that it looks like a straight line.

Elements of art

- Line
- Shape (geometric and organic)
- Form (perspective)
- Color
- Texture
- Space (positive and negative)
- Value/light and shadow