Art is communication - Teaching is sharing

Art Tip: Simultaneous Contrast

You may be familiar with this strange looking image. The idea is to gaze fixedly at the red circle for about a minute. Then look at the white circle. You should see an after image of turquoise (the complement of the red).

Try this test using a red circle and a yellow circle. How does the yellow hue change?

When I started painting, I understood what the primary and secondary colors were. I knew that if I mixed red and yellow, it would result in an orange hue. What I did not understand was that our perception of a color changes as it interacts with different hues.

I do not look at colors in isolation. I cannot say if a color is warm or cool, dark or light, dull or bright unless I see the color in relation to another color. This interaction of two or more colors is known as simultaneous contrast. In other words, both of the colors are affected by this interaction. They are in contrast with one another.

Complementary colors create the most intense simultaneous contrast. In this example, I have used Cadmium Yellow/Orange, Cadmium Orange, Vermilion, Ultramarine Blue, Phthalocyanine Blue and Cerulean Blue.

In this example, Quinacridone Red, Permanent Rose, Alizarin Crimson, Thalo Yellow Green, Sap Green and Phthalocyanine Green are the colors that I used. By isolating different parts of this example, you can see how the various reds and greens contrast with one another.

Using the same colors as the previous example, you can see how the color proportions can alter your perception of the colors. The green rectangle is surrounded by all three of the reds. How does the color interaction between the red and the green change as you look across the example?

Raw Sienna is the ground color in this example. On the left, pure chromatic colors are surrounded by the Raw Sienna. On the right, chromatic color is mixed with Raw Sienna and painted on the Raw Sienna ground.
Simultaneous Contrast continued

Burnt Sienna is the ground in this example. Notice the differences in the color contrasts between the left side and the right side. Each color affects and is affected by its neighboring color.

Davy's Gray is the ground in this example. As in the other examples, the color contrasts are quite different from left to right. There are more contrasts on the left side, warm/cool, dark/light and bright/dull.

EVENING LIGHT was painted with a dominance of the red/green complementary pair.

Simultaneous contrast plays a role in the changing appearance of the Alizarin Crimson. Green, blue, purple and yellow are the colors used for the contrast.

Sap Green contrasts simultaneously with blue, red, purple and yellow in this cutout from EVENING LIGHT. The green changes according to its neighbor.

FLEETING LIGHT was also created with the complementary pair of red/green.

This cutout from FLEETING LIGHT shows a variety of contrasts. Each of the colors relies on its neighbor to influence our perception about the qualities of the red and the green.

In this piece of the painting, the green is a chromatic color. I altered the red by mixing it with the green to make an earth tone color.

I used to think that some of my unsuccessful paintings were the result of painting them in poor lighting. Now, I am inclined to think that I had not considered the color placements to maximize simultaneous contrast.