Color and Value
Week 5
Color Intensity (Chroma):
Bright/Saturated vs. Dull/Unsaturated

If you are a colorist rather than a value painter, you will be concerned primarily with structuring your paintings with color contrasts of intensity and hue rather than with contrasts of color value.

Intensity (or chroma) has to do with the quality of light that is reflected from a color. If the color is pure and saturated, the reflected light will be purest in quality and thus at its most intense. Compare this with value, which has to do with the quantity of light that is reflected from a color (how much of the color spectrum is reflected back to our eyes and how much is absorbed).

In painting, when we talk about the intensity of a color, we are talking about its relative brightness or dullness.

You cannot change the value of a color without also changing its intensity, but you can change intensity without affecting value.

Colors are at their most intense when fully saturated. The minute we do anything to that fully saturated color (add water to lighten it, or add another color to darken or neutralize it), we lower its intensity.

## Exercise 1:



Paint a swatch of pure, fully saturated Scarlet Lake [A]. Then paint another patch of Scarlet Lake [B] that is lighter in value (add water). Paint a third patch [C] that is darker in value (add some Permanent Alizarin Crimson to the Scarlet Lake). Both the lighter and darker values of Scarlet Lake are less intense tban the pure saturated color swatch.

Now paint a fourth swatch [D] by mixing Winsor Green with the Scarlet Lake ( a tiny bit at a time ) until you have a swatch that is the same VALUE as your pure Scarlet Lake swatch [A]. You should still have a reddish swatch, but it will be a dull red, much lower in intensity than your first swatch, even though they are the same value. [look at the gray drop shadows for the equivalent gray value] Knowing how to control the intensity of color will help you create stronger paintings.


## Exercise 2:

You change the intensity of any pure color by diluting it with clean water to lighten it, or by adding another color to it. Depending on what other color(s) you add, it will also affect the value and the hue, in addition to making the original color less intense. In watercolor, to lower intensity we use a color's complement.
Complementary colors are found opposite each other on the color wheel, but a quick way to determine a color's approximate complement is to stare at a patch of it for 30 seconds or so, then move your eyes to a plain white piece of paper or simply shut your eyes. The color you see on the white paper (or on the back of your eyelids!) is the color's complement. What are
 the complements of each of the colors below? Paint a saturated swatch in each of the labeled ovals. Let it dry. Stare at the swatch for 30 seconds or so, then close your eyes. Compare the color you "see" with the color wheel. Is it close to being the complement of the painted oval? Paint the blank ovals with the appropriate complementary color.


So far in this class, we've explored making paintings using high-key light values, and low-key dark values. We've looked at the color in white objects, and how the color of light affects the colors we see and paint. We've used color temperature (warm and cool) changes to model form and structure space.

## Using hue/intensity contrasts to structure paintings

When we begin a painting, one of our first tasks is to select a group of colors. Ideally, we will be doing this based on the subject matter and more importantly, on our INTENT as an artist. This intent can range from representing what we see as closely as possible to creating a work based solely on our emotional response to our subject, or to how we want our viewers to respond based on suggested symbolism or color associations. Our intent may be simply to use particular colors we like.

Color schemes can use one color (monochromatic) or up to four or five, and go from a limited range of contrasts in value and temperature to complex, highly contrasting color schemes. (see the diagram in last week's lesson)

How much color contrast you prefer provides another clue as to whether you might be a value painter or a color painter. Some prefer strong, saturated, highly contrasting colors, and others prefer nearly
color neutral combinations with just a small amount of bright, saturated contrasting color for accent purposes. Where are you on the color contrast scale?

Colorists often use the more contrasting color schemes (complements and equilateral triads) and lean toward more saturated, pure color. Value painters often prefer less color contrast, preferring to use more analogous hues and emphasize their different values instead. Compare "Hot Tomatoes" on page 1 which is a COLORIST APPROACH to the paintings at right by Mario Cooper, which reflect a VALUE APPROACH. Note that in the value approach, the shapes "read" as well in black and white as they do in color, while that is not the case in the color approach, which depends on hue rather than value to describe shape and form.

## Āssignment:

Select a simple subject from your sketchbook, or do a life drawing, or use a photo reference. Draw the same subject
 on two small ( $1 / 8$ sheet approximately) pieces of watercolor paper. Choose two to three hues to work with that have the same inherent value in their pure state. Paint one study using your hues full strength and pure in some areas, then intermix them in various proportions to make additional hues, but still keeping the mixtures full strength (saturated). You may leave some white paper if you wish.

In the second study, use the same hues, but this time, introduce value changes as well as intensity changes. This means you will have full intensity, pure color, and pure color that is lightened in value (with water), You will have "neutralized" hues that are fully saturated, and also some that are lightened in value (with water). Keep some white paper if you wish.

The color mixtures below are made from just two pigments. There are many more possibilities for these if you vary the proportion of each color, and if you add a third color, even more possibilities. The pigment to water ratio affects value. The less water you have in relation to pigment, the darker the value will be.

Remember that the more colors you add to a mixture, the "grayer" or less pure, or less intense the result will be. Try to make your mixture from two, or no more than three hues.


