

YOU GLOW GIRL!

Aimee Erickson's notes on light and radiance

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LIGHT is the visible part of the electromagnetic spectrum.

Color is a reaction that happens when light (radiation) strikes an object and some of that radiation is bounced off and is received by the eye. Remember from physics class? a green apple absorbs all the light except the green frequencies, which it reflects.

Color isn't something that IS. It's something that HAPPENS.

I ask myself, what's the color doing here?
what's the light doing? where's the action?

So color is an effect of light. Without light there is no color. As painters we can use color to indicate the presence of light: in the right context, brighter color can be perceived as more lit.

Effects of light:

Remember, light bounces around.

Light and shadow

Reflections—into shadow, on other surfaces

Glow (light+atmosphere)

Light can reveal form

Bright bright light (glare) can obliterate form. It eats into things. People in front of bright water—you see their torso shapes but their limbs are softened and made skinnier by the light.

Shadow also can obscure or obliterate form

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What do we see when we 'can't see'?

Letting go of "survival vision" (what IS it). Remember: your eyes are an extension of your brain, and your macular vision, the part in the very center (you use it to read), in particular, is really good at identifying things. Soften your gaze. What do we see when we are...

blinded by headlights

exiting a dark room into broad daylight

looking into darkness from the light?

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We can roughly group different types of lighting into categories to understand them better. If you understand the phenomenon, you can paint *that* instead of being completely reliant on observation. Here are four phenomena that I have noticed in my work (you'll notice that they do start to overlap):

1. Looking right at a light source

To make something look bright, paint it a really light (high-value) bright (high-intensity) color, like white with a tiny bit of color in it. Everything else has to be darker. However!!! If you want the thing to look bright, the dark background has to lighten as it approaches the object.



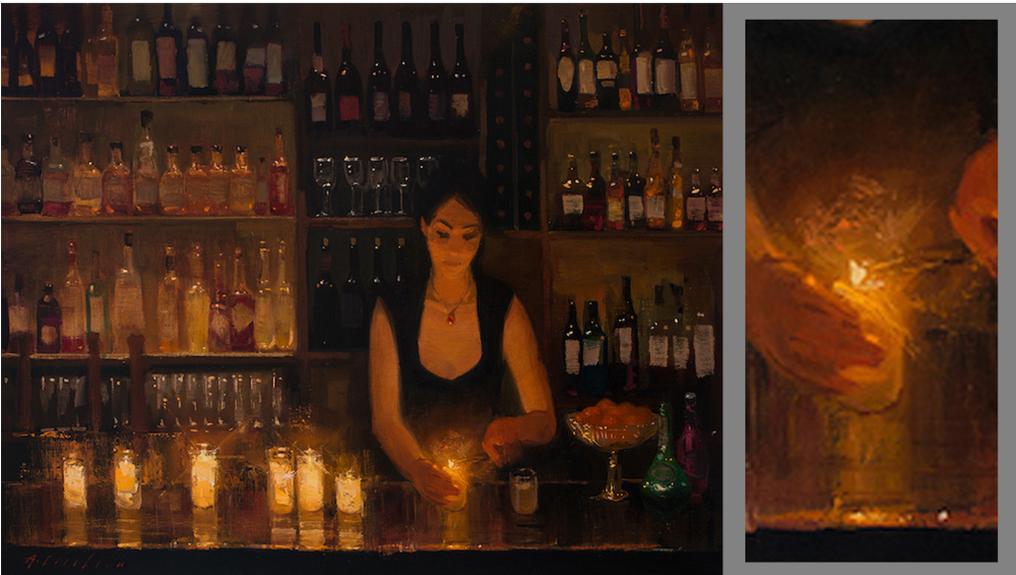
Glow happens off the object. Around it. Remember, the light radiates from the source/object and lessens with distance.

2. Looking into/towards the light (backlighting)

The light is coming towards you. Objects are silhouetted and flattened.



3. Reflections



A great way to get more color in a painting. Sometimes you'll get a both: a light source and reflections; even if you can't see it, paint the light source higher value than the reflection.

4. A well-lit object



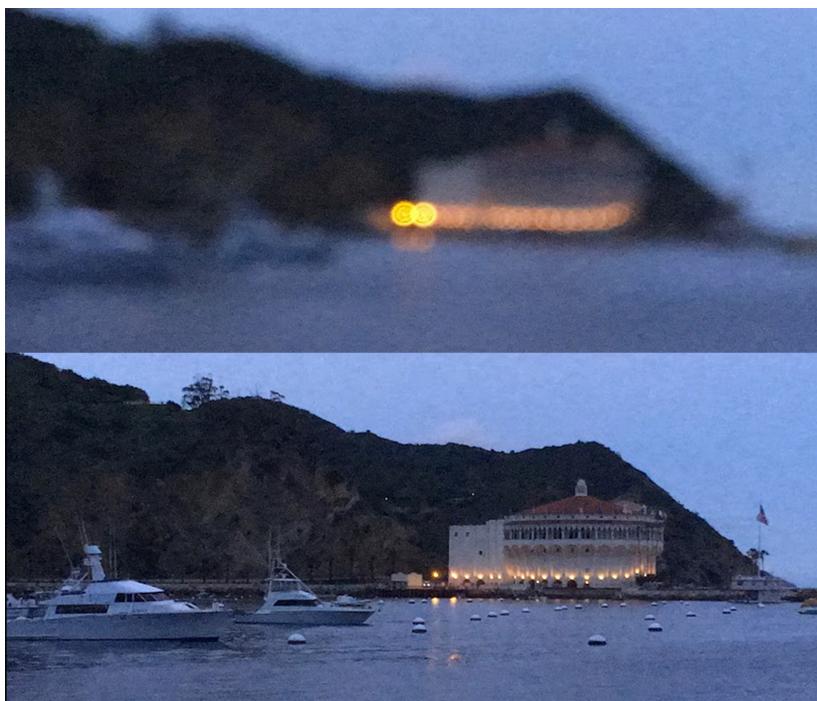
An object can be lit from behind, like this coffee cup or lemon wedge, or from the front/above like the clementine next to the blue pitcher.

If something is lit, it is essentially a light source.

Backlit highlights don't stay on the object. They have their own shape. Fatten them up.

What and How to Paint

Gradations are very useful. In a light-to-dark gradient the eye will always move towards the light. It's like putting an arrow in your painting. A chroma gradation will work the same way—the eye will move away from the grayer color toward the brighter color.



Out-of-focus photo:
generalized shapes
simplified color
light sources glow

In-focus photo:
more detail

iPhone apps I like

- Camera+ because it has manual adjustments for focus
- Genius Scan because it allows you to unskew images by manually selecting the corners of the crop.