

Small Subjects, Big Lessons: Color and White Balance

By David Hayden

I had the strangest dream this morning.

I was in the body of an Instamatic camera. Boxy, yellow, and compact. For reasons I cannot explain, I had become quite taken with a beautiful roll of film named Kodacolor.

The whole thing was unsettling.

I knew if I wanted to ask her out, I would first have to speak with her father, Mr. Graflex.

I walked up to the front door and rang the bell.

Kodacolor answered.

My shutter was all a flutter. My aperture got completely tangled. Somehow I managed to squeak out, “May I speak with your father?”

Mr. Graflex had apparently been listening nearby and appeared almost immediately.

Before I could say another word, he looked at me through a kind but protective lens and asked a question that changed my life forever.

“Son, what exactly are your intentions with my film?”

Many years ago, photographers made nearly every important decision themselves. Film choice determined color response. Filters altered color temperature. Exposure decisions had consequences that could not easily be undone.

Modern cameras are remarkably capable. They make thousands of decisions for us every time we press the shutter and most of the time, they do a pretty good job of it. The trouble starts when the camera’s assumptions and our intentions aren’t quite the same.

I was reminded of that a few years ago while helping my wife decorate for Halloween.

We had arranged several orange pumpkins on an oak table near a window. The afternoon light was beautiful. The pumpkins glowed warmly against the wood. Nothing about the scene felt complicated. It was just one of those small moments worth holding onto.

I made a photograph and moved on, but later, when I opened the RAW file in Capture One, I immediately felt something was off. The image carried a subtle blue cast.

The pumpkins were still basically orange. The table was still brown. But the specular highlights were noticeably blue, and even the pumpkins carried a slight coolness that simply wasn’t there when I made the photograph.

I realized pretty quickly that I had left the camera set to Auto White Balance. I had seen similar behavior before while photographing theatrical productions. Colored stage lighting often confuses Auto

White Balance because the camera is trying to normalize something that was never meant to be neutral in the first place.

Understanding White Balance

- * The camera records light
- * Auto White Balance seeks neutrality
- * Neutral is not always the photographer's goal



I was still a little surprised to see the same thing happen in such a simple tabletop scene. I didn't expect a couple of pumpkins, warm wood, and window light to confuse it quite so easily.

It's easy to miss how subtle color really is in our daily lives. One of the most remarkable things about human vision is how effectively our brains correct it for us.

Walk into a room lit by warm tungsten bulbs and a white napkin still appears white. Step outside under a blue sky and the same napkin still appears white. We rarely notice the constant corrections happening in the background.

Our brains are quietly adapting all day long.

A camera doesn't work that way. It simply records the light as it arrives. The Auto White Balance system looks at the scene and tries to find neutrality. Unlike us, the camera doesn't "know" the pumpkins are supposed to be orange or the table a warm oak color—it just sees a scene dominated by warm tones and tries to cool them down.

For my part, the daylight entering the room carried a stronger blue component than I had consciously noticed. The reflections revealed it most clearly. Specular highlights tend to reflect the color of the light source rather than the color we expect an object to be.

While my eyes had already corrected for it, the camera had not. Auto White Balance added its own interpretation on top of that.

In this case, neutrality wasn't what drew me to the scene. Warmth was.

Fortunately, this was easy to adjust in post. I changed the white balance setting in Capture One from Auto to Daylight, and the photograph immediately felt closer to what I had seen and more importantly, to what I had felt.

Did that edit render perfectly "accurate" color? Probably not. But it did represent what I noticed and wanted to remember. And that's really why I reach for a camera in the first place.

When photographers talk about white balance, the conversation often leans heavily on correctness. With some amusement, I might ask, "Correct for whom?"

No two of us see color exactly the same way, so any scientific precision is already a bit compromised. What we respond to is interpretation, not exact wavelengths.

Tabletop photography gives us a chance to explore light, shadow, shape, contrast, and color in a very deliberate way. If color is part of the reason you created the arrangement, then handing that decision off entirely to the camera probably doesn't serve your intent very well.

Auto White Balance performs remarkably well most of the time. The camera is certainly capable of making the decision.

The question is whether that was the decision you wanted it to make.

Learning Opportunity

If you feel like experimenting a bit, try this:

Create a simple tabletop arrangement built around a dominant color.

It could be lemons on a cutting board, red apples in a bowl, blue glass bottles on a shelf, anything where color is doing most of the work.

Photograph the arrangement twice:

First using Auto White Balance.

Then using a white balance that matches the actual light source.

Compare the results.

In some kinds of photography, color accuracy matters tremendously. For the personal tabletop work we do, a slightly different question might be more useful:

Does this photograph reflect my intention?

That answer isn't looking for technical perfection. It's trying to preserve the mood.

And that part still belongs to the photographer.