Resources for Colour in Photography

For IACC, 2023 11 23, Compiled by Ron Ross

Note: Some web pages listed here sell products. I am *not* suggesting that these products are necessary or even helpful for club members!

Introduction

It isn't necessary for a photographer to know everything about colour, but it is often helpful to know some things. I've compiled a list of resources, in no particular order. Some bits might be useful for you.

Meanings of Colours

As far back as ancient Egypt, and probably long before, specific colours have been associated with ideas, concepts, emotions, and other meanings. There was a lot of disagreement then, and there still is. This seems to be because the meaning of colour to any individual is a product of their culture, overlaid with their individual life experiences, and possibly physiological variations relating to their eyes and brain.

This chart lists colour associations in various cultures.
- https://www.thoughtco.com/visual-color-symbolism-chart-by-culture-4062177

Even within our westernized global culture, there is significant disagreement about the meaning of colours, not to mention combinations of colours. Marketing gurus, wellness influencers, online photography educators, and a whole lot of others will happily tell you they have the "correct" interpretation. If you are really concerned about the meaning of colours, I'd suggest doing a little exercise before doing any reading. Write down a list of colours, and colour combos, and then what they mean to you. What are they associated with in your mind? Do you have any favourite colours or combinations? Any that repel or irritate you? Then, after you've thought about this, if you still want to, look up what others think. Here's a good site to start with. But remember, they are no more "right" than you are.
- https://www.adobe.com/ca/creativecloud/design/discover/color-meaning.html

Human Colour Perception

As photographers, we don't *need* to know much (if anything) about how humans see colour. For those who are curious, this article presents a good short introduction:

- https://www.pantone.com/articles/color-fundamentals/how-do-we-see-color

For those who are looking for more detail, this Wikipedia entry is a good place to start.

- https://en.wikipedia.org/wiki/Color_vision

Colour Theory in Art

There are many "theories" of colour aimed at artists. One of the best introductions is the work of Johannes Itten. His first work was *The Art of Color: the subjective experience and objective rationale of color*, first published in 1961. It is hard to find now, but fortunately he produced a shorter, more concise summary work in 1970 called *The Elements of Color.* It is still in print, but also available for free here.

- https://monoskop.org/images/4/46/Itten_Johannes_The_Elements_of_Color.pdf

Common Colour Topics in Photography

How Film and Digital Cameras Produce Colour Images

It is helpful to know, at least in a general way, how your camera makes a colour image.

- https://global.canon/en/technology/s_labo/light/003/01.html#:~:text=Color%20film%20contains%20three%20layers,light%20as%20the%20topmost%20layer.

Calibrating a Display for Colour

Computer monitors are not stable over time, although they are much better than they used to be. If you want fully repeatable results, you should calibrate your monitor once in a while. Both Windows and Mac have built in calibration tools. As these change with OS updates, etc., Google the most recent results instructions.

You can also purchase aftermarket hardware tools. These are useful if you are doing precision printing, but are probably not worth the effort if your photos will only be viewed digitally. Here are two contrasting views on the matter.

- https://www.photographyacademy.com/why-you-dont-need-to-calibrate-your-monitor
- https://www.adobe.com/ca/creativecloud/video/discover/how-to-calibrate-monitor.html#:~:text=Professional%20colorists%20recommend%20you%20calibrate,devices%20is%20essentially%20good%20enough.

Colour Spaces

At some point, you will encounter the term colour space. Your editing software uses colour space settings for a variety of purposes. For example, in Lightroom and Photoshop, you need to set colour space when you send an image for external editing, and when you export a file. Getting it wrong may have unpleasant consequences. Here are three articles about colour spaces, ranging from more theoretical to more practical:

- https://www.pantone.com/articles/color-fundamentals/understanding-different-color-spaces
- https://blog.frame.io/2020/02/03/color-spaces-101/
- https://photographylife.com/srgb-vs-adobe-rgb-vs-prophoto-rgb