

If you've followed the other guides to the Exposure Triangle (the presentation and the pdf) that you'll find on the KPC Learning page, you should all be up to speed on these basic elements of exposure.

Quite basic stuff you learn when you're first getting into the workings of a camera, whatever mode you decide to use to take your pictures. If you're just learning, you may be wondering what the point is in obsessing over your ISO, aperture and shutter speed, but each part of the triangle has major effects on the image - not just on the exposure. So let's summarise and look at them 'paired up' with the major differences they make:

**{Aperture - Depth of Field}** When I first learned that there were lenses that were 'faster' than others (meaning the aperture can open wider), and that this was required for good photos in low-light situations, I thought 'great! problem solved!' Well...problem NOT solved. Why? Because opening your 50mm f/1.4 right up to 1.4 now causes issues with very shallow DOF (depth of field). So if you're shooting a wedding, perhaps, and your plan is to just open your aperture up, you better have a plan B. Because at some point, the groom will be a blurry smudge in front of the bride or the bride will be holding her bouquet in front of her and the focus will fall on the wrong thing. So simply opening your aperture isn't going to be enough to leave your other settings as they are. ***Point? When adjusting aperture, don't just think 'more light', also think 'depth of field'. Smaller aperture, more in focus; larger aperture, less in focus.***

**{Shutter Speed - Sharpness}** When first encountering the exposure triangle, every setting was explained in terms of how it dealt with light: aperture lets in more or less light, shutter speed lets it in longer or shorter, and ISO is how sensitive the sensor is to light. But there are other factors when considering your settings. With shutter speed, it isn't only the length of time the shutter is open that you have to think about. Particularly in low-light situations, using a too-slow shutter can cause camera shake from your shaky hands or motion blur from moving subjects. And this all leads to blurry photos, soft edges and no sharpness in sight. In most cases, use as fast a shutter as possible while still being slow enough to fit into your triangle.... but don't forget the occasional pictorial benefits of some blur. ***The short of it? Fast Shutter speed = sharpness. Slow Shutter speed = blur.***

**{ISO - Grain}** ISO can be your best friend or your worst enemy. It's the setting I compromise on last and not at all if I can help it. If the lighting conditions tell me I need more than ISO400 I tend to put my camera away. I really hate digital noise. That said, editing programs like Photoshop, Elements and Lightroom get better and better in dealing with noise. But just know that ISO isn't a magic triangle-balancing number. You can't just whack it up to 3000 and forget about the rest. You should know that higher ISO equals increasingly more noise. And don't confuse noise with grain - noise is always bad, grain can give graphic effects similar to film - some people even put extra grain in when editing what they call 'fine art' black and white. ***Basically? High ISO = more noise; Low ISO = finer detail.***