

## Carmarthen Photographic Society - aspects of photo editing.

Editing is where art and science intersect, the science lets you do what the art demands.

The first principle of editing as far as I am concerned starts with capturing the best image possible in camera. It is hard to polish a turd.

In this session I will cover optimising 'reality' not creating masterpieces of abstraction. I am not a world authority on the subject of photo editing but I can get myself around at a basic level which I will share with you. Think of this session as a foundation to build upon.

There are loads of image editing programmes available, some free some quite expensive it is up to you to choose one that fits your needs.

I use Photoshop (PS) and Lightroom (LR). I have tried several others, for example DXo Optics Pro but you have to remember broadly similar but slightly different controls in each. This is where my brain melts and I go back to what I know in LR and PS.

Before we start I will give a very brief summary of file formats commonly used and some initial thoughts on editing. For more insight into file types please see my article on image formats.

### 1. File types

**RAW** - these files contain unprocessed information straight from the sensor, images may look a bit flat and lack impact but they contain ALL the information captured by the sensor, so are a great basis for editing.

RAW files can be large 20 - 50 Mb depending on your camera. These numbers relate to a typical 1.6 crop and full size sensor. Some newer cameras capture 100Mb files. Large format cameras can generate much larger files.

RAW file formats are most often manufacturer specific in structure and are in effect digital negatives that require processing to become a viewable image. RAW image format is preferred when high quality is needed.

**JPEG** - Joint Photographic Expert Group - typically smaller than RAW, so requiring less space to store, these files are a result of discarding a substantial percentage of the information captured by the camera sensor.

Commonly used when fast results are needed such as with mobile phones or when the user does not want to process RAW files. JPEG is often termed a lossy format.

JPEGs are very widely compatible and are often used on the web and for sharing files.

**TIFF** - Tagged Interchange File Format is a lossless format often used to archive or print pictures. Tiff files can be rather large.

## **2. Choices to make**

I use RAW files in my cameras because these files give you more scope in editing and helps minimise, but does not eliminate, the difference in dynamic range between the human eye and your camera sensor.

It is well understood that your eye can perceive more information than your camera\*\*\* so any losses due to file compression will degrade the image in terms of the information the camera captures and is subsequently available for editing.

My thought is that the less information you discard, the higher the probability of a good technical result. By all means use JPEGs if you want to share files quickly.

I rarely use presets as I treat each image as an individual challenge, I know some folks advocate using presets, especially for situations where there are many similarly exposed photos, but I do not use them. That choice is up to you.

## **3. Pre-editing thoughts**

In my opinion the most essential part of editing is to achieve the result you want. If you can do that with minimal work then congratulations!

Try to avoid overworking an image unless you want extreme effect. You can get carried away with excitement and attempt too much.

If all else fails in the editing process you can always start again. This is beauty of digital. Reset!

#### 4. My Process.

The primary tool I use for my edits is the RAW processor which is common to LR and PS. I find it quite easy to use in LR and does most things I need.

My typical RAW editing workflow is quite simple - common initial steps for most situations followed by some specific tweaks when needed. I will give some worked examples using LR and a little PS later on.

1. I generally start with lens correction then apply a compositional crop if needed
2. It often helps a RAW image if you boost shadows
3. Reduce highlights to avoid clipping
4. Check exposure, loop back round steps 2- 4 if you need to until you have eliminated clipping as far as the image demands or eliminate over saturated blacks; caution too little black can give the image a nasty greyish appearance
5. Boost vibrance slightly if the image is a bit muted. Convert to mono if you want to experiment. In the case of mono I find the individual colour filters can be quite useful.

I avoid the saturation control as it is a bit of a blunt instrument. NIK "Silver Effects" in PS is a versatile tool for mono work

6. For extra impact try adding a little contrast. It can give the impression of sharpness. If you want to add sharpness the use of sharpening tools such as the high pass\*\* filter in PS combined with a mask can be used. "Viveza" in NIK works quite well also.

Remember that with a few exceptions RAW images captured by the camera are modified with an anti-aliasing\* filter which imparts a small amount of blur to the image. In some situations this is an issue.

7. I may use some of the LR tools to enhance aspects of the image, such as graduated filter, brush, redeye reduction, converging verticals.
8. For detailed editing effects, especially cloning I open the image in Photoshop perform the tasks and return to LR. I am a fan of NIK in Photoshop as a way to produce interesting effects. Aside from mono conversion mentioned in step 5, there are a range of tools available
9. Once you like the result, go away and have a cup of tea, when you return you might spot errors you missed the first time around such as odd bright spots or a slightly sloping horizon; even a telegraph pole growing out of someones head!

Another trick is to get someone else to look at the image; the first impact is quite revealing and may reveal things that you missed.

A variation on this checking process is to invert the image and see what flaws you can find.

10. I like printing from LR as it is quite easy. I usually boost brightness a little because transmitted light from the screen gives the impression that the image is correctly exposed, the printed image relies on reflected light and may look a bit darker than you intended.
11. I export my images as JPEGs for the ones I use as a PDI. You can resize at the same time. This gets me down to around 2Mb in file size which is easy to share without choking up someone's computer.

## Practical stuff

Let's look at a few images and work them up. None are photographic masterpieces, but they illustrate aspects of processing that I like to apply.

## Reminders

1. Capture the best image you can in camera. Expose for highlights whenever possible to avoid clipping, it is easier to recover shadows as highlight clipping loses valuable information.
2. If you can use RAW files it will help your editing.
3. Don't forget to resize your images; 1600 x 1200 pixels is the new PANG standard. Giant files clog up computers when images are shared.

\*aliasing is an effect that causes different signals to become indistinguishable (or aliases of one another) when sampled. It also refers to the distortion or artefact that results when the signal reconstructed from samples is different from the original continuous signal. In other words things get a little blurry when an alias artefact is present

\*\* When using a high pass filter in PS, use the overlay blending mode which uses the brightness of the colours in the base layer. An Intensity of 1 - 5 pixels is usually enough.

\*\*\* Most cameras can capture a dynamic range (the difference between the lightest and darkest portion of a scene ) of around 13:1; the human eye can capture a range in excess of 20:1. Since dynamic range is measured as a logarithmic function your eye can capture around seven magnitudes more information than your camera. There is much written about this subject and figures vary, but this general rule applies nonetheless.