## After the click, the Techie bit. Part 2, Following his June 2014 article about what happens to your submitted photos, Photo Editor Tony Bagwell has had a number of enquiries about how he corrects photos ready for the magazine

Autor(en): **Bagwell, Tony** 

Objekttyp: **Article** 

Zeitschrift: Swiss express : the Swiss Railways Society journal

Band (Jahr): - (2014)

Heft 120

PDF erstellt am: **30.04.2024** 

Persistenter Link: https://doi.org/10.5169/seals-854170

## Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern. Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

## Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

Ein Dienst der *ETH-Bibliothek* ETH Zürich, Rämistrasse 101, 8092 Zürich, Schweiz, www.library.ethz.ch

## After the click, the Techie bit -

Part Two Following his June 2014 article about what happens to your submitted photos, Photo Editor Tony Bagwell has had a number of enquiries about how he corrects photos ready for the magazine.

uckily these days most reasonable quality digital cameras have a good try at recording the scene they're pointed at, even when leaving everything on "Auto". No matter if it's a pocket compact, a high quality single lens reflex, or something in between, they generally get the focus and exposure right, just leaving you to compose that masterpiece shot - and some will even assist you to do that! However, the "Auto" bit tends to rely on the assumption that the scene being recorded is within certain limits, particularly with regard to light levels and contrast. Certain conditions can fool the camera into getting it wrong. That's when exposure correction (or resorting to "manual") can help, but the wonder of modern computers does mean that often these errors can be corrected later.

Before we get to the home computer stage, it's worth just explaining how the image is stored in your camera. When you half press the shutter button, the camera decides the focusing and exposure that it's going to use, and then when you push all the way down, the shutter opens for the decided time, light hits the sensor and that is recorded. BUT, and this is the crunch, how is that data translated into the JPEG file that is stored on your memory card? Initially the data read from the sensor is that of the light pattern that fell on it – in photography terms the Raw data. The processor in the camera then reads that Raw data and does what it thinks is the best job with it and converts it to the well-known-JPEG format - a format specified by the Joint Photographic Experts Group (you always wanted to know what JPEG stands for, didn't you?). It's at this stage it either gets it right, or slightly wrong. Now, if you're a keen photographer and have the right sort of camera (usually more expensive), you can get it to store the Raw data either as well as, or instead of, the JPEG version. That way, when you get home, and with suitable software, you can do the conversion exactly as you want, to get the final image as you'd like to see it. There are several stages in that process and it can take time to deal with each image, but the results can be worthwhile. But the thought of doing all that for the hundreds of photos from your last Swiss trip can be daunting. The happy medium is to set your camera to record Raw + JPEG and then if any JPEGs aren't quite right, you only have to play with the corresponding Raw file for those images. But if your camera only saves JPEGs don't worry, all is not lost if the camera gets it wrong.

What is probably not realised by many is the fact that far more pictorial information is available, even in JPEGs, than appears when first looking at a digital image on your screen. This is mostly down to the "dynamic range" that the camera can record or your screen can show. This is basically the range of light levels between the very brightest and very darkest areas. As our eyes scan around a scene they adjust very quickly so that we see more or less everything at similar levels of brightness,

but the electronics cannot do that. Thus, when calculating the exposure, the camera tends to average the brightness and thus on a sunny day with deep shadows it can only do its best. The norm is for it to try not to burn out the highlights, but that means the shadows tend to be very dark. But, some of that shadow detail can be recovered using photo-processing software. That software can be some of the very simple, and sometimes free, programmes right up to the industry standard Adobe Photoshop. For most home uses, something like Adobe Photoshop (PS) Elements will do most things you need.

So what do I do when I receive your photos for magazine use? Well luckily, most need very little "tweaking" as you and your cameras get it right before I receive them. If your image looks like it could be improved, the first check is to look at the light levels (Enhance-Adjust Lighting-Levels in PS Elements, or press Ctrl + L). This gives a histogram that shows the exposure from fully black on the left to fully white on the right and a representation of how much of each light level there is. The "ideal" shape is a hump trailing off to zero at each end. If it's concentrated to the left, the image tends to be too dark, to the right too light. The three pointers under the histogram can be dragged about to improve the exposure, though care has to be taken not to overdo the corrections. See the examples to get the idea.

Another change I often make is to try to boost the shadow detail, particularly to bring out the underframe detail in locos. This is easiest using the Shadows & Highlights filter (Enhance-Adjust Lighting-Shadows/Highlights in PS Elements). When first selected the default can sometimes lighten the shadows too much but by dragging the slider a compromise can be reached. I don't use the Highlights adjustment so often as it can make the resulting image look artificial. On the odd occasion when perhaps a sky is particularly bright I might make a second copy of the image to darken the sky and then blend the two together, using the sky from one and the rest from the original, but that's getting too technical for this article.

Most of your cameras get the colour balance right but just occasionally I correct that and sometimes I cheat and boost the saturation to make it look a bit sunnier. Very occasionally I might "clone" out a distracting item to tidy the photo. This may be removing a bit of litter (very rare in CH!), or whatever, but not to change the context of the photo. The final adjustment is to sometimes sharpen the image slightly to make it look crisper when it appears in the magazine. I have to be careful here as if there's any "noise" in your pictures (usually in those taken on dull days or at night), sharpening can accentuate that. Then it's just cropping and resizing to fit the magazine, overall lightening and converting to CMYK colour mode to keep the printer happy - and that's it!

26 SWISS EXPRESS

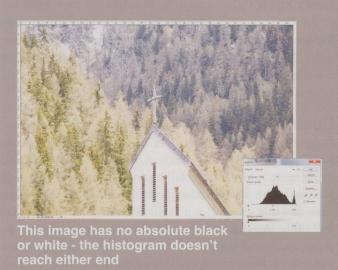


Too dark - the levels histogram is concentrated towards the left hand side



Too light now the levels histogram
is concentrated towards
the right hand side

Correct exposure - the histogram is evenly spread

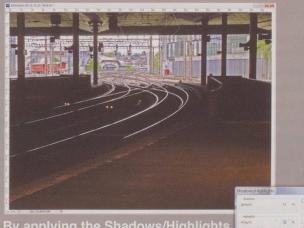




As taken, the camera has tried its best, but the shadows are blocked out and the exterior is too light



By dragging the two end sliders towards the centre, the image has more depth of colour



By applying the Shadows/Highlights filter and adjusting the sliders, detail has been revealed in the shadows and the exterior