THE RPS
ROYAL
PHOTOGRAPHIC
SOCIETY
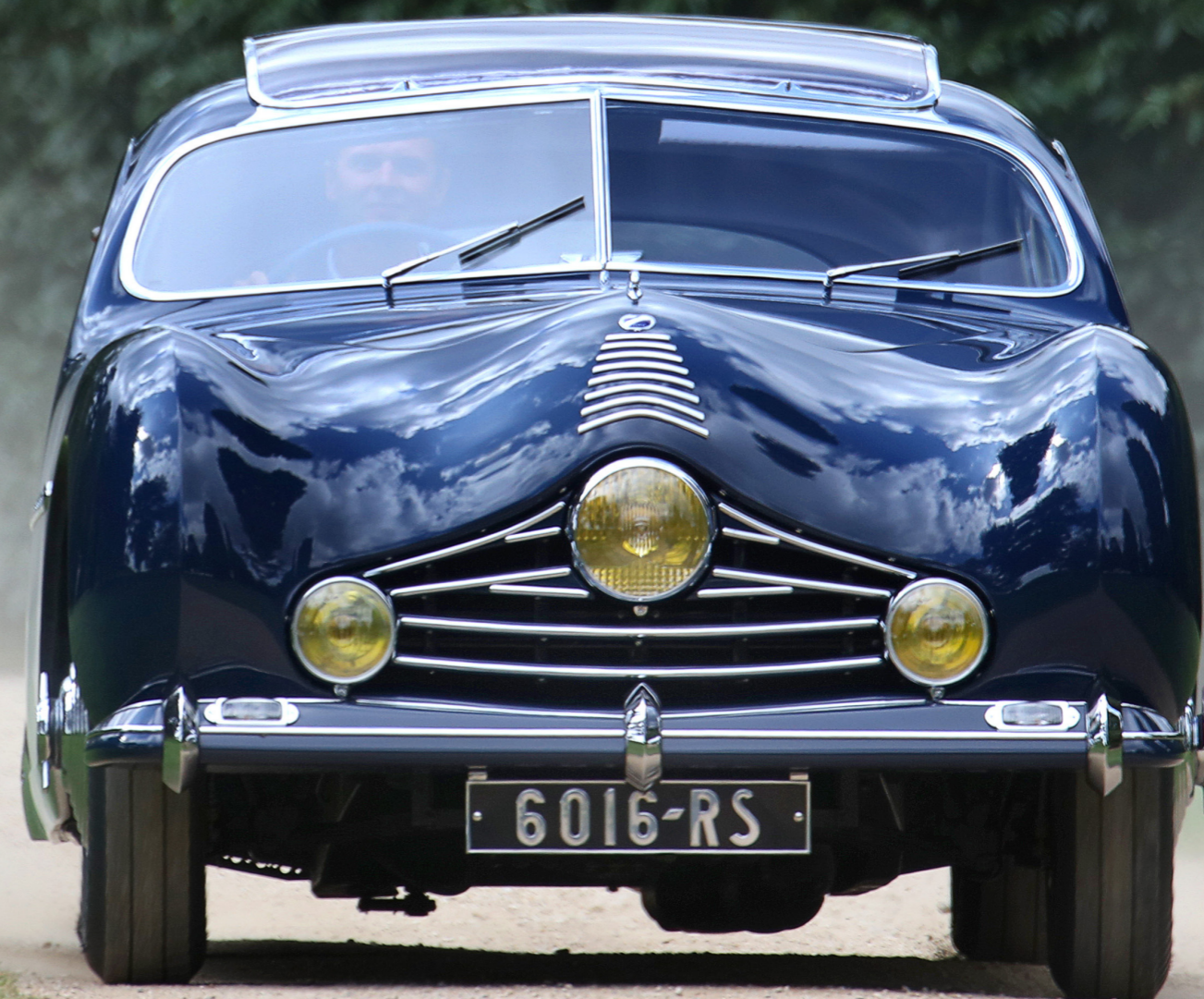
Upcoming DIG events

Details of all DIG events are available on the Group's website at
tinyurl.com/sxzl487

Digital Imaging: South East
Saturday 27 June 2020
Online via Zoom

Steve Gosling
Online Presentation

The Nature of Creativity

www.rps.org/Steve-Gosling-Online

Digital Imaging: Western
Sunday 13 September 2020
Ilton TA19 9HG

Duncan Armour DPAGB and Deborah Armour DPAGB
"Rainforest"
Let there be light & Divergent Views

www.rps.org/DIWesternDuncanArmour

Digital Imaging: Thames Valley
Sunday 20 September 2020
Wokingham RG41 3DA

Paula Davies FRPS
Guy Davies ARPS
DOUBLE VISION &
CONTINUING THE JOURNEY

www.rps.org/digtv-2020-09

Digital Imaging: Thames Valley
Sunday 18 October 2020
Wokingham RG41 3DA

Alan Frost ARPS
ME AND MY MONO

+ Print Competition

www.rps.org/digtv-2020-10

Digital Imaging: Eastern
Sunday 8 November 2020
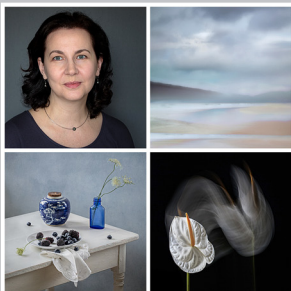Foxton CB22 6RN

Linda Wevill FRPS
'A Creative Way of Seeing'
Linda's journey to FRPS and her
creative approach to photography

www.rps.org/dig-eastern/linda-wevill/

Digital Imaging: Thames Valley
Sunday 15 November 2020
Wokingham RG41 3DA

Polina Plotnikova ARPS
STARTING FROM A BLANK CANVAS
Flowers - Still Life
SEE IN A NEW WAY
My journey with Lensbaby

www.rps.org/digtv-2020-11

Digital Imaging: Western
Sunday 29 November 2020
Ilton TA19 9HG

Di Wilkins ARPS
'Creative Floral and
Dance photography'

www.rps.org/DIWesternDiWilkins

Digital Imaging: Western
Sunday 31 January 2021
Ilton, TA19 9HG

Ralph Snook ARPS EFIAP
'Wildlife Snaps From My Travels'
"The Good, Bad and the Ugly"
covering anecdotes, techniques,
memories and frustrations.

www.rps.org/DIWesternRalphSnook

Cover image: 1948 Talbot-Lago T-26 Grand Sport by James Mann

CONTENTS

From the chair

Ian Race

We are now pretty much all used to watching our Zoom (or equivalent) presentations on all aspects of photography. From my perspective, I have been privileged to listen to speakers who would never have graced my local club.

So my thoughts turn to post-lockdown. On a video link there is too much technology between the print and the viewer, the detail is hard to see, and I am looking forward to being close up and personal again with some prints and their photographers.

However, my local club has around 50 members and on a club night not all attend. Our (SIG) centres combined manage to attract in total a few hundred attendees to their meetings. In the four online events we have held as a SIG we have had about 1300 attendees in total. These attendees have not had to travel and, as has been pointed out to me, the seats are comfier, the wine is better, and the trip home afterwards is short.

Zoom events are not going to go away, and I would not want my local club nights to either, so how are the two going to co-exist going forward?

This situation has a historical precedence. As Music Hall transitioned to television, acts that had toured the Music Halls for years and been refined in the process discovered that after one appearance on TV you needed a new act, particularly if you were a comedian. This posed a real challenge in terms of maintaining quality.

With many photographers touring the club circuit with their portfolio there is a balance to be struck in how to proceed.

Editorial

Gary Beaton

There is no doubt that the weeks since our last issue have been unusual for each and every one of us, wherever we are and whatever we might do. But some things do not change - each of us is a photographer. For some of us, the COVID-19 pandemic has granted us more time than we could have dreamed of to indulge in our passions or, maybe, to do some of those jobs that have steadfastly remained on the 'To do' list. Whatever you have done over recent weeks, I hope you have been able to enjoy photography and image-making in some form.

As ever, compiling DIGIT has been a pleasure and seeing the work of our contributors has inspired me to go out (and to stay in) with the camera. We have some fascinating tales in the pages of this issue, not least the musings of Australian member Alan Elliott as he entered the digital age, some 16 years ago. Not only is Alan a recipient of the Society's Fenton Medal for his support of the RPS, but he has been awarded the Medal of the Order of Australia (OAM) by the Commonwealth of Australia for his services to photography.

In the last issue James Mann recalled the early days of car photography, he follows this up with advice and guidance to help us all to capture superb car images.

We have a treat for those who revel in the nuances of image processing - or those whose images never seem to come out the correct colour. Dr Tony Kaye explains the multitude of options available to us when processing a RAW image file.

Slawek Staszczuk explains how he planned a trip to the coast which resulted in a beautiful seascape, and how some other plans fell by the wayside.

Finally, we have two Challenge articles which have quite a lot in common. Each consists of a number of components which have been brought together on computer - but with rather different results!

I wish you an enjoyable read.

The blue window

Dabbling in digital

ALAN ELLIOTT OAM ARPS has been an active member of the Australian Chapter of the Society for many years. He wrote a column regularly in the Chapter's newsletter and we reproduce one of these pieces from 2004 which may remind us just how much has changed over just 16 years and some of the images Alan produced after he overcame his computer problems.

It is therapeutic, so we are told, to have a relaxing and creative hobby. When I retired all was calm and quietly evolving. We had a wonderful range of film and papers to choose from, and cameras were so good that they almost took pictures by themselves. Then came digital and a great change began to affect every one of us.

Now, with the darkroom dead as far as colour printing is concerned, a decision had to be made. To be or not to be, colour-print-wise, that was the question. 'To be', I answered, blissfully unaware of the consequences. The next decision was how to proceed. A digital SLR camera which would accept my existing lenses is expensive and would not give access to my stock of medium format and 35mm transparencies and negatives. I decided, at least as an interim measure, to stick with film and to buy an Epson 3200 scanner. This led to a chain of events of which a mere summary, shorn of byways and dead ends, follows.

It became apparent that my existing Windows 98 computer, initially a hare, was now a tortoise. Enquiries revealed that a brain transplant was impossible because something called a 'front side bus', once lightning-fast, was now too slow and nothing could be done to fix it. Thoughts

DABBLING IN DIGITAL

The Epson Perfection 3200 scanner, capable of 'Superior 3200 x 6400 dpi resolution' and 48-bit scanning.

turned to a new computer. A plan, masterful in its simplicity, was put into action. I would use the existing 17" Hitachi CRT monitor on a new machine and buy a small LCD monitor (mainly because of space-saving) for the old PC to keep it going during the changeover.

Now, about this time, Apple was bringing to fruition an entirely new computer system, fast enough for my present and foreseeable needs, with a superior, stable operating system based on Unix technology, and with all the basic functions fully integrated. Our Chapter President and our Newsletter Editor, worthy souls both, each have one. What better commendation could there be? After much deliberation I purchased a Mac G5 with twin 1.8 GHz processors, a 160 GB hard drive, DVD burner and modem. It runs commendably quiet because of the thermostatically controlled cooling fans, and in addition the case is superbly engineered and looks handsome. Expensive, yes, but a thing of beauty and a joy forever, and could reasonably be expected to be reliable. As the peripherals were said to be 'plug and play', those pesky IRQ conflicts which used to plague PCs were banished forever, and all was well with my world.

With hardware problems neatly solved, and a song on my lips, I plugged in the Hitachi monitor, the new Epson scanner and the existing Epson 1290 printer. After adjustment of the monitor refresh rate a nice, stable picture resulted. Then, as both the scanner and the G5 have Firewire connectors I purchased the appropriate cable ($45) thus ensuring fast signal transfer and plugged it in. Nothing could be simpler; but it failed to work. Back at the shop the cable checked out OK. I was advised to download the latest driver for the Epson. This I did and fixed that unexpected problem.

The Apple Power Mac G5 which, in 2004, came as standard with 256 MB of RAM and a 80 GB hard disk drive.

Only slightly crestfallen at this stage, I loaded Photoshop and the Epson scanner software which included the Silverfast plug-in, only to find that the scanner failed to recognise Silverfast. As usual, the help key was of no help at all. This problem was put aside for the moment while I did some experimental scans just using Photoshop. Immediately a serious problem was apparent

The Epson Stylus Photo 1290 printer, capable of printing edge-to-edge A3 at 1440 dpi.

in that, whilst the pre-scan gave a reasonably close facsimile of the colours of the original, those of the scan were wildly out, as were the prints. The Epson hot-line operator could offer no suggestions, nor could any passer-by I buttonholed and transfixed with a glittering eye like the Ancient Mariner while I poured out my tale of woe. Experts and non-experts alike shook their heads at this improbable story, and sidled away with strange looks in their eyes. I was alone with my albatross.

At this point the Hitachi monitor developed a fault in that the 'on-screen display' could not be turned off. I temporarily replaced the Hitachi with the LCD monitor from the PC and ran another test. Immediately the colour problem disappeared and I was able at last to make a good scan and a quite acceptable test print even without any calibration. Then I purchased a Nikon V 35mm scanner, installed the accompanying software and connected it up only to find that Photoshop failed to recognise the Nikon software. Now I was totally out of my depth and my confidence badly shaken. Fortunately help was at hand.

Shirley, my ever-supportive wife, spotted an ad in the Green Guide. 'Is your Mac not behaving as it should?' it asked. Nothing could have been more opportune. The address given showed that Nic, the Mac expert, lives nearby. Within the hour, standing at the front door was a young man wearing a grubby army overcoat. With his blonde spiky hair, three earrings in each ear, nose studs and large ugly rings on every finger and both thumbs, and with a miasma of alcohol and stale tobacco, he was not the sort of person I would normally have invited into our home.

The Nikon Coolscan V LS-50 film scanner, which is capable of 4000 dpi, 14-bit scans.

Rainy day at Manly

I need not have worried. Nic was polite, well spoken, quick and knowledgeable. He asked a few pertinent questions, messages danced on the monitor as his fingers flew over the keyboard. "You need updates for all your software including the operating system," he announced. He went home, downloaded the appropriate files, and returned with a CD. After loading files into the Mac and with a bit of abracadabra which I couldn't follow, the software problems disappeared. I gladly paid his modest fee in cash and am daily expecting the receipt in the mail.

Things were looking up, but I was now one working monitor short. The experience outlined above indicated that Hitachi monitor had at least one fault and possibly two. There was also the possibility that it was incompatible with the G5. At this point, there was a long investigation into the comparability between the RGB connection of the PC and the VGA connection of the Mac, not yet resolved. After much discussion and guidance from experts I decided to buy a new monitor. Many enquiries later, I bought from the local Apple outlet a 19" Mitsubishi CRT monitor, guaranteed to work with the G5. It was duly delivered and I called for assistance from step-son, Chris, to get the 24kg monster up the steep stairs to my study, now my light-room.

With monitors one has to juggle with the resolution and refresh rate settings to arrive at a clear image. The Mitsubishi refused to behave. The best we could achieve was at a refresh rate of 100 Hz which yielded an image that was good in parts - rather like the curate's egg. The curious thing was that the sharp and blurred parts kept slowly changing as one watched. A call to the supplier quickly brought Hugh the technician to my light-room. He instantly pronounced the Mitsubishi faulty and took it away.

DABBLING IN DIGITAL

Laneway scene

The black swan

Puppet Master

The next day, to my surprise, Hugh reported that the monitor was working perfectly in the shop. I took my G5 to the shop where Hugh connected it to the same monitor. There was no problem in establishing a satisfactory resolution and refresh rate. An excellent image resulted. Clearly, both the Mitsubishi and the G5 were in perfect working order. Hugh scratched his head. "All I can suggest," he said, "is that there is something wrong with your room." Chastened, I took my lovely gear back home, and considered the options over a glass of red.

Now, our house was built during the gold-rush almost exactly 150 years ago. Originally it was the Queen's Arms Hotel but early last century it went downhill, acquired a dubious reputation and was eventually de-licensed. If walls could speak there would be some interesting stories to tell but nothing likely to affect the computer. However, the front wall of our two storey building is on the street boundary line and the power lines are at roof level just a few feet from my study windows. There is little doubt that electromagnetic radiation (EMR) from the power lines was affecting the Mitsubishi. Strangely, no significant effect had been evident on other, smaller, CRT monitors. As LCD monitors are not susceptible to EMR, a logical solution to the whole problem would have been to replace the Mitsubishi with an LCD, however I was already committed. A test

run in the kitchen well away from the power lines gave an entirely satisfactory result. The inevitable conclusion was that the Mac would have to be relocated. The only place for it and the associated gear was the darkroom. But, the large steel multi-drawer print storage cabinet there would have to go. A major renovation would be necessary.

Let me draw a merciful veil over the next step - the tearing apart of the darkroom, the tiling of the floor, the patching and painting, and the building of a new table for the enlarger still needed for monochrome. As I write I am awaiting delivery of a new computer desk and considering the future over another glass of red. I will have to learn enough of the Panther operating system, Photoshop, Silverfast and the Nikon software to start making prints.

Going digital? Yes, of course. There's nothing to it!

Alan is now 98 and although suffering failing eyesight, still maintains a keen interest in RPS activities. He was awarded the Fenton Medal in 2013 in recognition of his huge support to the RPS in general and the Australian Chapter in particular. He has written over 130 articles for the Victorian Chapter (latterly the Australian Chapter) monthly Newsletter over the years, plus others for the RPS Journal and the RPS PhotoHistorian.

Ferrari 512 - panning with a long focal length lens

How to photograph cars in action

JAMES MANN is a self-confessed car nut and shoots cars for *Classic and Sports Car* magazine. Here he shares the secrets of taking great car action shots.

As a new staff photographer joining the Haymarket photographic department in 1989 I had little idea or experience of how to photograph cars. At the time the publishing house had a number of the best known car magazines in its stable including *Autosport*, *Autocar*, *What Car*, *Classic and Sports Car*, and a new title called *Your Classic* to which I was to be attached. I had some of my first freelance work published shooting portraits for *Your Classic* and had got to know the small editorial team who were friendly. This could not be said for the photography department who were a cliquey bunch and resented me from the off…I later found out that another photographer from the department was lined up for the job I had got. So the reality was that any help I might have received from the more senior snappers in the department was lacking and I had to evolve very quickly. At the time car photographers tended to be secretive about their techniques, and even as an assistant I had been kept in the dark about how

Ford Mustang - using a 200-300mm lens, shutter speeds as slow as 1/30th second can result in a sharp image

some things were photographed. The first action car shoots I did for the magazine were pretty bad, and despite looking for any advice on techniques in the various photography manuals around I could find little useful guidance.

In 2002 when I proposed the idea of a book about *How to Photograph Cars* to my publisher I was thinking of my younger self arriving in that inhospitable environment and what I needed to know about the previously secret techniques of shooting cars on the move. So I'm going to explain how action car photography is undertaken today for a magazine feature illustrating this with my own images taken over 30 years.

Techniques are evolving all the time and each photographer will have their own way of shooting but these shots are the staples that have been proven over the years with a high hit rate. Hit rate is the percentage of successful images compared to the total number of images taken, and improves with practice.

First of all is the oldest and most developed of all types of action photography, that is panning. This is done by swinging the camera to follow the car as it passes, choosing a shutter speed that will freeze the car but blur the background. There are a number of variables to consider.

The focal length: The longer the lens the longer the car will remain in focus as perspective is flattened (see Ferrari 512, previous page), and with a 200-300mm lens shutter speeds right down to 1/30th second can secure a sharp image (see Ford Mustang, above). However with a wider angle 24-70mm lens the car is in the frame for a much shorter time and the depth of focus is very wide so a faster shutter speed of 1/125th - 1/250th second is needed to achieve a sharp image.

Speed of the subject: Too low a speed and a smooth pan is difficult to hold so a faster shutter speed is needed. Too fast and the eye can't keep up with the subject

The axis (front, side, rear): As the car is approaching it is passing through the plane of focus and a faster shutter speed is again needed, (see BRM P261, next page top left) likewise as it moves away from camera. If a front 3/4 or rear 3/4 view is needed a shutter speed of between 1/125 and 1/250th second is required. If shooting with a zoom lens you can follow the car in using a pull or twist zoom that can offer some interesting effects (see Tyrrell F1, next page top right).

A bumpy road will also affect success and require a faster shutter speed as will shooting a multiple

HOW TO PHOTOGRAPH CARS IN ACTION

BRM P261 - panning with a fast shutter speed

Tyrrell F1 - pull-zoom whilst panning

car pan (for example, see three Ford GTs, below left). If you wish to catch the car in the air for a jump, a faster shutter speed of up to 1/800th second will be needed (see Bowler Offroad, below right).

The other most commonly featured type of car photograph and seen on the covers of nearly every magazine is the cornering shot (see next page). A telephoto lens of 150mm or more is needed, and a shutter speed fast enough to capture the handling of the car as it drives through the corner but not so fast it freezes the tyres. The decisive moment is when the car ceases to appear to come towards the camera and starts to traverse the frame. Shutter speeds of between 1/400-1/800th second, depending of the speed of the car approaching should do it.

A cockpit photograph (see page 14) is another important staple of an action feature car shoot to show movement, with either an open or closed cockpit. This is not possible for a single seat racer, of course, although you can look into the cockpit if you can get close enough when the car is passing. A wide angle lens of between 17-40mm works best with shutter speeds from 1/30-1/125th second, depending how bumpy the road is. A pop of on-camera flash will also help to illuminate

the dark corners and freeze the dashboard instruments in a closed cockpit photograph. A forward facing view of the road can also make for another great in-car photo in the right location. Shooting from one open cockpit to another car can also work well.

A great opener for a magazine feature is a landscape image (see page 14). This is taken with the camera still and the car moving through the landscape, usually along the road. Either a long exposure or fast shutter speed can work for this depending on the light and the speed of the car.

Similar to this is what I call a scenic photograph. This is where the car is still and the background is moving. I've used trains, boats and car washes to achieve this. Shutter speeds again depend on the speed of the movement but I try 1/30th second right down to a second with the camera on a tripod.

Recently the movie industry grip (see page 14) is starting to be used for stills photography, so that cameras can be mounted onto cars. I only use a small rig or light clamps as often there is not enough time to fix anything complicated or the car is too valuable to do it to. A lightweight tripod, rubber suction cups and superclamps are mounted to the car with a small camera and

Three Ford GTs

Bowler Offroad - caught in the air

A Plymouth cornering

A Mercedes 300SLR cornering

HOW TO PHOTOGRAPH CARS IN ACTION

A Rolls Royce closed cockpit

A Bentley 8L open cockpit

A Mercedes W196 streamliner cockpit

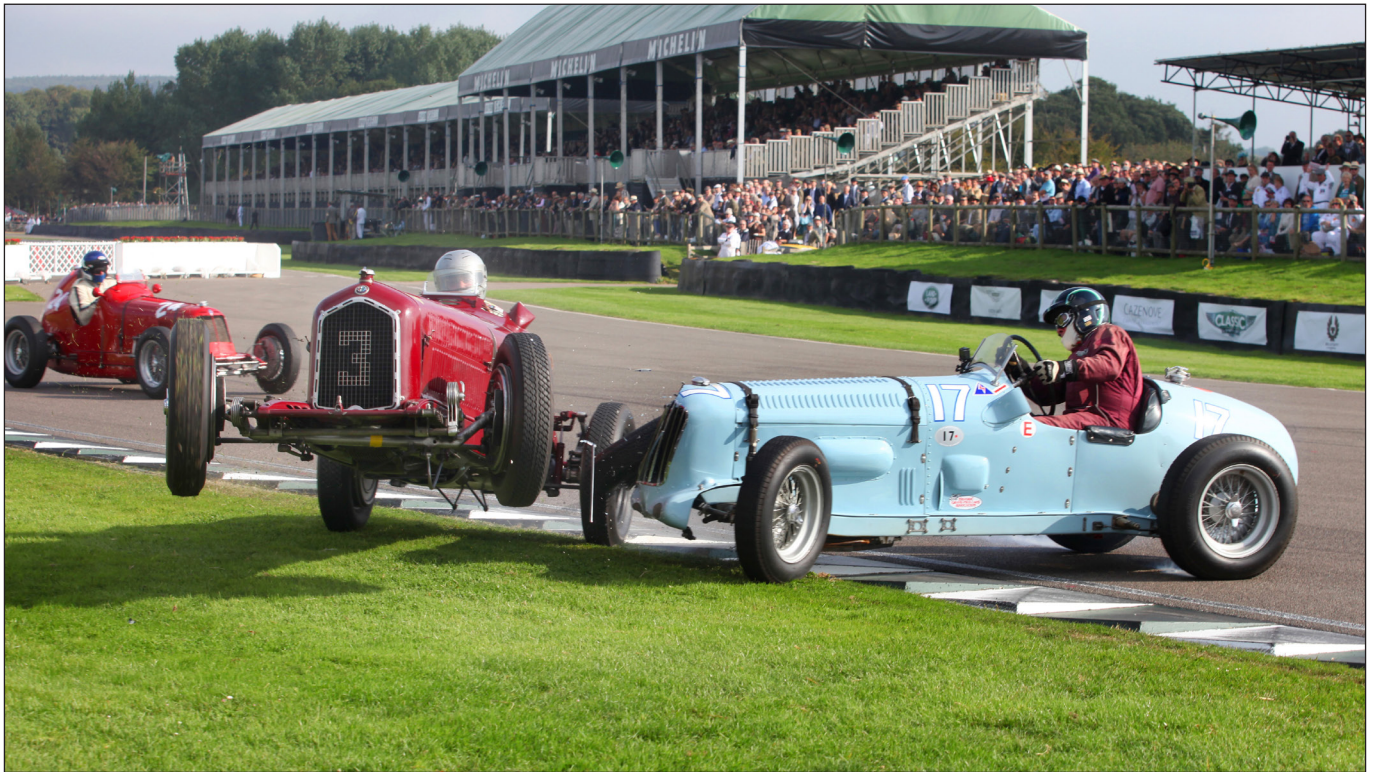*An Aston Martin DB3S - shooting from one open cockpit to another*

Typical landscape shots - on the left, a Ford Business Coupe

A shot taken with the camera attached to the car

Attaching a rig to a car

HOW TO PHOTOGRAPH CARS IN ACTION

The grab shot - being in in the right place at the right time and having the camera set up

wide angle lens. A window clamp is a great bit of inexpensive kit. The technique here is to switch off the engine and roll the car slowly and shoot using a long exposure of between 1/15th-1 second.

Then there is always the chance of a grab shot (see above); one of those images where you not only have to be in the right place at the right time but have the have the right auto-focus lens on and fast shutter speed.

A head-on image (see cover) is also useful particularly if the road is dusty as you often cannot see the tyres due to deep shadow, but a fast shutter speed in excess of 1/350th second and a long lens,200-300mm is usually required.

Finally the most common type of action image used is the car-to-car or tracking shot. This requires an extra camera car driver who will need to be smooth and confident. Car-to-car photography needs a quiet straight road with good visibility or a private, closed road or test track. You can shoot out of a window but it's better to use a hatch-back and lie down in the back and get low down so that the road whizzes through the bottom of the frame to give the feeling of speed. A slow to medium speed of 30-50mph is about right and both drivers need to hold position just metres apart so a static set up and safety briefing is a good idea before you start. Standard to wide angle lenses

work best with shutter speeds from 1/15th to 1/125th second offering the best results. If you are shooting more than two cars you may need a higher position to see every car, in this case a sunroof works well.

But why bother with all this action photography? It's difficult, dangerous and often involves getting up early in the morning when it's freezing cold. You could just create a CGI digital frame and place it on any road anywhere in the world.

Keith Jeffery from top London retouching house Taylor James said recently:

"The digital world is always looking for photo realism and it's a term that's bandied around far too often in the CG automotive world today. It's a set of skills based on traditional techniques that have to be learned and understood for decades and the goal to achieve photo realism in CG will never truly be realised."

If you would like to find out more about how to photograph cars, James runs regular RPS workshops, covering different areas of car photography. All details can be found on the RPS website.

You can see more of James's work at *www.jamesmann.com* and *www. howtophotgraphcars.co.uk,* and on his *YouTube* channel.

From RAW file to fully rendered image

– Profile choices with Adobe Camera Raw

Dr TONY KAYE ASIS FRPS takes a quick look at the huge range of variations which can be applied to images using Adobe Camera Raw and offers tips on which may suit different images.

If you shoot all your pictures as in-camera JPEGs then normally an article about camera profiles with Adobe Camera Raw (ACR) probably wouldn't interest you. ACR has always been able to process JPEG images but since ACR 10.3 was introduced in 2018, you have been able to choose from a range of different creative profiles. So, this article should appeal to both RAW and JPEG shooters.

For those shooting RAW files, a RAW converter has a multiplicity of tasks to perform that include, but are not limited to:

• Demosaicing the Colour Filter Array image to produce a R,G,B image
• Colour reproduction characteristics
• Tone scale
• Sharpening
• Noise reduction
• White balance
• Conversion to a standardised working colour space
• Compensation for lens characteristics eg. Vignetting, pin-cushion and barrel distortion

The camera profiles that are available within ACR affect the colour reproduction and tone scale of your images and that is the focus of this article. Back in 2002, Adobe in Photoshop Version 7.0.1 added RAW capability. I purchased my first DSLR back in 2004 (a Nikon D70) and up to and including Photoshop CS3 with ACR, I only had one profile to choose from. However, by the time I had graduated to CS4 and a Nikon D300, many more choices were available. At the RPS Imaging Science Group's Good Picture Symposium in 2009 I presented a comparison of a range of different RAW converters. At that time in ACR 5.3, 11 different camera profiles were available. Eight profiles were Adobe's attempt to emulate the results you would obtain from in-camera images or those from Nikon software and three were Adobe's view on how your images should look. Two were historic profiles from ACRs 4.3 and 4.4 and one was Adobe's new 'standard' camera profile. If we fast forward into 2018 and beyond, we have had a huge explosion in the number of profiles available to you within ACR. In this article I'll try and navigate you through the range of profiles available and to explore some of the key differences between them.

At the RPS Imaging Science Group's Good Picture Symposium in 2018 I reviewed the profiles available within ACR 10.3; in 2018 Adobe dramatically increased the number of profiles available and introduced an additional type of profile. This article draws largely on that review as a similar range is available in ACR 12. There are two classes of profile currently available, DNG Camera Profiles (DCPs) which can be regarded as your traditional camera RAW profiles used to create a R,G,B image from your RAW file, plus the new Enhanced Profiles. Let's take time to explore what the differences are between these two classes of profile.

DNG Camera Profiles

In very simple terms, a DNG Camera Profile (DCP) gets you from what the camera captures (ie. a RAW image) to a fully rendered R,G,B image. It takes into account the spectral characteristics of the camera's image sensor, applies appropriate colour and tone scale adjustments to provide accurate colours and represents the image in a standardised colour space, usually sRGB, Adobe 1998 or ProPhoto. Given that task, why would you need more than one profile? In an idealised world surely, accurate colour would be desired. However, surveys have repeatedly shown that not everyone wants accurate colour reproduction. It may be very important in medical and forensic photography but for portraits, landscapes etc., people in general prefer something different. Often a convincing lie is preferred to accurate colour reproduction. Adobe DCPs contain an additional look up table (LUT) that allows them to tune the colour to suit certain applications. They achieve this by having a 'baseline' DCP, Adobe Standard. They then couple this with a number of different LUTs to obtain a number of profiles such as, Color, Landscape, Neutral, Portrait, Vivid. Additionally, they have DCPs that have LUTs which attempt to emulate the colour

characteristics that the camera manufacturers have engineered into their cameras and software. So, as a Nikon user I can find a range of camera matching DCPs such as Landscape, Neutral, Portrait, Standard, Vivid, and Flat.

Enhanced Profiles

Enhanced profiles (EPs) are used to apply specific colour and tone modifications. Surely that sounds similar to a DCP? Not quite, as the Enhanced profiles work on fully rendered images that are already in a standardised colour space. Thus, these can be applied to RAW images that you have opened in ACR or to existing fully rendered JPEG or TIF images that you have opened in ACR. Unlike the DCPs, you have an amount slider available to you. This allows you to effectively dial in as much or as little of the characteristics the enhanced profile has. The amount slider ranges from 0 – 200. The default amount is the midway '100' position. If you select '0' then for a JPEG or TIF image, your image isn't modified at all by the enhanced profile. However, if you are using an enhanced profile on a RAW image the '0' position corresponds the result you would get from the Adobe Standard DCP RAW profile.
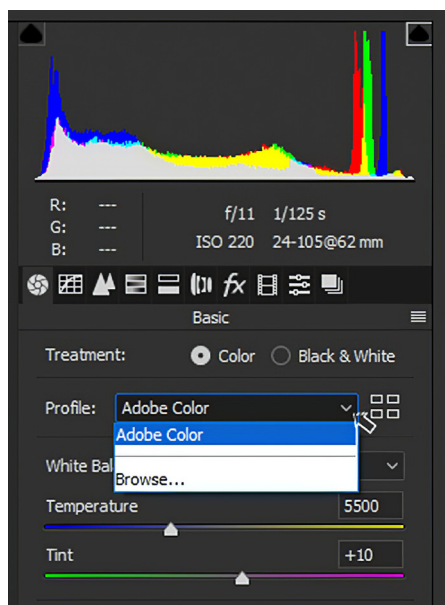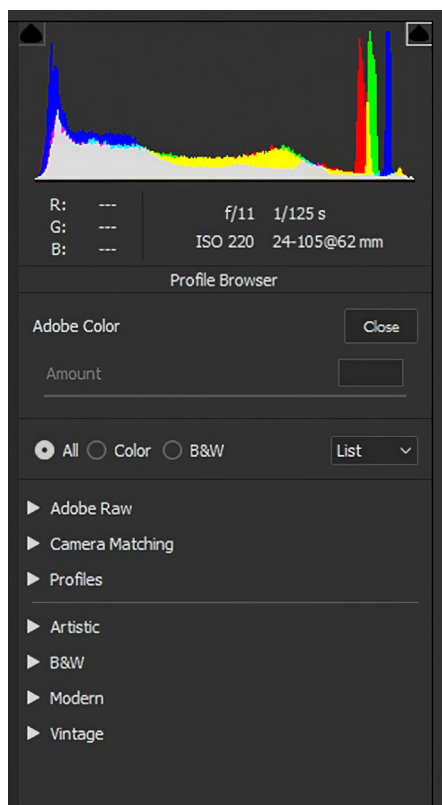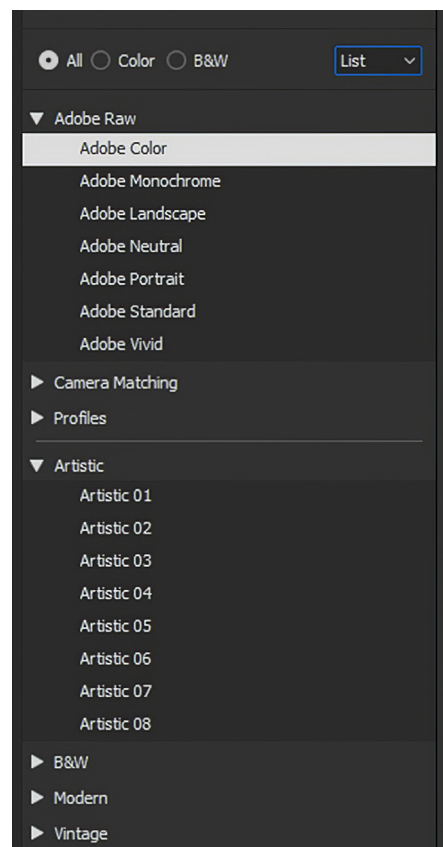

Figure 1

Figure 2

Figure 3

FROM RAW FILE TO FULLY RENDERED IMAGE

How to access the profiles

Once inside ACR on the basic tab you immediately have an option of working in colour or Black & White. While there are B&W profiles available, this article will cover only the colour profiles, apologies to monochrome workers! The next option is Profile which, when Photoshop and ACR are installed, has Adobe Color as the default profile. Using the drop down you can

Figure 4

select Browse, see figure 1. This will allow you to access a range of profiles, see figure 2. The top three above the dividing line are all DCP Profiles, and the four below are all Enhanced Profiles. The option Profiles isn't always present as it is where you can choose any custom profiles that you have created. If you haven't created any you will only have a choice of two categories of DCPs, Adobe RAW and Camera Matching. You can then open each category, see figure 3, and select what profile you would like to use, and you have plenty to choose from. Adobe recognise that choosing from a list is not for everyone so by selecting the Grid option you get to see an imagette preview, see figure 4, of the affect the profile has on the image, which some users prefer.
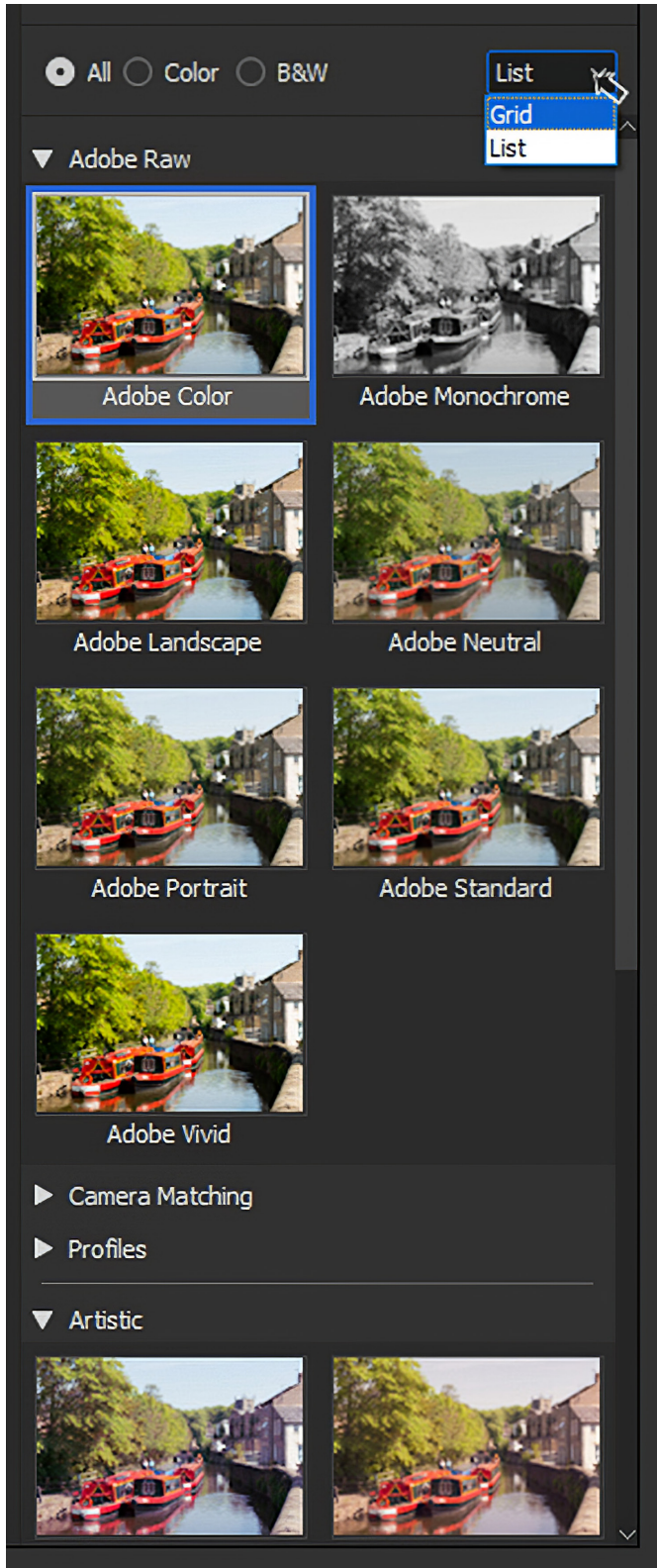
Amount of choice

It should be readily apparent that there is plenty of choice. The number of Camera Matching DCPs will depend upon your camera, but the number of Enhanced Profiles and Adobe RAW profiles should be camera independent. As mentioned previously this article will only cover colour profiles. For the D800 series of Nikons (800/810/850) there are 6 Adobe RAW DCPs and 6 Camera Matching DCPs. These are accompanied by 28 Enhanced Profiles. Given such riches, how do you choose which ones to use? You could try shooting a range of different images and then try all the profiles! As an imaging scientist by training, I thought there must be an analytical approach to comparing all the profiles to help understand what you see in the images.

Evaluation of DCP profiles

Photoshop is both a creative and analytical tool and can be used to evaluate images. With the assistance of Photoshop and Microsoft Excel, the following process was adopted to evaluate the profiles.

1. A RAW image was shot of a Macbeth Color Checker Chart (see figure 5).

2. The white balance was adjusted on the Neutral 5 patch of the Macbeth to ensure grey was truly grey! The RAW image was processed with all the DCP profiles

3. The images were saved directly from ACR as Adobe 1998, 8-bit TIF images. Care was taken to check if any of the images were outside of the Adobe 1998 gamut.

Figure 5

Figure 6

4. All the images were opened in Photoshop and a script was run to extract the L* a* b* values of all the patches.

5. The L* a* b* values of the images were compared directly with those of the original. From this is was possible to compare the colour accuracy, contrast, colour saturation and hue accuracy of the profiles.

DCP profiles - contrast

The difference in L* value between the white patch and the black patch was measured for every profile and compared with that obtained from the Macbeth Color Checker Chart. When plotted it gives a basic comparison of the different contrast levels the different DCPs produce. See figure 6. Negative percentage values indicate profiles that produce results lower in contrast than the original and positive one, higher.

The differences are visually very easy to discern, see figure 7.

However, just plotting the difference between black and white doesn't give you the full story.
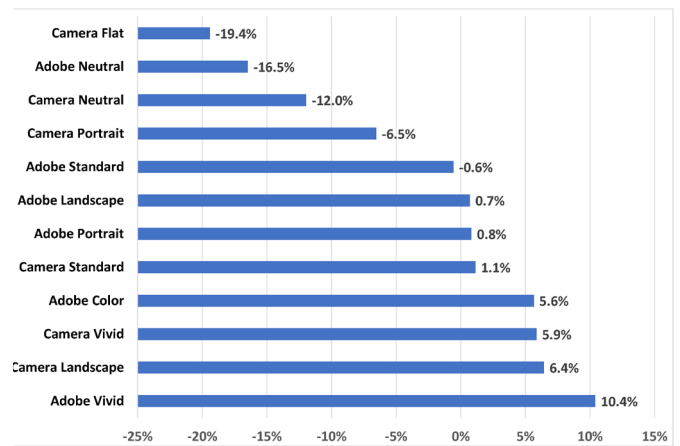
To understand what is happening to shadows and highlights it is better to do a plot of L* of the different DCPs compared to the L* of the Macbeth Color Checker Chart, see figures 8, 9 and 10.

If we separate the camera matching profiles from the Adobe ones, we can see Nikon and Adobe have different views on tone scale!

If we exclude the camera flat and the Adobe neutral profiles which are really special purpose ones and take the average of the camera matching profiles and compare that with the average of the Adobe RAW profiles, it's obvious Nikon and Adobe have very different views on how highlights should be reproduced, see figure 11.

Adobe have a clear preference for brighter upper mid tones and highlights. Adobe and Nikon have very different views on the tone scale for portraits where the difference is visually most marked, see figures 12 and 13.

This has been deliberately shown in monochrome to focus attention on tone scale only as we

Camera Flat -19%

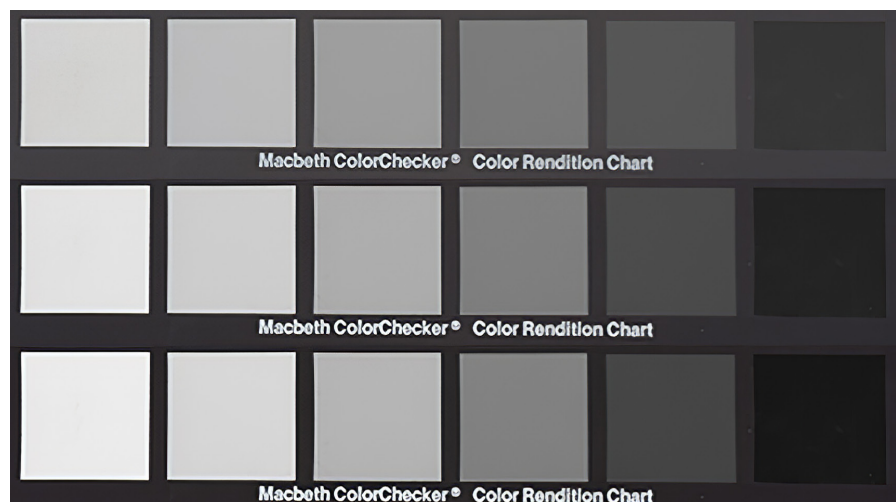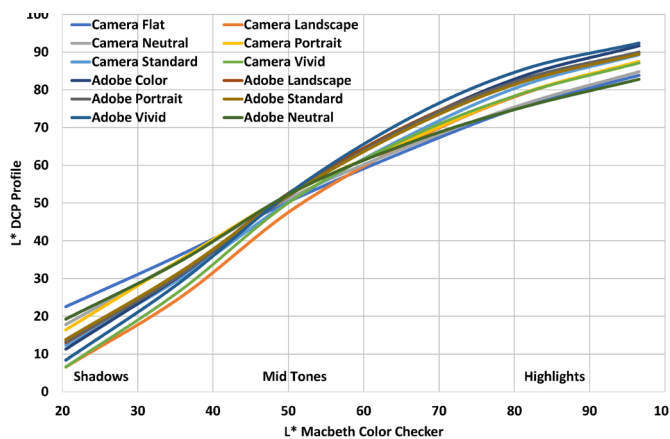Adobe Standard -1%

Adobe Vivid +10%

Figure 7

Figure 8
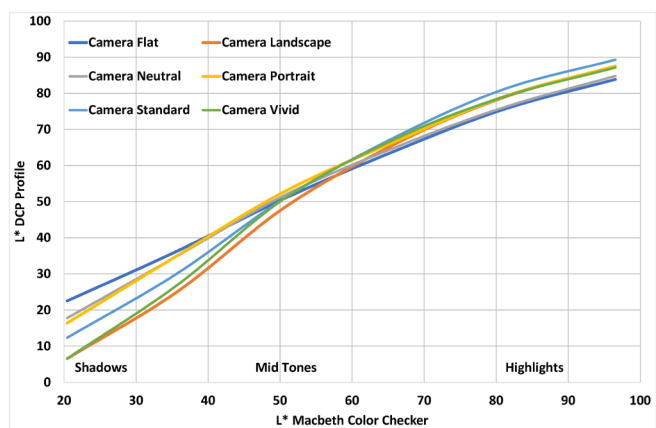
Figure 9

Figure 10
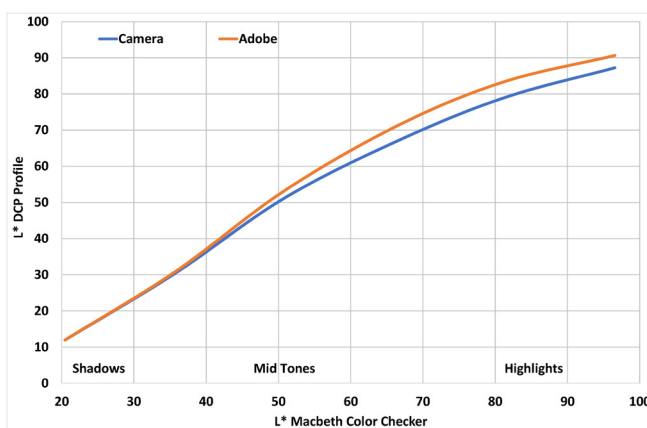

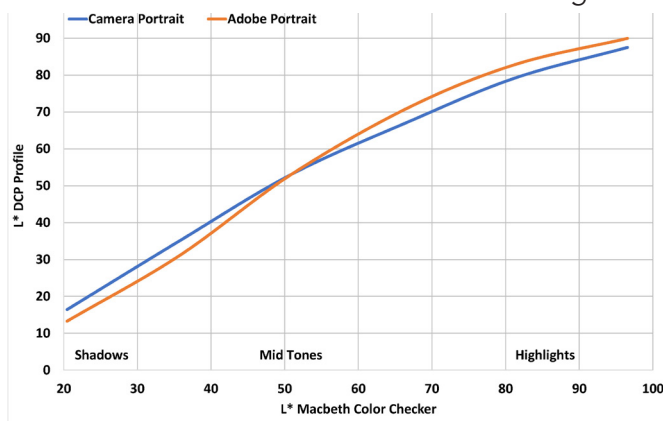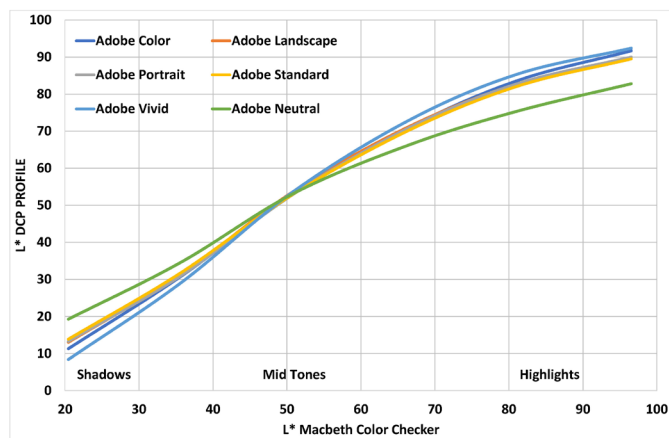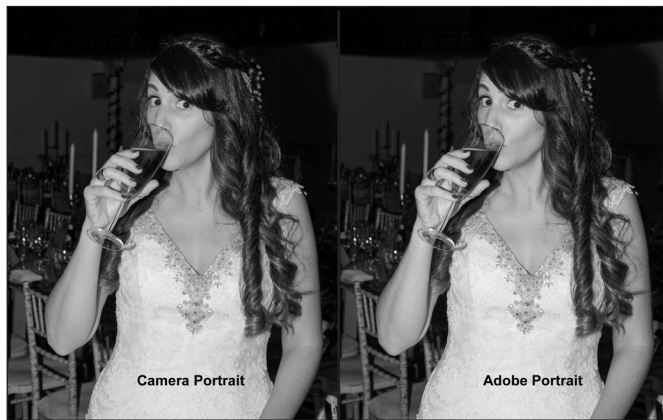*Figure 11*

Figure 12

Figure 13

shall go on to see later Adobe and Nikon have different colour preferences for skin tone and saturation.

Colour Reproduction

Let's now consider colour reproduction. The L* a* b* values of the images produced from the different DCP profiles were compared directly with those of the original Macbeth Color Checker Chart and the internationally accepted definition of colour error Delta E 2000 was used to provide an average colour error over all the colour patches, see figure 14. As it's an error, the lower the error the more accurate the colour

reproduction.

As mentioned previously often a convincing lie is preferred to accurate colour reproduction. Colour error numbers in isolation can be very misleading and tell you really little about how your pictures will look. Of more interest to photographers is the relative colour saturation of different profiles and their hue accuracy. That coupled with a profile's tone scale, conveys far more information than just colour error numbers.

Let us now take a look at the contrast and colour saturation of the different profiles. The objective measure of colour saturation is 'chroma'. Figure 15 is a plot of contrast from the grey patches

Delta E 2000 - Average Colour Error

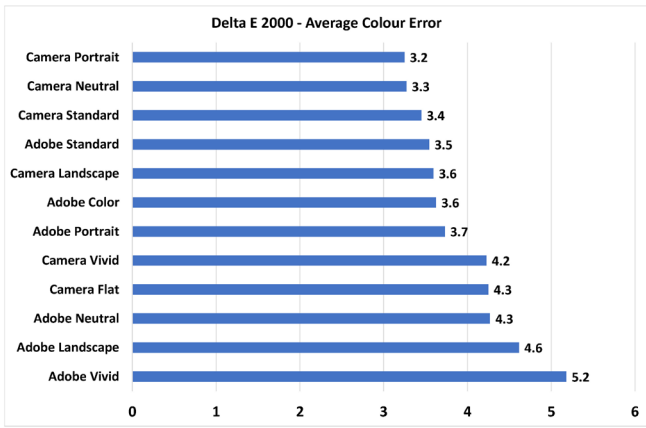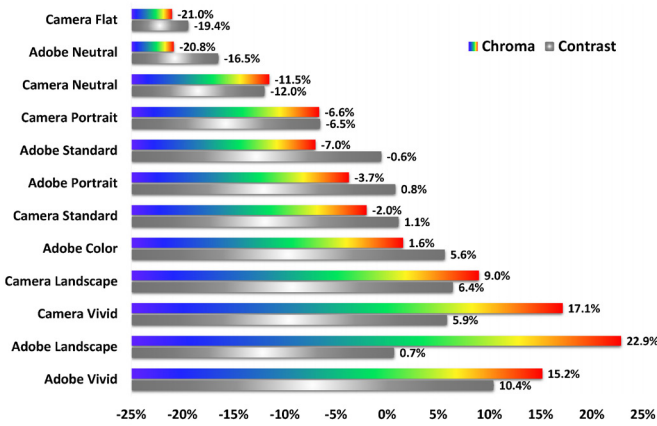| Profile	Value
Camera Portrait	3.2
Camera Neutral	3.3
Camera Standard	3.4
Adobe Standard	3.5
Camera Landscape	3.6
Adobe Color	3.6
Adobe Portrait	3.7
Camera Vivid	4.2
Camera Flat	4.3
Adobe Neutral	4.3
Adobe Landscape	4.6
Adobe Vivid	5.2

Figure 14

Figure 15

and average chroma of all the colour patches compared to the Macbeth original. Profiles with lower contrast and lower chroma will tend to look 'wishy washy' (a wonderful technical term!) and those with higher contrast and chroma will look 'punchier'. Figure 17 (next page) shows visually the difference between the Camera Flat Profile and the Adobe Vivid profile.

Having a boost in colour saturation via enhanced chroma can be very attractive as long as there aren't any serious errors in hue. You still want blue skies to look blue and not move in the magenta or cyan directions! So, let us now take a look at the hue errors of the different profiles. This is measured in degrees. Figure 16 shows how the hues are distributed as a function of angle. Table 1 shows the effect

hue errors have on individual colours. Figure 18 shows the hue errors on the primary and complimentary primary colours for the different profiles.

From this it would suggest that the Adobe profiles have lower hue errors than the ones that attempt to emulate the camera manufacturer's performance. This is brought into sharp relief if you calculate the average hue error, ignoring the sign of the error (see figure 19).

But can you see this in real images? See figure 20.

This clearly shows a difference in the hues of the sky and the grass. The analysis would predict the blue skies from the camera vivid profile to be moved towards magenta and those from the Adobe vivid profile would look more cyan in comparison. Additionally, the analysis would predict the greens of the grass from the Adobe profile to be yellower than those from the camera vivid profile. Before we leave the discussion of
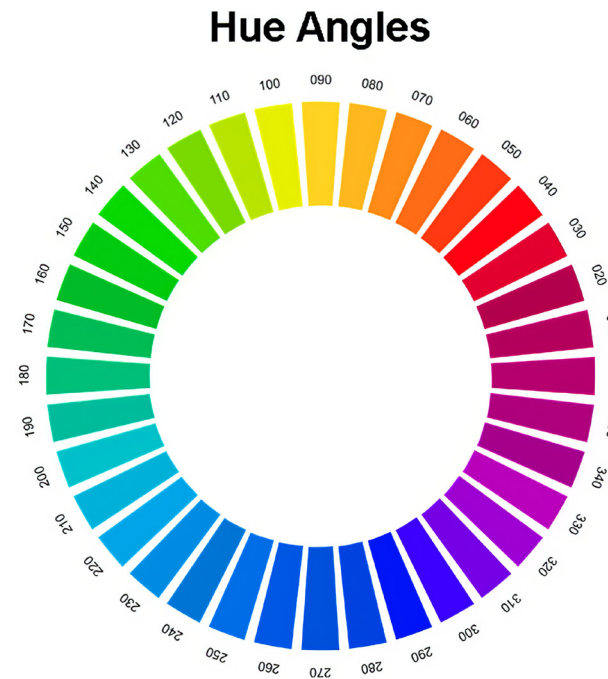
Hue Angles

Figure 16

Hue	Positive Errors (in degrees)	Negative Errors (in degrees)
Reds	Move towards Yellow	Move towards Magenta
Greens	Move towards Cyan	Move towards Yellow
Blues	Move towards Magenta	Move towards Cyan
Cyans	Move towards Blue	Move towards Green
Magentas	Move towards Red	Move towards Blue
Yellows	Move towards Green	Move towards Red

Table 1

FROM RAW FILE TO FULLY RENDERED IMAGE
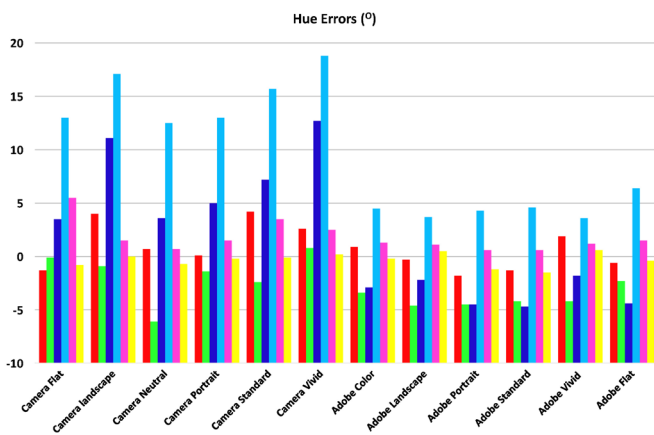
Camera Flat
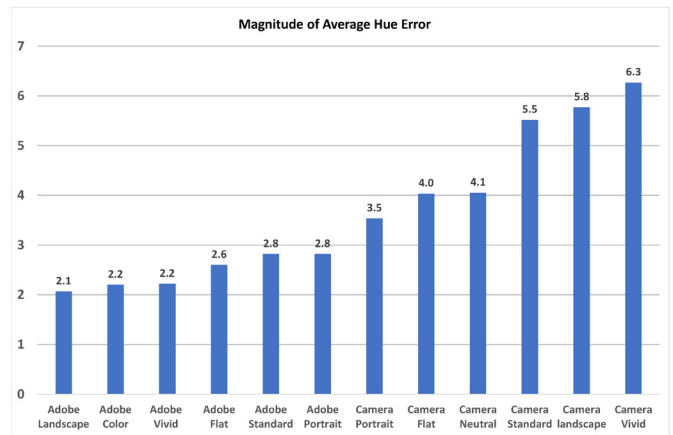
Adobe Vivid

Figure 17

Figure 18

Figure 19

Figure 20

hue accuracy let us consider the reproduction of skin tone and compare the hue differences between the Adobe and the Camera portrait profiles.

Previously we had seen that the Adobe Portrait and the Camera Portrait profiles delivered very different tone scales. The differences between these profiles also extend to colour reproduction. The 'light skin' patch from the Macbeth is 5% higher in colour saturation from the Adobe

Portrait profile than from the Camera Portrait profile. Additionally, the hue errors will tend to make the skin tone from the Adobe profile redder than the Camera profile which will tend to be yellower. This can be readily seen in figure 21.

Evaluation of Enhanced Profiles

As mentioned previously there are 28 colour enhanced profiles available. We could adopt a similar approach to evaluating them to that used for the DNG Camera Profiles, but given these
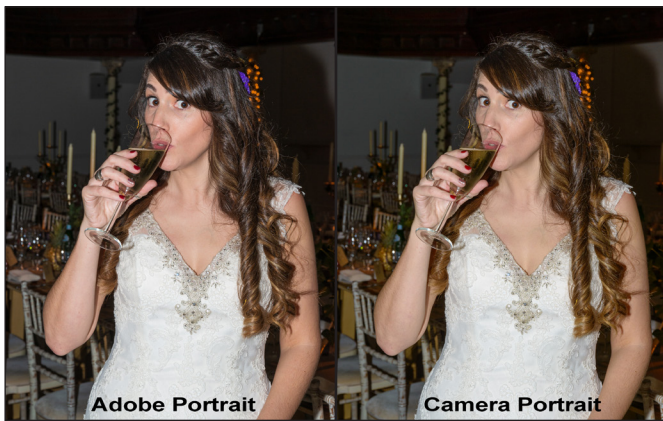
Figure 21

Figure 22

Figure 23

Figure 24

profiles are applied to fully rendered images what is our starting point? If the image started life as RAW then we could have 336 (12 DCPs x 28 EPs) combinations to evaluate! At best that could be pruned down to 56 if we chose the Adobe Standard and Camera Standard DCPs as our starting points. Couple that with the fact that these EPs are really special effects or 'looks' that are purposely designed to yield unusual tone scales and colour reproduction, interpretation of the results would be challenging to put it mildly. It will be much easier to try and provide a visual snapshot of the choice available. Figure 22 shows the 'Artistic' EPs, figure 23 shows the 'Modern' EPs and figure 24 shows the 'Vintage' EPs.

As can be seen there is almost a bewildering choice where some EPs will give you the look you desire. I do want to issue a note of caution about some of these profiles. A number increase the chroma considerably. With these profiles boosting the colour saturation so much, you could run the danger of trying to produce colours outside of the gamut of your working colour space. Let's use the Adobe Standard DCP as our baseline then compare it with the Modern 1 EP, see figure 25. Remember the only difference is that the Modern 1 applies a LUT to the Adobe Standard profile. Depending how you are reading this article, the gamut of your screen or the gamut of the print process won't really show you the difference in chroma between the two images, but nevertheless you can still get a good feel for the degree of chroma enhancement.

These images used ProPhoto as the working colour space. Let us turn on the out of gamut warning in Photoshop initially proofing as sRGB in figure 26. Out of gamut colours are reproduced as grey.

Let us turn on the out of gamut warning in

Photoshop proofing as Adobe 1998 in figure 27.

Let us turn on the out of gamut warning in Photoshop proofing using the profile for my Canon inkjet printer (iP8750) in figure 28.

The moral is clear, exercise great caution when using a profile that dramatically boosts the chroma! Additionally, if you do want to use such profiles it's a good idea to use a wide gamut colour space such as ProPhoto, as your working colour space.

Final Thoughts and Recommendations
DNG Camera Profiles

There is, in my opinion, almost too much choice and that any recommendations I may make would suit some users and not others. However, I will share what works for me. I tend to confine myself to three profiles. For portraits and images where faces feature large in the image, I use the Camera Portrait profile as opposed to the Adobe Portrait profile as I prefer the softer look it yields. For most other subjects including landscapes I used to use the Camera Standard profile. However,

FROM RAW FILE TO FULLY RENDERED IMAGE

Adobe Standard DCP   Modern 1 EP
Figure 25

Adobe Standard DCP   Modern 1 EP
Figure 26

Adobe Standard DCP   Modern 1 EP
Figure 27

Adobe Standard DCP   Modern 1 EP
Figure 28

since evaluating these profiles, I have switched my allegiance to the Adobe Color profile as its rendition of blues is less magenta than that of the Camera Standard profile. To my eyes this produces more natural looking skies. However, I do find the upper scale contrast a little harsh so I tend to pull back on the highlights more than when I used to use the Camera Standard profile. If I find that an image is lacking in 'punch' I may use occasionally the Camera Vivid profile.

I do recognise that some folk may choose a single profile for everything, say Adobe Standard and then adjust from there to suit the subject matter. Personally, I find having a 'portrait' starting point with the Camera Portrait profile and a 'general purpose' starting point provided by the Adobe Color Profile useful. A word of warning, if you are a Canon user, then while I would expect the Adobe profiles to yield similar results to that obtained from Nikon cameras, the relationship

between the Adobe profiles and the Camera profiles is likely to be very different. Thus, please don't read this article and then look at the plots and the images and expect to see similar differences, as images straight out of Canon cameras and Nikon camera do look very different! The same goes for you folk using Sony, Pentax, etc.

Enhanced Profiles

With so much choice the only recommendation I can make is try them and see which ones suit your creative intent. My personal opinion is that you can regard them as 'effects' that you apply to existing images. Additionally, don't forget to use a wide gamut colour space such as ProPhoto if you are using one of the enhanced profiles to significantly boost colour. If you don't, you could easily find that the working space you are using will limit the amount of colour enhancement you will achieve.

Shoreham Beach, West Sussex

Seascape - from idea to post-production

SLAWEK STASZCZUK is a professional photographer based in Brighton. He specialises in landscape, travel and architecture shots. He tells us how he takes an idea to a finished image.

Creating an image can often start with an idea. But achieving the image that you have in your mind requires careful planning and execution. To illustrate this I shall explain in detail how I created the above shot of Shoreham Beach in West Sussex, from my original idea to post-production.

The idea

The clouds looked quite interesting on that early December afternoon, promising a good sunset. So I decided to give it a go and get some

photography done. I took a short drive to nearby Shoreham-by-Sea, with three potential spots in my sights. First, the boats moored on River Adur. The second option was the oft-photographed and iconic view of the town seen across the river. And the third possibility was the beach. With any luck, I thought to myself, I might get some material from more than just one spot.

Dwindling options

After driving through the town, I saw that the tide

SEASCAPE - FROM IDEA TO POST-PRODUCTION

was really high on the river, and there was no way I could do what I had in mind at this location. So I didn't even think of stopping there, and drove on to see what opportunities the next two spots might offer.

Next, I tried the town view. However, it quickly became apparent that the clouds were thickening a bit too quickly, and I wouldn't get the effect I was hoping for, and soon it looked like the sun had disappeared behind the cloud for the evening. There was also a new development taking place on the river bank which was rather spoiling the view, and blocking much of the view of the church which has been one of the town's high points.

View of Shoreham-by-Sea from across the river

So I walked to the beach, for my 'last chance', which seemed to be the only viable option that evening.

The coast in Sussex is quite tame for the most part, except for cliffs in a few places, and sadly these are far away from Shoreham. I knew then that I'd have to work with some man-made structures as foreground; or maybe go for a minimalistic approach, without any obvious focal point. The beach affords a range of sea defences; piles of boulders interspersed with wooden groynes, and I decided to focus on these features.

On the beach

First, I took a snap of a wooden groyne, and quickly realised it wasn't going to work. Because there was no direct lighting, the image lacked impact. I felt the groyne didn't really work well enough as foreground in these conditions. With more decided sunlight, I might have been able to work with long shadows cast by the groyne, but this was not going to be an option on this evening. Still, I took a test 'snap' to check if there

Groyne on Shoreham beach

was anything to be had that I wasn't seeing. But it only confirmed my impressions.

In the distance you can see the boulders that I moved to a couple of minutes later. Luckily, these offered much more room for manoeuvre.

Boulders on Shoreham beach

The westering sun gave the boulders a sheen, which caught my eye. I really wanted to make it prominent in the image. At the same time, I also wanted to include as broad a stretch of the sky as possible in the frame - since the clouds were quite interesting, although not exceptionally colourful. After a few quick snaps, I decided to 'dissolve' the sea and get the clouds to streak by using a long exposure. All of these wants dictated my choice of perspective, focal length, and exposure time…

Technicalities and practicalities

To encompass the largest possible stretch of the sky in the frame I chose the widest angle lens I had at my disposal, a 17mm. Then I got much closer to the boulders, to fill the breadth of the frame with them, and to make them appear really close to the viewer, and their details more palpable. Next, I adjusted the tripod to a height from which the reflections on the boulders

appeared strongest when seen through the view finder.

Since there was still a lot of ambient light, I used a flat neutral density filter (10-stop strong), in order to allow me to slow down the shutter speed and to create that ethereal effect on the moving water, and the smudging in the clouds. Because there was a lot of contrast between the sky and the rest of the frame, and because I was looking straight into the sun, I also used a graduated ND filter. The graduated filter was a reverse hard-edged 0.9 ND grad (3-stop strong). This filter is darkest near the centre and slowly tapers off towards the upper edge, and is designed specifically for capturing sunsets.

Camera settings

These two filters gave me a 30 seconds exposure, at *f/8* and ISO250, which was just enough to create the effect I was after. I could have switched to 'Bulb' and taken a longer exposure at a lower ISO, and perhaps at a smaller aperture, but I chose not to, because the warm glow on the boulders was evidently very ephemeral, and I was determined to capture it. The light was quickly shifting and a couple of minutes later a thick layer of bluish clouds covered the sun, never to reveal it again on that evening. Seeing what was inevitably about to happen, I preferred to take a few slightly different shorter exposures while the warm reflections were dancing on the boulders, and to be able to do any necessary tweaking in between, rather than taking one longer exposure, with no opportunity to correct it.

Further snapping

Eventually, the first 'proper' long exposure (after a few less interesting shots without the 10-stop filter) I took turned out to be the most effective, and didn't need any tweaking. I took three more from slightly different angles, and then the glow was gone. Nevertheless, I kept shooting for about an hour afterwards. Even though there was no red sunset or afterglow, and everything turned blue very quickly, the constantly shifting light created interesting opportunities for quite some time. Later, as it was getting darker, and I no longer needed the 10-stop filter to slow down the shutter speed, and as some heavy clouds were blocking the brightest part of the sky around the sun, I swapped the reverse filter for a regular hard-edged .6 grad (2-stop strong), and used it

for the rest of the session.

Wind from the land

There was a healthy breeze all through the evening, but luckily, and quite unusually, it was coming from the land. Which was welcome news for me for two reasons.

First, on a strictly practical level, I didn't have to cope with sea spray settling on the filters, or on the lens. When the wind is blowing from the sea, you can easily spend most of the time trying to wipe the droplets off the filter. And what a Sisyphean task it is… even if you manage to get rid of the water, you invariably end up smearing the filter with salt residue which is hard to get rid of until you give the filter a wash with fresh water.

Second, it was also favourable on an aesthetic level, since the wind was blowing roughly towards the sun. This allowed me to create an impression of 'acceleration' in my long exposures, with the cloud streaks pointing towards the sun. Clouds smudging sideways across the frame wouldn't have the same impact.

Post-production

I always prefer to do as much work as possible before I press the shutter release button in order to do as little as possible later on in editing. I follow the old cliché of 'getting it right in the camera', and don't rely on software gimmicks to salvage botched exposures, or to create phantasmagorias.

This image is no exception. All of the edits that I applied were basic tonal and colour corrections, noise reduction and default sharpening. I also applied automatic lens corrections, including chromatic aberration removal and geometric distortion correction. Finally, I did a little horizon straightening at the end (although not much was needed). All of those operations took about a minute.

Tonality and colours

White Balance: The image was shot set on Daylight. I moved the Temperature slider substantially, and the Tint slider slightly, to the right, in order to warm up the image and give it more of a sunset colour palette.

Tonality: I brought Highlights and Whites to negative values to recover some of the detail in the brightest spots. Then I used Clarity and

SEASCAPE - FROM IDEA TO POST-PRODUCTION

Check the before and after post-production comparison:

RAW / FINISHED IMAGE
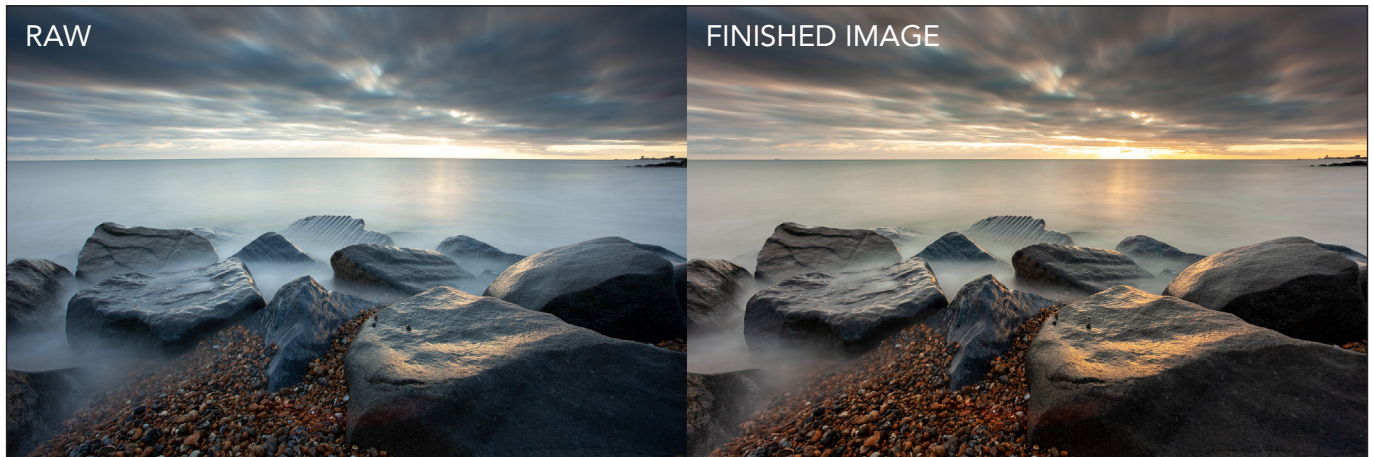
Dehaze at low positive values to increase local contrast and definition. Finally, I slightly raised the overall Contrast.

Colour: I used Vibrance to liven up the colours somewhat. I generally prefer to use this parameter, rather than Saturation, as it is more selective; it doesn't add the same amount of saturation to each pixel indiscriminately.

Detail

Sharpening: I essentially accepted the default settings, apart from Masking. This parameter allows you to limit the area to which sharpening is applied, and therefore can help you avoid needlessly accentuating noise in portions of your image that don't have any defined detail (such as skies).

Noise Reduction: I was only concerned with Luminance and Color, both of which I increased slightly from their default values, while checking the effect at 100% view in the noisiest areas of the image, otherwise I left the sliders at default settings.

Lens Corrections

Chromatic Aberration: The automatic removal, a one-click affair, did everything that was needed. Which in this case was some green and purple fringing along the boulder contours in the corners.

Lens distortion: At 17mm, the lens I used has quite a pronounced barrel distortion. The automatic correction based on the profile for this particular lens did a satisfactory job.

These are all the settings I used, and I didn't do any further editing in Photoshop or any similar application.

I used ACR (Adobe Camera RAW) plugin for this example, and most readers will likely be familiar with it, but any good RAW processing software today offers identical or analogous tools, and similar effects can be easily achieved in other programs.

Equipment and settings

- Camera: Canon 5D MkII
- Lens: Canon 17-40mm @17mm
- Tripod: Manfrotto 190
- Filters: 10-stop ND + 3-stop reverse ND grad, from Breakthrough
- Shooting mode: Aperture priority (compensation +1 stop)
- Aperture: f/8
- Shutter speed: 30s
- ISO: 250
- Metering: Evaluative
- Focusing: Single shot
- Auto-Focus points: 1 in the centre
- Image quality: RAW
- White Balance: Daylight
- Back button focusing

Slawek offers workshops and tuition from his Brighton base. He also regularly publishes blogs on his website.

Read his blogs - which explains why 'Landscape photography is simple' - and see more of Slawek's work at *www.photoss.net*.

SCARY!

Ian Thompson ARPS

At my club (Beacon, Malvern) we run a monthly themed competition, the results of which add up towards a silver pot at the end of the season. The competition is designed to foster creativity, both in terms of the original taking and subsequent processing of a picture. The judgments are made on-line by all those who enter, which brings some consistency to the scoring.

I am a keen follower of the competition and I try to think outside the metaphorical box to produce my entries. The image which is the subject of this article was produced to fit the theme of 'Scary!' and I was determined to come up with something other than the standard made-up ghoul or picture of a pumpkin, etc. The germ of an idea slowly took root which required some staging but nothing too arduous. Three subject sources were required: a bedroom, a girlfriend and a giant insect. The first was easy, the second not so, the third took the most effort. Starting with the last item first….

A friend at the club is a very proficient macro- and micro-photographer and is knows to acquire weird subject matter for his picture-taking. I knew that he had in his possession a (dead!) giant Amazonian fire ant - these beasties are 3 cm long and quite fearsome looking. I borrowed his pet and set it up on a piece of white card and lit it with flash from a planned direction. I knew that - if I was to inject realism into the final creation - I would need a depth of field greater than is possible using a macro lens even if well stopped down. So I took 50-or-so images shifting the focus plane slightly for each so that

the resultant series of shots could be funnelled into Zerene image-stacking software, the output of which would be an image which would be sharp from front to back. I carried out this process from two viewpoints because at this stage I was not totally clear as how the final picture would be constructed.

The two finished, stacked ant pictures were then cleaned up and cut out from their backgrounds to form an element of my creation. I have found that a major fault when combining one image with another is to make the cut out edges too sharp. Even the highest resolution images from the best cameras with near-perfect lenses do not produce hard pixel transitions of real-world, hard-edged items. So I always ensure that when cutting out an image, I right-click the selection marquee, select 'feather' and set the range to a couple of pixels. This gives the cutout a believable feel when it's inserted into another picture. Colour balance is another bug-bear for composited images; all too often the source images are taken in light of different colour temperature and these need to be adjusted carefully to fit the final scene. This aspect would not be a problem here, as both the macro and subsequent bedroom shots were taken in light of very similar colour.

Then, I needed to get a picture of my bedroom, which involved persuading my girlfriend to climb into the bed and pull the covers up to her chin. I had not explained my ultimate goal at this point so you might understand that she was a bit quizzical. However, when I asked her to scream in fright at an empty space 2 feet from her nose, she became more concerned. Just what I needed! Seriously, after some reassurance and persuasion, she performed the task with aplomb, and I got my picture.

So to the screen, Photoshop, and the moulding of my images into the desired result. Normal processing of the room picture was easy enough, though - you might imagine - not particularly

Above - The giant Amazonian fire ant, top, as borrowed, middle, focus-stacked and cleaned up and bottom, the starting point for ant number 2.

Right - The bedroom, and its evolution to the final image.

scary at this point. Enter the ant which, cut out from its background, was scaled and positioned appropriately. At this point it was apparent that the ant didn't stand out too well against the golden bedspread, so I had to re-think this element. My girlfriend had run for the hills by now, so I covered the bed with a white duvet and stuffed some pillows under it to simulate a body, then re-shot the scene and cut out the duvet on the screen to overlay the bedspread. Even though this is a fantasy image, believability (or maybe suspension of disbelief) is important in my opinion. Simply placing the ant on the picture does not produce the right result - it 'floats' and needs to be 'grounded'. This is effected by two methods: shadows and weight. The reader will notice that the direction of light on the ant was chosen at the taking stage to be that which emanates from the window in the final picture. The shadows were created by adding an exposure adjustment layer, dialling down the exposure by three stops, pouring solid black onto its mask and then painting white onto it in the right places with a small, soft brush at low flow so as to show darkened areas. A bit of a slow, delicate process but it meant that I could build up realistic looking shadows of the ant's legs. An appreciation of the way that shadows are formed from diffuse light (from the window) brings reality to the scene. Much easier, the feeling of weight was procured by using the Photoshop 'Liquify' tool to drag small depressions into the duvet under the ant's feet. Also, placing a section of the ant's leg 'behind' the foot of the body in the bed gives realism to the scene.

Completion was approaching but I suppose I was becoming a little screen-blind and used to looking at my creation, so I felt that more was needed to tip the viewer over the scary edge. Enter ant number two - the second set of stacked pictures I took in which the ant was lit from behind. It was an accident that the window was slightly ajar when the bedroom scene was captured and now I was able to make use of that fact. Ant number 2 was made to appear to be climbing through the window for his share of a snack! Shadows were vitally important here as they would be the only clue as to the beast's presence and solidity.

The finished result has - almost without exception - caused gasps when viewed by the uninitiated. I have been told it is horrific to look at. Job done, then!

BETRAYAL

Nick Browne ARPS

Some time ago I was asked by a friend if I could provide some images to accompany a series of poems he had written. As I am always on the lookout for new photography projects I responded with a tentative yes. So he emailed some of the poems, I read them carefully and set to work, well out of my comfort zone. We then began what turned out to be a programme of 'editorial meetings' in coffee shops and pubs. At the first one I took a hard knock as I learned that I was not supposed to be 'illustrating' the poems but rather developing images that conveyed a similar message. A subtle distinction but I quickly learned that my early attempts would not do.

For subsequent get togethers I took along postcard sized prints and returned home with three piles: a rejects pile, a good but 'needs further work' pile and a set of images deemed to be finished. Over time this last pile got bigger.

'Betrayal' joined the last pile and here I will go through how it was created. I began by trawling my Lightroom library for elements that I could use for composite images and for this one I settled on these:

I brought them all into a new document in Photoshop and put them into groups: a Wedding Dress group that was going to provide a background, a Couple-Dress-Bed group and a Confetti group. Later I would add a Border group above all these.
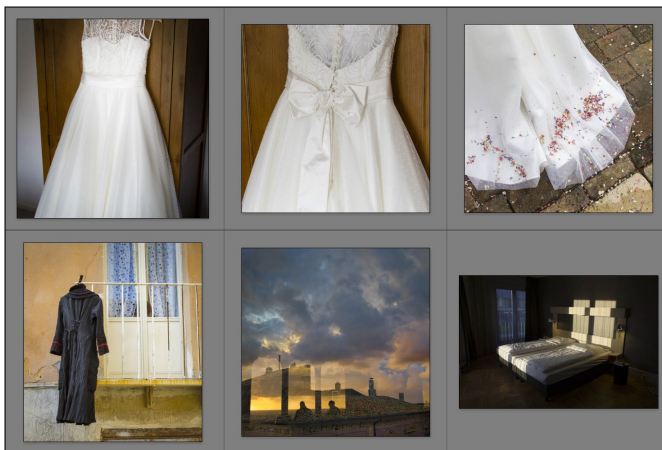
The Wedding Dress group (blue layers) was simple to deal with. I resized all the layers, duplicated one of them and rotated it. Wedding Dress 1 was set to the Lighten blend mode. I added a Solid Colour adjustment layer set to Colour blend mode and 40% opacity and painted on layer masks to get a background I was happy with.
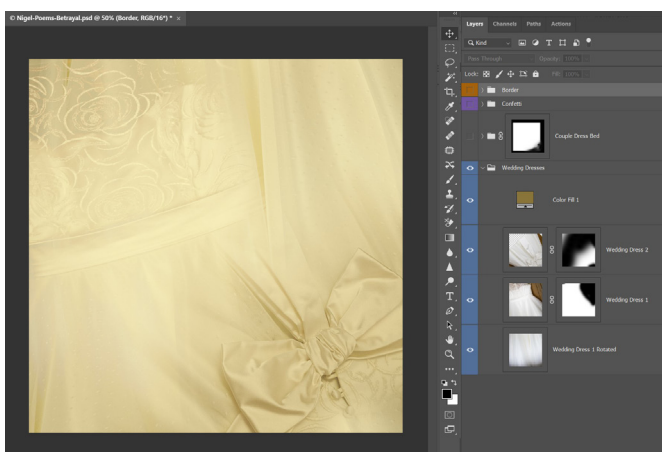
I then worked on the Black Dress image (red layers). Before that I applied a layer mask to the whole Couple-Dress-Bed group. I double clicked the mask and set the feather to 20px.

The first task was to make some modifications to the lower part of the photo. On a new layer I cloned out a couple of distractions. On another layer set to Colour blend mode I then made some colour changes. Sampling colours from other parts of the image, and with a soft brush set to a low flow and the Colour blend mode I added colour to the grey patch on the wall and to the bottom left corner, masking the dress. A Black and White adjustment layer at 60% opacity and a layer mask allowed me to make some further tweaks to the colours.

Next I needed to mask out the windows and some other details. Clearly there are many selection methods available but for this I used the pen tool. I made a path around all the parts of the window that were visible, applied it as a selection and then made the mask, adding a few tweaks with a brush.

Then I activated the Couples layer and moved it into place in the window.
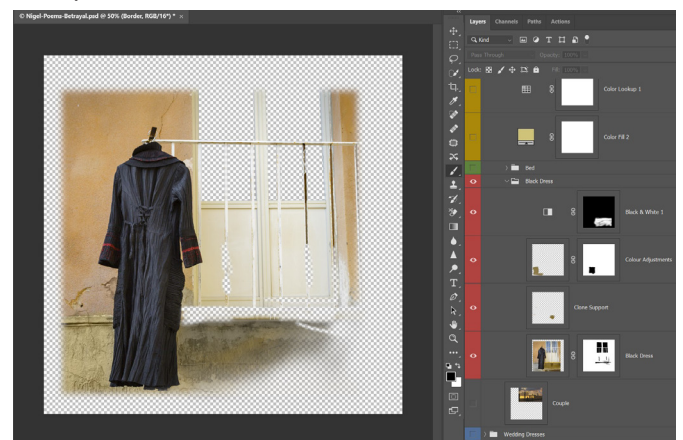
Now to the Beds group (green layers). I added a white layer mask to the Beds image and double clicked it to enter Layer Styles. There I adjusted the 'Blend If' on 'This Layer'. I combined this with some painting on the mask with a soft black brush. To brighten parts of the beds I filled a new layer with 50% grey and set it to Overlay blend mode. I sampled a light tone from the image and dodged with it using a soft, low flow brush. Finally, I added another layer filled with white and set to the Soft Light blend mode.

Above the Beds group I added two more layers, one a Solid Colour layer set to 25% opacity and the Colour blend mode. The other a Colour Lookup - 'Crisp-Warm' at low opacity.
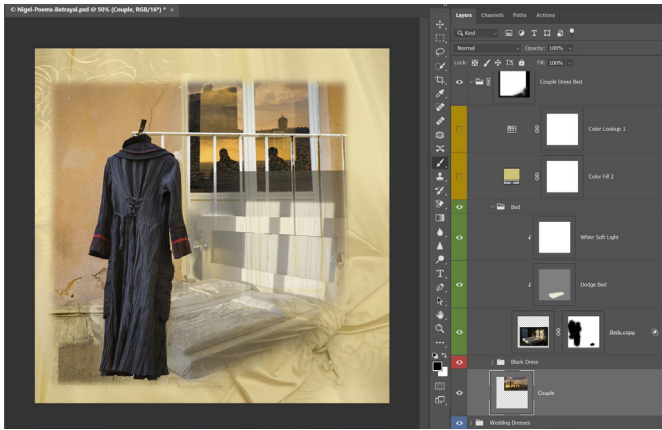
For the Confetti group (violet layers) I first made a copy of the Confetti layer and set it to the Soft Light blend mode. The first Confetti layer was set to Multiply and layer masks added to both of the layers. Lastly I added another Solid Colour adjustment layer and set it to the Colour blend mode. Working on all three layer masks with a soft black brush I settled on the effect I was after.

Finally (at last!), and this is something I have
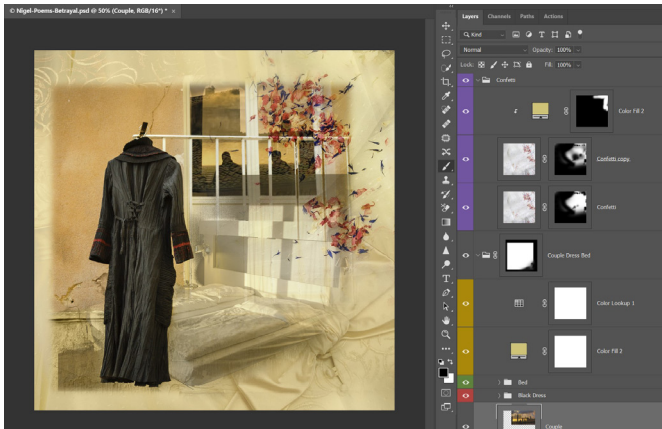
done with all the 'Poem' images to provide some consistency, I added a Border Group (orange layers). It comprises two layers. First I made a 'Stamp' layer (holding down Ctrl, Alt, Shift, E) to merge all the work so far onto a single layer. I masked out all but a narrow border, double clicked the mask and adjusted the feather, and set the layer to the Multiply blend mode. On top of this I added a final layer filled with white and set it to the Darken blend mode. I double clicked this layer to get to Layer Styles and added a Stroke with the Darken blend mode using a dark tone sampled from the image.
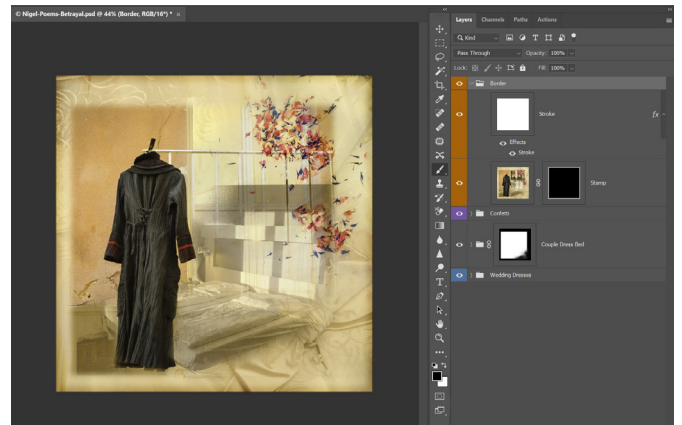
The only other adjustments I made were some minor levels and curves back in Lightroom before printing. I had to remind myself that these pictures were only due to be printed 15cm square!

See more of Nick's work on this project at *nickbrownephotography.co.uk/pf-nigel-poems.*

All previous issues are available from the Digital Imaging Group magazine page of the Group's website at rps.org/digitarchive