Camera Clips

From the Editor
James Allan

Welcome to the second newsletter for 2013. You will note the banner has been taken from a photograph by Jo Tabe during the club excursion to Port Willunga / Blanche point. Jo has created a lovely orange—mauve colour contrast, using the grasses as a strong foreground feature. This year we have had good attendance at our club excursions. I think that those attending have both enjoyed the trips and also produced some fine images. We have two galleries in this edition of the newsletter, one each from the Willunga and the Rundle Mall excursion. I must say I was astounded by the range of colours in the sea and sky at the old Port Willunga jetty. It is hard to believe that all of these images were taken on the same night. The Rundle mall set shows a variety of skills. In the spirit of this excursion I have included a list of 20 top street photography tips that I gleaned from one of the photography web pages. Look in the upcoming events column for future outings.

This month we start a series on photo manipulation skills. The first article is on contrast and saturation enhancement. There seemed to be a sizable number who did not know how to do these steps at our last club meeting. I strongly recommend that you learn these simple procedures as it may help unleash the potential of some of your images.

Grant Coles a new writer for our newsletter has drawn my attention to Astro landscape photography. He has written a short review on page 4. The images are truly stunning. Mark Peddlar on page 3 has given us his recollections of a photo-shoot that he and I undertook in February with the world renown glass blower, Tim Shaw. I was quite excited when this opportunity arose and Mark has accurately reflected the difficulties and the excitement / successes of this exercise. On page 5 Les Ludgate gives some practical tips on how to create a panoramic tripod head for taking panoramas without encountering those annoying mismatch errors due to parallax.

I would also like to encourage you to enter your photographs in the various competitions. Not only the regular club competitions, but also there are a range of external competitions that Chris has drawn to our attention in his regular e-mails. The first of these is the Rotary Club of Stirling Competition in 2 weeks time.

I received some positive feedback about last months Camera Clips, especially about Chris's article on "shooting for the judges". I thank you for taking the time to write your comments. Jo tells me that I incorrectly identified her Nikon D600 as a D90. I hope that the error did not cause too much consternation. I am also grateful to all those who submit articles. I am always looking for new material if you have anything to share. Enjoy this months newsletter.

Contrast and Saturation Enhancement—James Allan

Just this week I was doing my income tax and had to try and read some faded petrol dockets that had been sitting in my hot car for around 6 months. The temperature of the car had caused the print on the heat sensitive paper to fade to white. To my failing vision they were totally blank. "Why don't you photo enhance them" suggested my son Tom. Not a bad idea that. I took his advice and you can see the resulting image on the right. Amazingly it is entirely legible. Here's what I did. I scanned the dockets with the printer-scanner and then imported them into Photoshop. I used essentially 2 tools to render an enhanced image. Firstly I adjusted levels to maximise the contrast and then I used sharpening tools to increase the clarity of the text.(4-6px).

Suddenly it hit me that these were the same two processes that I found most useful in enhancing photographs. I am only going to discuss the first of these two processes in this article.

There are many ways to maximise the tonal contrast of an image. Many programs will have an "automatic" setting that will take a lot of the hard work out of the process. The result is however a bit hit or miss. Brightness and contrast can be adjusted (in the same way you adjust your television set), however they may result in loss of detail in the bright or dark parts of the image (clipping). The "levels" tool will do the job without causing

Contacting a member from the club; This month Mark & Jenny Pedlar :mnjpedlar@biqpond.com

Port Willunga Excursion—(These images were all taken on the same night)

Jo Tabe

Adrian Hill

Graham Field

David Tulloch

James Allan

Adrian Hill

Yvonne Sears

Melinda Hine

How did James Allan and I come to spend an afternoon in the "hotshop" with a world renowned glass artist?

Tim Shaw is a glass blower who sells and exhibits his work all over the world. His pieces are notable for their brilliant colours and their size. Many of his signature works are also heavily carved and engraved.

Tim had been asked by one of the major Melbourne galleries in which he exhibits to provide them with both still images and video footage of him at work in the studio. So, James and I got to spend an afternoon in the "hotshop" capturing the images.

First of all hotshops are hot! This was summer but they're still hot in the winter. There's a furnace containing molten glass at 900°C and a glory hole working at the same temperature which Tim uses to re-heat the glass on his blowpipe at intervals to keep it workable. Second, glassblowing is a two person job. Tim works with Bec Harkman-Kearns, a very competent glassblower in her own right.

So, two glass blowers, two photographers with two cameras, one tripod, one video camera all walking around in a dim room with two furnaces at 900°C and several kilos of honey texture glass on the end of a blowpipe.

The workshop was not exactly dingy, but being indoors had low light. James and I had to make choices about how to get adequate illumination. I utilised a flashgun, whereas James decided to use ambient light, some-times pushing the ISO to get sharp enough images, sometimes allow them to blur.

The images in this article are a selection of those shot by James and me. The shot of the flame close up and vase in tongs are James'. The remainder are mine. They track some of the steps in the process from the first collection of glass from the crucible in the furnace to the final artwork.

What was it like? It was both fascinating and exciting!

You can visit Tim's web page and see a description of his art and a display of his glass works at the following web address:

http://www.timshawglass.com

I attended a presentation at a meeting of the Astronomical Society of South Australia (ASSA) at the beginning of March where the guest presenter was Alex Cherney. Alex's presentation was entitled "The Beautiful World at Night". In his presentation Alex showcased some of his photos and videos of landscapes taken at night utilising the light provided by the stars, moon and in some instances using light pollution to great effect. An excerpt taken from the introduction for his presentation to ASSA follows:

> *Alex finds the time-lapse imaging of night sky particularly appealing because it shows the motion of celestial bodies in relation to the landscape and helps connect viewers with the night sky. Alex travels throughout Australia to photograph the most beautiful landscapes under the stars of the Milky Way and loves to connect ocean, land and sky in his work. His images and work have been published on NASA Astronomy Picture of the Day, in well-known astronomy magazines and books and won prestigious Australian and international awards, including the STARMUS astrophotography competition, numerous David Malin astrophotography awards, International Earth and Sky Photo Contest by TWAN (The World at Night), and the South Pacific Star Party Astro-Imaging competition.*

Alex's presentation showed what can be achieved with nothing much more than an entry level DSLR, a kit lens, a sturdy tripod, a remote trigger and simple processing. He gave suggestions for initial camera settings, exposure times and for the making of a timelapse animation of an evening's observations/photography.

Alex's latest images, videos and blog are online at: www.terrastro.com

Why is the Nodal point important?   Les Ludgate

"The nodal points are widely misunderstood in photography, where it is commonly asserted that the light rays "intersect" at "the nodal point", that the iris diaphragm of the lens is located there, and that this is the correct pivot point for panoramic photography, so as to avoid parallax error. .... A better choice of the point about which to pivot .....is the centre of the system's entrance pupil." Wikipedia

So the photographers and the physicists argue over semantics. Strictly speaking it's not the nodal point but the centre of the lens pupil that's important. The concept however still holds true. When taking pictures for a panorama you need to rotate the camera around a rotation point within the camera lens. Failing to do this may result in problems due to Parallax during the stitching process. Parallax is the apparent shifting of foreground objects relative to background objects when you change your point of view position.

The rotation point is usually about half way between the lens front element and the film plane. Mostly a point slightly in front of the camera body.

There is a lot of information on the net re finding the "Nodal point" and buying or making a bracket to achieve good results. Just type into your browser "Finding the nodal point "and read or watch video on the subject.
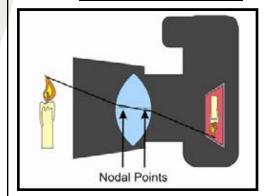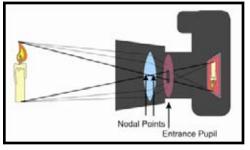
The nodal point is a point within the lens where a light ray passing through the centre appears to have crossed the midline. There are two points, one for the front surface and one for the back.

Other tips to making good panoramas include, overlapping images by a generous amount (1/3) and keeping the horizon level. Set the exposure lock at the centre of interest in the panorama to aid in blending images. Panoramas are difficult with very wide angle lenses (> 28mm) as the edges exhibit distortion making it hard to match. Using a longer lens and taking vertical shots in a horizontal panorama can give the extra coverage you need so that the wider angle lens should not be necessary.

I have made a simple bracket from an old Metz flash head to try and achieve the desired positioning of the camera and lens. (picture above) The Metz bracket has a slot milled in it and allows the camera to be positioned over the rotating tripod head. You need to be able to centre the camera over the tripod head and then be able to move the camera forwards along the slot and using information from the web you will be able to achieve the desired rotation position. What photographers erroneously call "the nodal point"

Nodal Points

Nodal Points
Entrance Pupil

Contrast and Saturation Enhancement—James Allan

clipping. However I like to use the "curves" tool as it gives a lot greater power and flexibility. I will walk you through the steps using an image of a brown tree creeper (right).

Firstly I will explain some concepts: The number of tones that an image file can contain is known as the gamut. A particular image may use the entire available gamut, or only a portion of it. You can easily visualise the amount of gamut utilised by displaying the histogram. The histogram is a graph showing how often different tones are used in the image. On the left are the darkest tones and on the right the lightest tones. The higher the shaded area of the graph, the more that tone is in the image. Unused gamut occurs where the graph is flat.

Curves tool with histogram

The curve tool is also a graph. On the x-axis are the tones of the input image and on the y axis are the tones of the output image. The diagonal line shows how the tones of the input image are changed by the curves tool. A straight line from the bottom left to the top right indicates no change at all. You can completely invert the image – create a negative by making the line go in the opposite direction. Ie make the dark tones light and the light tones dark. (Image Ib)

You will note that the curves tool in Photoshop displays the histogram underneath the diagonal line in the curves window. This is useful in knowing where to adjust the curve.

Image 1 is the input image. You can see that the curve is a straight line from bottom left to upper right. (no change) The histogram does not extend all the way to the edges of the square. This means that image is only using the central portion of the gamut. That is why it looks a bit dowdy and unappealing.

In image 2 I have moved the black and white points up to the edge of the histogram. It is important not to go beyond the edge of the histogram as this will cause loss of detail in the dark or light areas (or clipping). The effect is to stretch the existing histogram to cover the whole way across the graph, or put another way to eliminate the blank (unused gamut) in front and behind the histogram. The image has changed so that there are now both darker and lighter tones in the image. The whites are whiter, the blacks blacker. Unfortunately I am not happy, as I think the image still lacks a bit of punch.

In image 3 I have created a handle in the middle of the line and dragged it downwards, giving the line a downward curve. This has resulted in darkening of the whole image. Conversely you could drag the line upwards to lighten the image. This has the same effect as moving the gamma in the "levels" tool. You can see that the image is a bit more interesting than the original.
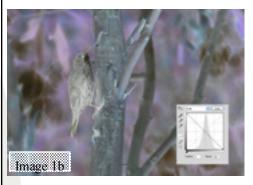
In image 4 I have created a second handle and dragged it upwards creating an "S" shape to the curve. The overall effect of the S shape is to darken the darker tones and lighten the lighter tones, resulting in greater contrast and a bit more punch in the image. To be more precise, the contrast is enhanced only in the central part of the image (where the line is steeper than the original straight line), and reduced in the very dark and very light areas where the line is less steep than the original. The image has improved considerably.

Keeping in mind that the steepness of the line indicates how much contrast you create, it is possible to be selective and choose where you want to improve the contrast. Sometimes the contrast enhancement creates a cluttered busy image. It may be you are enhancing detail in areas that are not important. Look to see if you can identify the main subject of the image, and enhance mainly those tones. For instance if all the detail is in the dark tones, make this end of the curve the steepest. Experiment a bit until you are pleased with the result. As a general rule however the best results usually come from placing the steepest part of the curve over where the highest peaks in the histogram occur.

You might also notice that the colour saturation has improved as a result of these changes. You can further increase the saturation if desired using the HSU tool (Hue / Saturation / Brightness). I suggest a subtle boost of contrast, say 5-10 % is more pleasing than a strong boost (20-25%) Do not touch the Hue or brightness controls if you want to maintain some authenticity to the image.

How much contrast or saturation enhancement should you provide? That is entirely a matter of taste. I often find that I need different settings, depending upon whether I am viewing the image on a monitor, projected onto the wall or printed onto paper. I hope that this walk through has been helpful and I have not confused you too much. Curves is a very useful tool to get the most out of your images and certainly worth the effort learning to master it..
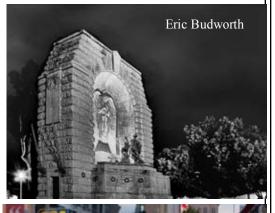

Image 1

Image 1b

Image 2

Image 3

Image 4

Excursion—Rundle Mall

Graham Field

Graham Field

Howard Schultze

Howard Schultze

James Allan

Melinda Hine

Eric Budworth

Melinda Hine

Ron Hassan

20 Tips in Street Photography

·   **Less is More** – don't take too much equipment and travel light.

·   **Off the Beaten Track** – try to get 'behind the scenes' and 'real life' scenes.

·   **Stolen Moments** – anticipate moments between people—get ready before the action happens.

·   **True Colours** – be on the look out for interesting colours / textures. (Also try black and white to reduce clutter)

·   **In the Background** – what's going on behind your subject can actually 'make' the shot. Eg Billboards, signs, graffiti.

·   **Dare to Go Diagonal** – don't just hold your camera horizontally – experiment with angles.

·   **Opposites Attract** – Look out for 'surprising' subject matter and composition. Shots which challenge the 'norm'

·   **What a Performance** – street performers, parades and other street entertainment can be great subject matter.

·   **Off the Streets** – other places - zoos, fairs, shows, parks, sporting events—can be worth trying.

·   **New Angle** – find ways to get up high or down low

·   **Practice makes Perfect**

·   **Fortune Favors the Brave** – sometimes the best thing you can do is to get close to your subject

·   **Fun in the Sun** – try shooting into the sun and into shadows that direct sunlight can produce

·   **Ready to Pounce** – have your camera out and ready to shoot at all times.

·   **Revise and Revisit** – if you see a scene with potential don't be afraid to keep coming back to it until you get the shot.

·   **Frozen Motion** – make sure your shutter speed is fast enough. 1/125 or more with an ISO of 400—higher ISO at dusk (experiment with slower shutter speeds)

·   **Street Wallpaper** – blend in with the scene – shoot unobtrusively and unnoticed.

·   **Life Through a Lens** – use a wide angle lens—'exaggerating perspective will help set your subject in context and provide a more forgiving depth of field'

·   **Expect the Expected** – shoot in places where people expect to see people doing photography. Smile, be polite and be willing to delete images if people protest.

·   **Location, Location, Location** – Choose places where people interact with one another and times when they are present.

Read more: http://digital-photography-school.com/20-quick-street-photography-tips#ixzz2PIijT86i