



SHUTTERBUGS

Newsletter of the Camberwell Camera Club

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Don

CHRISTMAS GREETINGS FROM YOUR PRESIDENT

In this, my first article as President, I would like to wish every member of Camberwell Camera Club a merry Christmas and a very happy New Year.

Gaynor Robson has served you as President for the last four years and has done an excellent and very thorough job. She has developed additional activities, both educational and social, as well as raising the awareness and prestige of our club with other photographic organisations. I hope I can do as well. With the talented and enthusiastic team I have assisting me, anything is possible.

Enjoy the coming festive season and have a healthy and peaceful 2009!
Don Weston

RAW FILE FORMAT

The RAW file format is digital photography's equivalent of a negative in film photography: it contains untouched, "raw" pixel information straight from the digital camera sensor. The RAW file format has yet to undergo demosaicing, and so it contains just one red, green, or blue value at each pixel location. Digital cameras normally "develop" this RAW file by converting it into a full colour JPEG or TIFF image file, and then store the converted file in your memory card. Digital cameras have to make several interpretive decisions when they develop a RAW file, and so the RAW file format offers you more control over how the final JPEG or TIFF image is generated

OVERVIEW

A RAW file is developed into a final JPEG or TIFF image in several steps, each of which may contain several irreversible image adjustments. One key advantage of RAW is that it allows the photographer to postpone applying these adjustments-- giving more flexibility to the photographer to later apply these themselves, in a way which best suits each image

Our eyes perceive differences in lightness logarithmically, and so when light intensity quadruples we only perceive this as a doubling in the amount of light. A digital camera, on the other hand, records differences in lightness linearly-- twice the light intensity produces twice the response in the camera sensor. In order for the numbers recorded within a

digital camera to be shown as we perceive them, tone curves need to be applied

Colour saturation and contrast may also be adjusted, depending on the setting within your camera. The image is then sharpened to offset the softening caused by demosaicing, which is visible in the second image

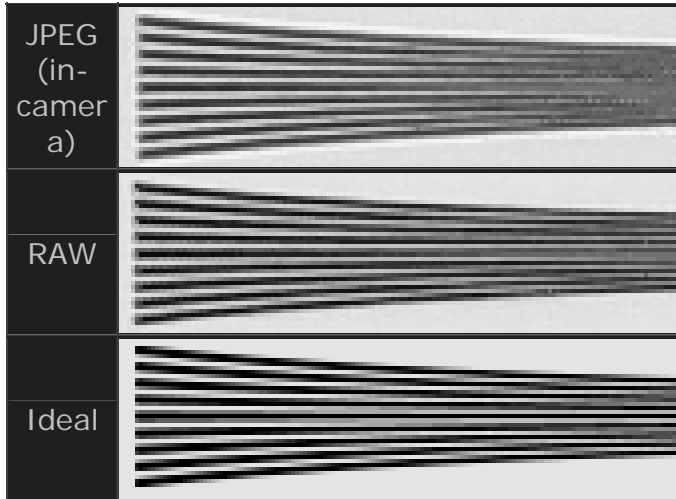
The high bit-depth RAW image is then converted into 8-bits per channel, and compressed into a JPEG based on the compression setting within your camera. Up until this step, RAW image information most likely resided within the digital camera's memory buffer

There are several advantages to performing any of the above RAW conversion steps afterwards on a personal computer, as opposed to within a digital camera. The next sections describe how using RAW files can enhance these RAW conversion steps.

DEMOSAICING

Demosaicing is a very processor-intensive step, and so the best demosaicing algorithms require more processing power than is practical within today's digital cameras. Most digital cameras therefore take quality-compromising shortcuts to convert a RAW file into a TIFF or JPEG in a reasonable amount of time. Performing the demosaicing step on a personal computer allows for the best algorithms since a PC has many times more processing power than a typical digital camera. Better algorithms can squeeze a little more out of your camera sensor by producing more resolution, less noise, better small-scale colour accuracy and reduce moire'

Continued over the page



The in-camera JPEG image is not able to resolve lines as closely spaced as those in the RAW image. Even so, a RAW file cannot achieve the ideal lines shown, because the process of demosaicing always introduces some softening to the image. Only sensors which capture all three colours at each pixel location could achieve the ideal image shown at the bottom. (such as Foveon-type sensors)

FLEXIBLE WHITE BALANCE

White-balance is the process of removing unrealistic colour casts, so that objects which appear white in person are rendered white in your photo. Colour casts within JPEG images can often be removed in post-processing, but at the cost of bit depth and colour gamut. This is because the white balance has effectively been set twice: once in RAW conversion and then again in post-processing. RAW files give you the ability to set the white balance of a photo “after” the picture has been taken-without necessary destroying the bits.

HIGH BIT DEPTH

Digital cameras actually record each colour channel with more precision than the 8-bits (256 levels) per channel used for JPEG images. Most current cameras capture each colour with 12-bits of precision ($2^{12} = 4096$ levels) per colour channel, providing several times more levels than could be achieved by using an in-camera JPEG. Higher bit depth decreases the susceptibility to posterisation and increases your flexibility when choosing a colour space and in post-processing.

DYNAMIC RANGE & EXPOSURE COMPENSATION.

The RAW file format usually provides considerably more "dynamic range" than a JPEG file. Dynamic range refers to the range of light to dark which can be captured by a camera before becoming completely white or black, respectively. Since the RAW colour data has not been converted into logarithmic values using curves, the exposure of a RAW file can be adjusted slightly, after the photo has been taken.

(This informative article is part of one titled “Tutorials – The RAW File Format” located on the web site www.cambridgeincolour.com/tutorial/RAW-file-format.htm)

October Digital Group Report

I started the evening off by talking about brushes. What have brushes got to do with photos, you may ask? Believe it or not, brushes are used extensively in Photoshop for things like erasing, masking, retouching and even painting. By the way, who says we can't paint on our photos!

Photoshop comes with a huge array of brushes and brush libraries which can be loaded as required. Often we need to make changes to an existing brush or even create our own from scratch. We looked in detail at how to change brush size, hardness and opacity and set this as a new preset so you don't have to go through all the creation steps again.

We also looked at using basic shapes to create a new brush and learnt how to adjust aspects like brush tip shape, how smoothly the brush flows or spatters on the canvass, and how you can make the brush gradually fade. We even looked at using an image or part of an image to create unusual brushes for special effects. I then showed a short video on creative use of brushes to supplement the information.

Gaynor then wanted to see if we could create a colour palette from one photo and map that palette onto a different photo. This proved too difficult for the combined brains trust, but it's something to research for next year. However, this led me on to show a very cool site that can help you select colours for your designs, photos, etc. The site is called Kuler and is free to use at: <http://kuler.adobe.com>. This enables you to create your own colour scheme using rules to formulate colours that are complementary, monochromatic, shades, etc. There are pre-existing themes created by others that you can search for, or you can create and upload your own themes. Well worth exploring, just for fun if nothing else.

We finished the evening with a couple more tutorials on creating a David Hockney style collage and learning a new way to add colour drama to a landscape photo.

As always, we finished the evening with a wonderful supper and I would like to thank George and Jan Thomas for putting up with us all year and always supplying lots of goodies to eat and drink after the meeting.

Have a merry Christmas and a happy and safe New Year and I'll see you all in 2009.

Braham Sacks

YOUR COMMITTEE

At the Annual General Meeting held on 24th November 2008 the following Officers and Committee Members were elected.

Don Weston:	President
Peter Brady:	Vice President
Bert Hoveling	Vice President
Edith Conway:	Secretary
Lorraine Holding:	Treasurer
Gaynor Robson:	Past President
Vicky Hyduke:	Committee Member
Sue Welsh:	“ ”
Bevellee Bryceson:	“ ”
Matt Moore:	“ ”

VALUED SERVICE AWARD 2008

At our AGM on November 24th our long time and popular member, Melva Cairns, was presented with a trophy as the inaugural winner of our Valued Service Award. This photograph shows an excited Melva being presented the trophy by our President, Gaynor Robson. During the presentation Gaynor read out the following citation.



“Melva Cairns first joined Camberwell Camera Club in 1980 and has made a significant contribution to the Club in the 28 years of her membership.

Her outstanding “eye” for a photograph has seen her win no fewer than twelve trophies at the club’s annual

trophy competitions. These include the *A Edmond Stevens Memorial Trophy* on three occasions, the *Viola Boyce Memorial Trophy* – twice, the *Wilfred Broadhead Memorial Trophy* – three times, The *Barbara Symonds Memorial Trophy* – once and the *Aggregate Small Prints* – three times.

In additions Melva is one of a small number of members who have readily contributed prints and projected images for interclub competitions.

Melva has also been a willing participant in the many tasks that contribute to the smooth running of a club.”

Congratulations to Melva, a worthy winner of this award.

Matt

TONIGHT’S GUEST SPEAKER

Tuck Leong AAPS SSAPS SSVAPS is a member of the Waverley Camera Club and has a long time involvement with the administration of both VAPS and APS. Tuck has been a popular Judge and Guest Speaker at our club a number of times in the past. While his interest in photographic covers most fields he is best known for his nature photography. We look forward to hearing what he has to say tonight on our end of year trophy entries and to viewing a presentation of his own work in the middle of the evening.

MEMBERSHIP FEES

In our October last issue of this newsletter we detailed the new membership fees that would be presented at our AGM for approval. However the members changed the Individual Member fee from \$49 to \$50. Therefore the charges will now be:

Individual member:	\$50.00
Family:	\$65.00
Student:	\$25.00
Joining fee:	\$5.00

2008 Diaporama Gala Tour

The Camberwell Camera Club was privileged to be part of the Diaporama Gala Tour which was due to the initiative of the GAPHE group, a Group of Amateur Photographers of Hyange and Environs in France. This festival was shown around the world during the month of November in order to publicise the art of Audio Visuals to as wide an audience as possible. DVDs were handed out to those participants, at the latest International AV Festival in Cirencester, UK, who were willing and able to organise a showing to their local clubs and I was lucky to be there at the right time, with a date for our next AV night already organised in November.

The diaporamas on this DVD consisted of 20 winning entries from AV workers in Belgium, France, Italy, Wales, England and Luxembourg. It is without a doubt that the standards reached were truly amazing and on the 17th November our club members were treated to a feast - members saying that they felt they had attended an evening at a film festival.

This evening for me was a fitting highlight to finish off the AV activities for the year, leaving one stimulated and inspired to try a more creative approach to our next presentation. I hope everyone came out wanting to test some of the new ideas and to create new ones. There is a long summer break between AV nights so perhaps we could all come back next March with an AV or two completed or in progress to show to our members at the next meeting.

Have a great holiday and come back with some new ideas.
Ruth Goldwasser

DIAPORAMA

Wow! What a privilege to see such wonderful AVs! We were privileged because Ruth Goldwasser recently attended the 18th International AV Festival in Cirencester in the beautiful Cotswolds in UK. To celebrate the 50th Anniversary of the Diaporama (the short creative audio-visual sequence) a gala tour of top AVs is being held worldwide in November. Ruth brought back a DVD of the program and offered to show it to Camberwell Camera Club members on 17 November when the AV group was due to meet. Nine members took the opportunity to see 17 AVs that had been awarded top prizes in international competitions over the last couple of years.

The AVs had beauty, mystery, humour, drama, whimsy, even horror. The technical and artistic creativity was fascinating, the themes widely varied, some simple, others profound. Making it even more interesting, Ruth brought back a judging sheet that shows the basis for the marking. 60% of assessment goes to Production (audience appeal, concept, communication of ideas, and presentation). 20% goes to Sound and 20% to Images.

Many thanks to Ruth for presenting the Diaporama in her home.

Nola Sharp

DATES FOR YOUR DIARY

Next Month's Meeting: This will be held on 26th January at the usual place and time. This is the fourth Monday and although it is the Australia Day holiday we hope you can all make it as usual.

Mid-week Outing: As usual there will be no outing in January so just control that itchy camera button finger until February.

Committee Meeting: This will be held on Monday 19th January at the residence of Lorraine at 7.30pm. Make sure you check for her new address.

Exhibitions: For those members who have some spare time over the holiday period why not consider preparing entries for some of these January Photographic Exhibitions. If you do not have entry forms email the addresses shown.

Maitland International Salon of Photography:
Closes on Monday 12th January 2009. Email:
(hamish001@optusnet.com.au)

Newcastle National Exhibition of Photography:
Closes on Wednesday 21st January 2009. Email:
admin@newcastleshow.com.au

Ballarat National Photographic Exhibition:
Closes on Thursday 22nd January 2009. Email:
lizc@ncable.net.au

Doug Walker

Everyone in our club knows Doug Walker and the sterling work he does for us. However you may be interested to know that Doug is now spending three weeks sight seeing in London. Doug worked in London for thirteen years some thirty plus years ago and is on a nostalgic journey to view the changes since that time. We all hope he is enjoying the experience.

Matt

YOUR SYLLABUS FOR 2009

Bert Hoveling has, once again, provided us with varied, entertaining and informative speakers for next year. They range from wildlife photography to photojournalism to stereo photography to pinhole photography and more. You'll even discover what "Bodygrams" are! So don't fail to get a few copies tonight and pass some on to friends.

George Thomas

NOSTALGIA

While looking through my historical records file I brought out a Volume 7, No 7 issue of Shutterbugs dated July 1976. This brought back some very interesting memories including this item which may be of interest to members.

“COLOUR PRINTING DEMONSTRATION
This will be held in the Lower Melbourne Town Hall at 8.00pm on Thursday 5th August. This is direct from SLIDES. Tickets at a cost of \$3.00 including instructions or \$2.00 without instruction booklet, are available at the door. This direct process is with the new “CIBACHROME” paper. A needed addition in the shops for the photographer.”
(Older members will remember when ILFORD introduced this new paper and chemicals processing kit called Cibachrome which for the first time allowed prints to be made directly from slides. Before this, slides were required to be converted to negatives and then prints made by the normal C-41 process.)

Matt

Quick removal of Colour Casts.

Some of the digital photos which you have taken may have a colour cast. This could be due to the time of day, or a predominance of one colour in the subject matter. There is a quick way in Adobe Photoshop to correct such colour casts.

Open your image in Photoshop and click on “image/adjustment/curves” (Ctrl M). The default setting has black at 0 and white at 255. With these settings there is no detail in the blacks or whites. Double-click on the white eyedropper. For the RGB entries, enter 245 in each of the boxes and click OK. Repeat with the mid-tone eyedropper, entering 128 in each of the three boxes. For the black eyedropper, enter 10 in each of the boxes. Lastly, click on the Options box and check the “Find light and dark colours” and the “Snap natural mid-tones” boxes. Lastly click on the “Save as defaults” box.

To try these settings, open an image with a colour cast, click “Ctrl M” to open up the curves box, and click on Auto. If the cast has not been completely removed, you can select the individual curves and make minor adjustments by selecting the mid-point, and dragging the curves up or down.

Don Weston

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Visit Camberwell Camera Club Inc. www.camberwellcameraclub.org.au

**NEXT MEETING: JANUARY 26TH 8.00pm, RSL HALL, 403 CAMBERWELL RD, CAMBERWELL
ALL WELCOME**