



## DIG Members' Digital Projected Image Competition 2011

**FREE ENTRY**

**Closing Date for Entries  
7th October 2011**

Further details will be available in  
July on our Website at:  
[www.rps.org/group/Digital-Imaging](http://www.rps.org/group/Digital-Imaging)

## Forthcoming Workshops

14th August 2011  
Practical Digital Photographic Workshop. Directing  
your model during a model shoot  
Aldbourn, Wilts  
For more information see the EVENTS listing on Page 4 or  
contact Maureen Albright ARPS  
Email : [maureen@maureenalbright.com](mailto:maureen@maureenalbright.com)

9th October 2011  
Dance Photographic Taster Workshop  
Aldbourn Memorial Hall, Aldbourn, Wilts SN8 2DQ  
For more information see the EVENTS listing on Page 4  
or contact Maureen Albright ARPS  
Email : [maureen@maureenalbright.com](mailto:maureen@maureenalbright.com)

10th November 2011 - 11th November 2011  
Portrait, Fashion & Nude Photography Workshop  
Cheltenham Film Studios, Hatherley Lane, Cheltenham GL51  
6PN  
For more information contact: Graham Whistler FRPS  
Email: [graham@gwpmultimedia.com](mailto:graham@gwpmultimedia.com), Phone: 01329 847944  
or download an application form from the Downloads section  
of the Group's website at:  
[www.rps.org/group/Digital-Imaging/downloads](http://www.rps.org/group/Digital-Imaging/downloads)

## The 2011 Members' Print Exhibition will be on show as follows:

1st July 2011 - 29th July 2011  
Link Centre Library Swindon, Whitehill  
Way, Swindon SN5 7DL

29th September 2011 - 21st October 2011  
Smethwick Photo Society Clubrooms, The  
Old School House, Churchbridge, Oldbury,  
West Midlands B69 2AX

For more information see the EVENTS listing on  
Page 4 or contact Alex Dufty LRPS  
Email: [exhibition@digit.rps.org](mailto:exhibition@digit.rps.org) or 01454 778485

25th September 2011

## A Big Byte of Barbie and Downtrodden Man

(Barbie Lindsay MPAGB EFIAP  
and Russell Lindsay MPAGB  
AFIAP).

Coopers Hill Community Centre, Bracknell,  
Berkshire RG12 7QS

For full details see the EVENTS listing on Page 4 or  
contact: Roger Norton LRPS  
Email: [centreorganiser@rpsdig-thamesvalley.org.uk](mailto:centreorganiser@rpsdig-thamesvalley.org.uk)  
Phone: 01628 622279



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# DIGIT

SPRING 2011 ISSUE NO 49

## DIG COMMITTEE

Dr David F Cooke ARPS  
(Chair and Editor of DIGIT)  
01275 462248  
[davidfcookearps@gmail.com](mailto:davidfcookearps@gmail.com)

Janet Haines ARPS (Secretary)  
01308 428219  
[janet.haines@btinternet.com](mailto:janet.haines@btinternet.com)

Elizabeth Restall LRPS (Treasurer)  
[treasurer@digit.rps.org](mailto:treasurer@digit.rps.org)

Alex Dufty LRPS (Exhibitions)  
01454 778485  
[exhibition@digit.rps.org](mailto:exhibition@digit.rps.org)

Tony Healy ARPS  
+61 (0) 2 9958 1570  
[anthonyhealy@digit.rps.org](mailto:anthonyhealy@digit.rps.org)

John Long ARPS (Publicity and Website)  
01179 672231  
[johnlong@digit.rps.org](mailto:johnlong@digit.rps.org)

John Margetts LRPS (Website)  
01223 700147  
[john@johnmargetts.com](mailto:john@johnmargetts.com)

Dr Barry Senior HonFRPS  
[barry@littlepics.freerve.co.uk](mailto:barry@littlepics.freerve.co.uk)

Graham Whistler FRPS  
01329 847944  
[grahamwhistler@digit.rps.org](mailto:grahamwhistler@digit.rps.org)

## DIG CENTRE ORGANISERS

Eastern  
John Margetts LRPS  
01223 700147  
[easterndigital@ukart.com](mailto:easterndigital@ukart.com)

Midlands  
Clive Haynes FRPS  
[clive@crhfoto.co.uk](mailto:clive@crhfoto.co.uk)

Southern  
Dr Barry Senior Hon FRPS  
[barry@littlepics.freerve.co.uk](mailto:barry@littlepics.freerve.co.uk)

South Wales  
Maureen Albright ARPS  
[maureen@maureenalbright.com](mailto:maureen@maureenalbright.com)

Thames Valley  
Roger Norton LRPS  
[www.rpsdig-thamesvalley.org.uk](http://www.rpsdig-thamesvalley.org.uk)  
[centreorganiser@rpsdig-thamesvalley.org.uk](mailto:centreorganiser@rpsdig-thamesvalley.org.uk)

Wessex  
Maureen Albright ARPS  
[maureen@maureenalbright.com](mailto:maureen@maureenalbright.com)

Western  
Tony Poole ARPS  
[tonypoole@gmail.com](mailto:tonypoole@gmail.com)

Yorkshire  
[info@yldig.co.uk](mailto:info@yldig.co.uk)

## FRONT COVER IMAGE

Ravensdale Cottages by Herbert Housley  
MBE ARPS

RPS DIGIT Magazine Spring 2011

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EDITOR: DR DAVID F COOKE ARPS  
[davidfcookearps@gmail.com](mailto:davidfcookearps@gmail.com)

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# EVENTS

**1st July 2011 - 29th July 2011**

**2011 Members' Exhibition**

Link Centre Library Swindon, Whitehill Way, Swindon SN5 7DL

Contact: Alex Dufty LRPS

Email: [exhibition@digit.rps.org](mailto:exhibition@digit.rps.org)

Phone: 01454 778485

Cost: Free

First showing of the Digital Imaging Group's Exhibition for 2011

**14th August 2011**

**Practical Digital Photographic Workshop. Directing your model during a model shoot. Tutor: Mike Jones ARPS**

Aldbourne, Wilts

Time: 10:00am - 4:00pm

Cost: £60.00 (DIG Members: £50.00)

Tickets: Strictly limited to 6. Book in Advance

Contact: Maureen Albright ARPS

Email: [maureen@maureenalbright.com](mailto:maureen@maureenalbright.com)

Phone: 01672540754 or 07979 523309

Learn how to direct professionally and get the most from a professional model on a shoot with Mike Jones ARPS.

How many model shoots have you been on and achieved nothing other than just a few basic shots? There are as many ways to shoot models as there are variable conditions. However, the purpose of this workshop is to give you a taster, a starting point to test and check the capabilities of your camera and your own personal level of enthusiasm and skill to direct a professional model.

We will have professional models in attendance for you to photograph.

We aim to teach you how to direct and photograph the models under the following conditions:-

1. Shooting initially in a small studio under controlled lighting conditions (head and shoulders).
2. Shooting under studio lighting in a marquee where there is less control over ambient lighting (full body).
3. Shooting outdoors utilising ambient light, reflectors and on camera flash.

This workshop is only for DSLR camera users and is not suited to chemical film users.

**29th September 2011 - 21st October 2011**

**2011 Members' Exhibition**

Smethwick Photo Society Clubrooms, The Old School House, Churchbridge, Oldbury, West Midlands B69 2AX

Contact: Alex Dufty LRPS

Email: [exhibition@digit.rps.org](mailto:exhibition@digit.rps.org)

Phone: 01454778485

Cost: Free

Showing of the 2011 D.I Group Member's Exhibition during normal opening hours

**25th September 2011**

**A Big Byte of Barbie and Downtrodden Man (Barbie Lindsay MPAGB EFIAP and Russell Lindsay MPAGB AFIAP).**

Coopers Hill Community Centre, Bracknell, Berkshire RG12 7QS

Time: 10:00am - 3:30pm

Cost: £10.00 (DIG Members: £5.00)

Contact: Roger Norton LRPS

Email: [centroordinator@rpsdig-thamesvalley.org.uk](mailto:centroordinator@rpsdig-thamesvalley.org.uk)

Phone: 01628 622279

A digital talk showing how to be creative in the camera and afterwards in the computer. Barbie says: Rusty and I currently both work for the same company as digital imaging specialists. We are using Photoshop CS on a daily basis to improve and create perfect pictures out of sow's ears sometimes. Rusty will photograph anything if he thinks it will make a good picture, I will just photograph anything! Rusty enjoys taking urban photographs, creating scenes and taking pictures of rock bands. I love people, the stranger the better, but I also love macro work, moths and insects are a particular favourite. I enjoy a challenge which both of these subjects give me. But overall we take everything. Ex darkroom workers, mono and colour, but now totally digital. Transferring our skills across back in 1996.

Free tea, coffee and biscuits throughout the day. Bring a packed lunch.

Advance booking advised. More information at [www.rpsdig-thamesvalley.org.uk](http://www.rpsdig-thamesvalley.org.uk)

**9th October 2011**

**Dance Photographic Taster Workshop**

Aldbourne Memorial Hall, Aldbourne, Wilts SN8 2DQ

Time: 10:00am - 4:00pm

Cost: £120.00, DIG Members: £110.00.

This workshop is limited to 12 attendees. All places must be pre-booked and pre-paid.

Contact: Maureen Albright ARPS

Email: [maureen@maureenalbright.com](mailto:maureen@maureenalbright.com)

Phone: 01672 540754

Learn how to shoot dance professionally with Mike Jones ARPS.

There are many ways to shoot dance.

However, the purpose of this workshop is to give you a taster to test and check the capabilities of your camera and your own personal level of enthusiasm and skill to photograph dance.

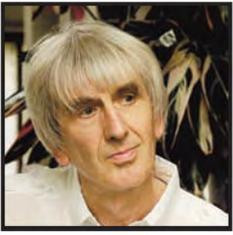
We will have in attendance for you to photograph a professional Flamenco Dancer, Helena Bengé and some of her dance students of Duende Flamenco Dance Company. Helena and her support team will be bringing with them their stage lighting and professional stage backdrops. Mike has been photographing Helena and her dance Company for many years and hence built up an excellent working relationship that you can benefit from to improve your skill with photographing dance.

We aim to teach you how to shoot dance under the following conditions:-

1. Shooting under live stage conditions with stage lights and stage backdrops, utilising the ideal camera settings for these conditions.
2. Shooting to create artistic blur with stage lights and studio lights (non-flash element of studio lights), utilising the ideal camera settings for these conditions.
3. Shooting with studio flash light to freeze the action and to gain some element of control over lighting, utilising the ideal camera settings for these conditions.

This workshop is only for DSLR camera users and is not suited to chemical film users. For further information, please see the Events page of the DIG Website at:

**[www.rps.org/group/Digital-Imaging/events/](http://www.rps.org/group/Digital-Imaging/events/)**



# EDITORIAL

This is the first editorial I write as both Editor of DIGIT and Chair of the Digital Imaging Group.

First, I want to say how grateful I am to the group for giving me the opportunity to take on both of these roles. Two of my main passions in life are photography and education and I feel this is a wonderful opportunity to pursue both of these in a fulfilling way. I hope that together we will all learn to be even better photographers with more and more skills to allow us to create the images we want to.

Second, I want to thank Clive Haynes FRPS and all the members of the Committee during his time as Chair, for leading the Group and helping it to thrive and to become the largest special interest group in the RPS with over 1000 members. In particular, I'd also like to thank Bob Pearson FRPS, who has just given up the post of Secretary General. Bob, you have played a key role in the Group's development and we are all most grateful for your tireless and meticulous work over the last five years.

Without those mentioned above and the support and contribution of many members we wouldn't be the thriving and dynamic group we are today.

On the Front page of the first issue of DIGIT, which was published in 1996, Robert F. Moore FRPS FBIPP, the then President of the RPS, in a piece entitled 'Welcome to the Digital Imaging Group' said: *"The advancement of photography, through whatever process or whatever technology, has been of paramount importance to the Royal Photographic Society since its inception. Indeed, many past and current RPS members have been at the forefront of innovative photographic advancements. It therefore gives me immense pleasure, that during my term as Royal Photographic Society President, a Digital Imaging Group has been formed. Currently, photography is moving towards an extremely exciting era and much of this is due to the basic technology of image making. It is changing almost daily, often at an alarming rate! One of the reasons for this is undoubtedly the accessibility of the*

*personal computer. I'm sure it won't be too long before a PC will be as common place in the photographic armoury as an enlarger is at present. I know that a number of the more traditional photographers are very concerned that the basic photographic skills will be undermined by the advancement of computer manipulation, I too share their anxiety. We cannot however bury our heads in the sand and ignore what is inevitable progress. As photographers, and as members of a Learned Society, we must encompass modern technology. At the same time, and this point is very important, we must not lose sight of what photography is. The end product should be our major concern. The computer is only a means to an end. A computer loaded with Photoshop or similar software is a "tool of the trade", no more and no less, but in the hands of a creative photographer what an exciting tool it can be! I am sure the RPS Digital Imaging Group will be hugely successful and a great asset to the Society. I give it my wholehearted support and I intend to send off my subscription to the group immediately."*

Since then some things have changed. As Clive Haynes reflected in his piece on page 5 of the last issue of DIGIT, digital photography is now very much a mainstream activity. But some things haven't changed including the rapid advancement of the technology we use to support our efforts as photographers and the fact that digital imaging is a means to an end – a tool of the trade – and not an end in itself.

Those of us who use digital photography as an alternative means of image capture to film and those who use it as a starting point for their creativity as photographic artists, have significant and ever increasing opportunities. We do indeed live in exciting times. I hope and trust that this will continue and that the Group will go from strength to strength. I look forward very much to playing my role to the full in this development.

The Group's Centres, their organisers and other members who run them are one of our strong assets. Together they continue to produce a full and extremely interesting series of events. I hope that the Events page of DIGIT will help to keep you in touch with what is

happening around the Country in the near future. Don't forget though that you can find full details of all events on our web page at:

**[www.rps.org/group/Digital-Imaging/events](http://www.rps.org/group/Digital-Imaging/events)**

Remember also that you are most welcome to attend any event, even if it is not being held in your immediate locality.

You will see from the list of DIG Centre Organisers on Page 3 of this issue that there are parts of the UK that do not have DIG Centres. If you are interested in organising events in your area, whether it be a small group meeting or a larger event, then please let me or any member of the Committee know and we will do our best to help you to facilitate it. If you are interested in becoming a Centre Organiser in one of the areas which currently doesn't have one then, again, please get in touch.

Another extremely useful asset that we have is our private area on the RPS Forum. In her article on pages 23 - 25 of DIGIT No 48, Janet Haines ARPS explained the benefits of this, in particular of taking part in the 'Images for Discussion' section of the forum but, as you'll see from her article, there is a lot more to the area than that. Do join and have a look at it. I'm sure you'll find it useful.

You may not know that DIG now has a 'Print Circle'. In his article on pages 26-27 of this issue of DIGIT, Andrew Brochwicz-Lewinski ARPS explains what it is and how to join. Do contact him, as he suggests, if you are interested in joining.

I hope you've read the Advert on page 2 of this issue for the 2011 Digital Projected Image Competition which will be held in October. Last year's first competition was a great success and, like the annual Print Exhibition, there were some excellent images submitted. This year entry will be free. The Committee hope that this will encourage you to submit some of your images and help to make this year's competition an even greater success.

Finally, I hope you enjoy this issue of DIGIT and find the articles both informative and useful.

*Dr David F Cooke ARPS*

# ENERGY IN IMAGES, AND MY BASIC WORKFLOW



Bruce Smith is an international Fashion Photographer based in the UK. He has over thirty years' experience and has shot high fashion images for some of the top designers and manufacturers of couture and bridal wear. In his article, he discusses how he gets the energy he requires into his images and outlines his workflow, before, during and after a shoot.



Figure 1: This was shot as part of a 'glitzy' high fashion story for a magazine aimed at a high income bracket. The girl is meant to be a wealthy professional who enjoys the high life party set

I met a fellow photographer named Marco, an Italian. His day job is as a top children's heart surgeon. His passion for photographing people takes him all over the world, seeking out that special face, interesting enough to be captured on film or file.

During this brief encounter in my brother's hairdressing salon, Marco asked me if I would visit his photographic society to discuss the possibility of me giving a talk about my fashion photography.

I said to Marco, "Whatever will I talk

about?" "Well", he said, "There is something very magical in the expressions of your models and in the atmosphere of your pictures that I would love to have in mine". He asked me how I achieved this. I said, "I can't, because I don't know myself."

"You have to find out", he said, "Because this is what you should talk about". We spent the next couple of hours discussing photography and the feelings and techniques of managing your subjects whilst shooting. We arranged for my talk to be done nine

months later, so I had time to think about it and to get myself prepared. For days, I looked at my work and examined myself whilst shooting my assignments. It was maybe six months later whilst photographing a bridal-wear collection for one of my clients that something clicked. I had decided that I would like to start shooting with wider lenses to change the style of my bridal-wear pictures. I shoot for so many bridal-wear designers, so I have to make them look and feel different from each other. It also helps to use a short zoom

because, during most of my shoots, I can take a variety of images from full length to portrait shots from the same distance, so my client gets much more use from the shots.

While moving in closer to my model, I noticed a big difference in the expressions in her face and her body language - they changed, as I got closer. I experimented more and began to play with this for the rest of this shoot. Not only could I see better, it also created a much better flow of the energy and communication between my model and me.

For years, I have been shooting fashion pictures using medium-length telephotos, at times so far away that my models could not hear me directing them. An amazing thing had happened. I could see and control so much more in my pictures. Not to say that I will never use long lenses, just that I prefer the new results that I am getting with wide lenses. In fact, most of my recent projects I have shot with a wide zoom.

I find that by doing the poses and expressions in my face that I want, my models seem to mirror mine. If I act daft, they act daft. If I laugh, they laugh. If I pull a sad face, they pull a sad face - which always makes them smile!

Since this experiment, I have been adapting my directions to my models in much the same way, obviously changing my energy levels to match the levels I want in my pictures. If I want a nice soft and gentle feel, I express this in my voice and my manner and my body. If I want high energy, I do high energy. If I want my model to leap, I will leap.

Think about this as if you were a conductor. The next time you attend a concert, watch him or her, and watch the orchestra. They mirror him - fast tempo, slow tempo, and medium tempo. You can do the same with your models. Fashion pictures for me have RHYTHM and TEMPO. If you want to express high energy or tempo in a picture, the shoot has to be high energy or tempo, or vice versa.

I look at pictures and sometimes wonder how boring the shoot must have been. I love to change the tempo up and down whilst I'm shooting. I would hate it if anyone viewing my pictures did not feel this energy.

This is why I strive to make my shoots exciting for myself, my model, the other members of my team, and, most importantly, for my clients.

As a photographer, you are the conductor, your models are your orchestra, and your clients or viewers of the pictures are the audience. So you have to direct and entertain. Your performance will reflect in your pictures.

Try a little experiment. The next time you have people over to your house or you get a moment with some people at work, pick a volunteer. Face each other, one or two feet apart, don't speak, and don't look at each other. In fact, do your best to imagine they are not there. Stay like this for 30



Figure 2: A gown shot for the client I mention in my workflow text, Lynn Ashworth. I shoot anything up to 24 gowns in a day for her. Bridal wear for designers like Lyn has to depict the romance, style and feelings of how wonderful a bride will look on her day. Shot as fashion depicting the gown first then the model to back up the story, quite the opposite to shooting a wedding where it's the bride first then her gown.



Figure 3: This shot was produced for a bridal wear magazine editorial story that was a reflection of the bridal wear trends current in the early 2000s. The only brief was to 'shoot it how you want'. So I shot moody lighting against an infinity cove.



Figure 4: This shot was taken at the same shoot in Figure 1 where the girl is meant to be a wealthy professional who enjoys the high life party set.



Figure 5: My first fashion commission shoot for a couture designer Helen Anderson (the designer who made John Lennon's leather hats). The images had to depict style, glamour and wealth. Although I was not given much in the way of a brief, the gowns spoke for themselves. My thoughts were to shoot in the style of Horst P Horst, Cecil Beaton etc.



Figure 6: 'Femme Fatale' or, as a lot of photographers would call it, 'Boudoir'. Shot in the bedroom of my apartment in London. These images were part of an editorial about beautiful lingerie for a magazine in the USA. The model, Stephanie Imhoff, is now a big photographer in New York.

seconds and remember how this feels. Stay in this position but hold each other's hands, look into each other's eyes, smile at each other, don't speak. Instead of imagining they are not there, do the opposite. Try to send them all of your good energy. Stay like this for 30 seconds. Remember how this feels, and compare the feelings. Ask your friend or colleague and the others to explain how it felt for them.

The next time you are shooting pictures, remember all of these feelings.

### **My typical work flow**

#### ***Before the shoot***

I keep it simple and quick. There is not enough time during a shoot to waste time looking for files so I do my editing after the day of the shoot, if necessary in the evening after the shoot or when I get back to my office.

On the day before the shoot or early in the morning of the shoot day, I set up the file system I will use. There's no time to sit and concentrate once a day's shoot gets under way. I always keep my image file names in sequence when I am shooting.

#### ***Shoot Image Files Management***

I create a folder on my computer for the client's shoot and call it by my client's name and date. e.g., Lyn-Ashworth-Sep-2010

If I am shooting for more than one day I create a folder for each of the shooting days within the client folder e.g., Lyn-Ashworth-Sep-2010-day-1. Lyn-Ashworth-Sep-2010-day-2

Within each of the shooting day's folders I create a folder for each outfit. This folder will have the outfit name or code number. Within each of these outfit folders I create 2 folder's one for raw files and one for jpegs. In the jpegs folder I create a 1st edit folder, within the 1st edit folder, I create a 2nd edit folder, within the 2nd edit folder, I create a final edit folder.

This process enables me to organise things efficiently and select the final images that I am going to work on and it allows me to maximise my time on set shooting rather than messing around with image files and folders. It also makes it easy when a client wants to review a particular outfit's images during the shoot day.

They are easy to find and quick to open because I use the jpegs to review for quality of shot, sharpness, exposure and composition etc.

#### ***During the shoot***

##### ***The mechanics of my shoot***

I look at the garment to see which parts of it are special features like appliqués, the cut of the garment, the shape of the garment etc. so I don't shoot an outfit and not show it how



Figure 7: This was shot during a master class in shooting fashion at 'The Fashion Up to Date' Academy in Milan. I was demonstrating making shapes with the model and explaining the relationships between the object (model) and the negative space (background) and how they need to balance and relate to each other.

the client expects the garment to be seen and sees how the garment should look. To make sure I cover every possibility, I shoot a variety of images for my client. I always start by shooting full length with biases to right or left, three quarters with bias to the right and left and close up with a bias to the right and left.

#### ***Following the shoot***

##### ***Editing following the shoot***

For each outfit I shoot, I will select the best full length images for left and right hand pages, the best close up images for left and right hand pages and the best three quarter images for left and right hand pages.

As I edit, I keep in mind that I am looking for images from each outfit that will work together and show something different about the outfit in each shot chosen, as well as those that may work and be balanced for



Figure 8: This is an image intended to reflect my idealism of feminine sensuality but keeping it innocent, even virginal. Part of a chronological process of understanding life.



Figure 9: A shot from a collection of bridal gowns and accessories. The story we added to the shoot to match the feel of the outfits was that of an 'Edwardian Eccentric Lady' who lives in a stately home and is, perhaps, a little mad.

individual pages and spreads. These spreads may, for example, be either two images with mixed full length close up or three quarter length images or single images across two pages, for instance a horizontal image if I have shot any.

I sub edit my images to produce a selection of spreads that show all of the garments at their best and also show any variations in detail over the three image variations of full length, three quarters and close up.

I edit my images as follows.

- 1st edit images down to as many as will work, then label them red. I move these files into 1st edit folder.

- 2nd edit images down to 20 to 30, label them blue. I move these files into 2nd edit folder.

- 3rd edit to final 4 to 6, label them green. I move these files into 3rd and final edit folder

I do not do any Photoshop retouching to my images during shooting days, I leave this until I have completely finished editing to my final choice images.

When I have finished my 3rd and final outfit edit, I copy the final edited images into the raw images folder, this will highlight the raw files of my final choice images, I then process all the relevant raw images to useable tiff format images with "4ret" at the end of the file name, keeping the original filename intact, now they are ready for any Photoshop retouching.

*Editor's note: You can find out more about Bruce and his work on his website at [www.brucesmithphotographer.com](http://www.brucesmithphotographer.com) and on his blog at <http://prodigitalfashion.blogspot.com>*

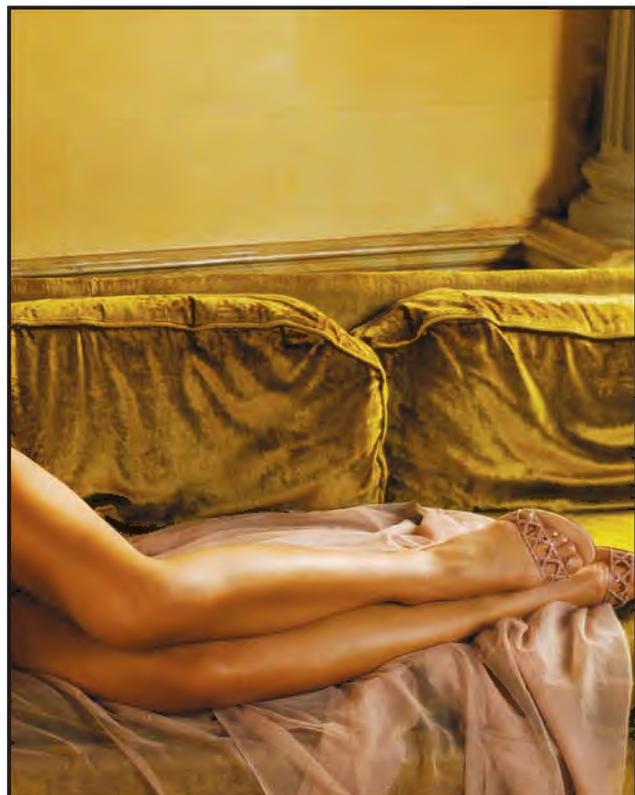


Figure 10: Double page spread using one horizontal image. As you can see the image balances as well. The centre of the image is in the gutter of the spread and is not going through an important part of the image. There is a comfortable balance as well as a good even toned space in the top right of the right page for text. This was one of sixteen lingerie images for an editorial for a French fashion magazine. The story was about elegance and sensuality. There is a fine line between tacky and tasteful and it's important to keep to the right side of the line,



Figure 11:



Figure 12:

*Why did I put the images in figure 11 together as they are? Firstly the image left was shot specifically as a left hand page and vice versa. The energy in the images is facing in the direction towards the centre. The lines and shapes of each image balance together making them more comfortable to view. If you look at figure 12 you will see that the images pull apart and don't flow together. You have to imagine your images are like repetitive designs that need to hold together like patterned tiles or wall paper or fabrics. If the design of each tile was not balanced, the pattern would fight and be uncomfortable to the eye. No one wants to have patterns that fight on their walls just as I don't want my images in my portfolio or the images published in magazines to fight.*



*Henry's String*

## MY 'JACK-OF-ALL-TRADES' APPROACH TO PHOTOGRAPHY



Herbert Housley has been an active member of the Digital Imaging Group for many years. He regards himself as a Jack-of-all-trades photographer and has been influenced in his feeling for form and shapes by Sheffield Cutlery designs. In his article, he shows us some of his images and his cutlery designs.



*Ashford in the Water, (Infra Red)*

When David Cooke invited me to write an article for DIGIT, I suggested to him that there are many DIG members far more experienced than me when it comes to digital photography. Even though my knowledge of Photoshop and other digital software is extremely limited, David insisted that he still wanted me to write an article. A very persuasive man is our David, so here goes. My ARPS distinction, obtained approximately twenty five years ago, was for Pictorial Photography which covered a wide range of subjects. This suited my "Jack of all trades, master of none" approach to photography. In those days I had a small darkroom with facilities for

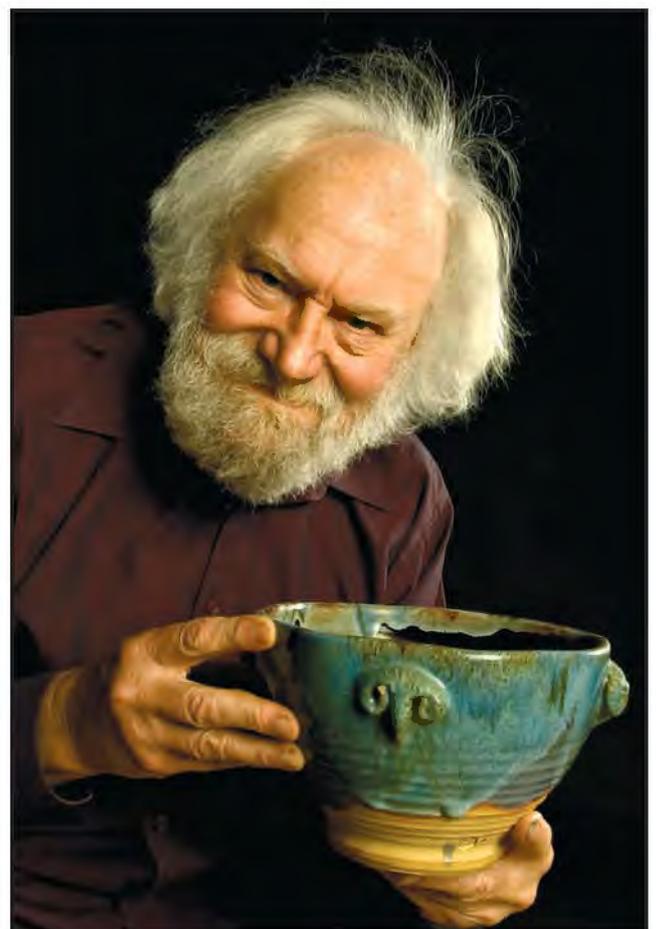


*Lowery-land Sledgers*

developing and printing both mono and colour. My ARPS panel was created there.

As you get older, I was 85 years old in September 2010, I personally find it increasingly difficult to retain what I learn about all things digital; this despite attending courses, making notes and buying books and training DVDs. Because of this I am aware that I only use a very small percentage of, for instance, the facilities that my camera and digital software such as Photoshop and Lightroom can provide. This is something that I and possibly many of my fellow geriatrics must learn to live with. I am always grateful when DIG members offer advice on how to improve any of my images which I get from the “Images for Discussion” in the DI Group section of the RPS Forum.

I bought my first camera during WWII when I was in the Royal Navy. It was a second hand Zeiss Icon with the old fashioned bellows to which a fixed, rangefinder, lens was attached. If my memory serves me right you got eight negatives to a roll of film. I’ve never stopped taking pictures since. Some of the subjects I particularly like to photograph are landscapes, portraits, travel pictures, local cutlery and edge tool makers (I spent all my working life making cutlery and working with some superb craftsmen) and, more recently, Infra-red. Having left school at the age of fourteen at the start of WWII, my formal knowledge of art is minimal. However, some of the exquisite silverware and, in particular, dozens of the old traditional Sheffield cutlery designs that have stood the test of time have instilled in me a feeling for form and shape. During my career I have designed several ranges of cutlery each one leading to a desire to create something better. This probably



*Proud*

## HERBERT HOUSLEY MBE ARPS

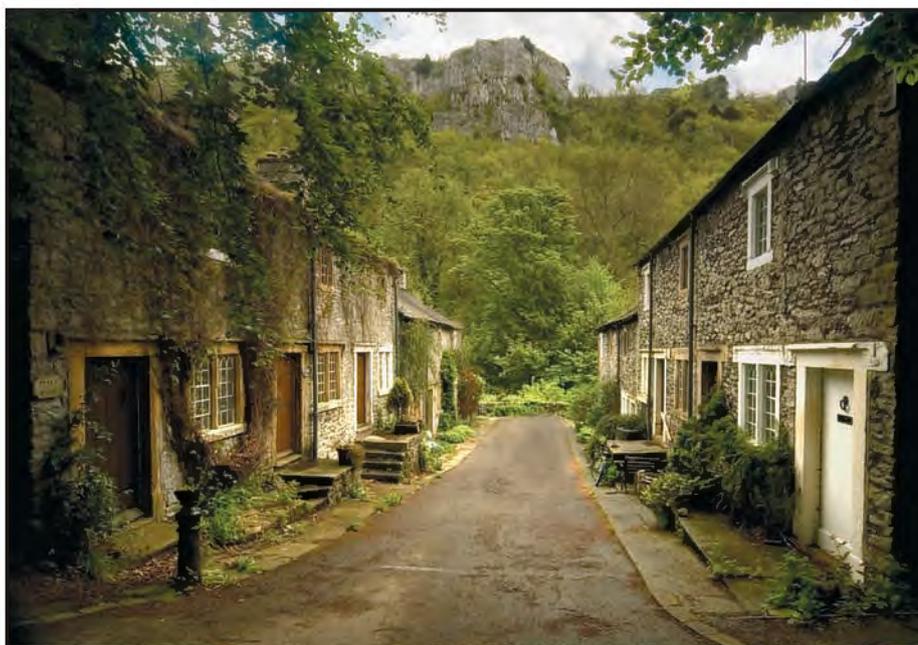
describes my approach to photography. Sheffield has been renowned as a centre of cutlery making excellence since the time of Geoffrey Chaucer (1343-1400). In *The Reeves Tale*, Chaucer wrote; "A Sheffield Whittler (knife) bore he in his hose".

At its peak the Sheffield cutlery industry employed in excess of 30,000 people. Today there are probably less than 200. Many so called manufacturers are simply importers. After nearly one thousand years, Sheffield's cutlery manufacturing heritage is in great danger of disappearing. Sheffield is not alone. Throughout the UK industries that made our great country wealthy have almost disappeared.

It's no use people like me just whingeing; therefore I have designed and helped produce, handmade prototypes of a new range of table cutlery. My vision is for a visitor training workshop to be created where college leavers can be taught to make superb quality cutlery while there are still a few craftsmen around to teach them. Without an exclusive registered design that cannot be copied and made abroad, such a workshop would fail. Most likely nothing will come of my initiative but I have at least tried to do something. Photographs of my as yet unnamed design were produced professionally; I do not have the facilities or skills for this specialised branch of photography.



Venice



Ravensdale Cottages



Three of Herbert Housley's Cutlery Designs. From Top to Bottom: New, as yet un-named, Four Piece Set, Romance Stainless Steel, Penthouse Stainless Steel



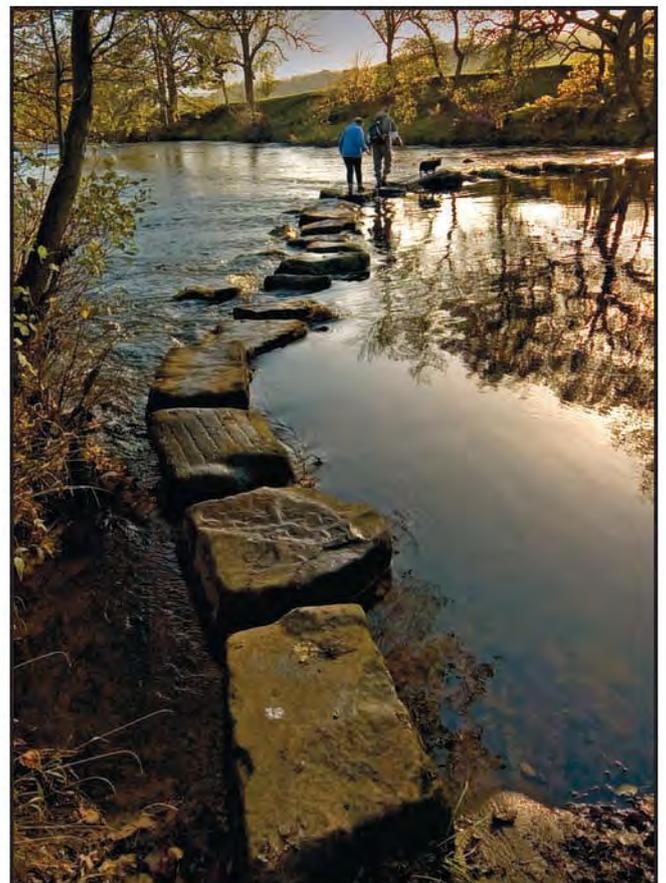
*Nora Batty in Portugal*



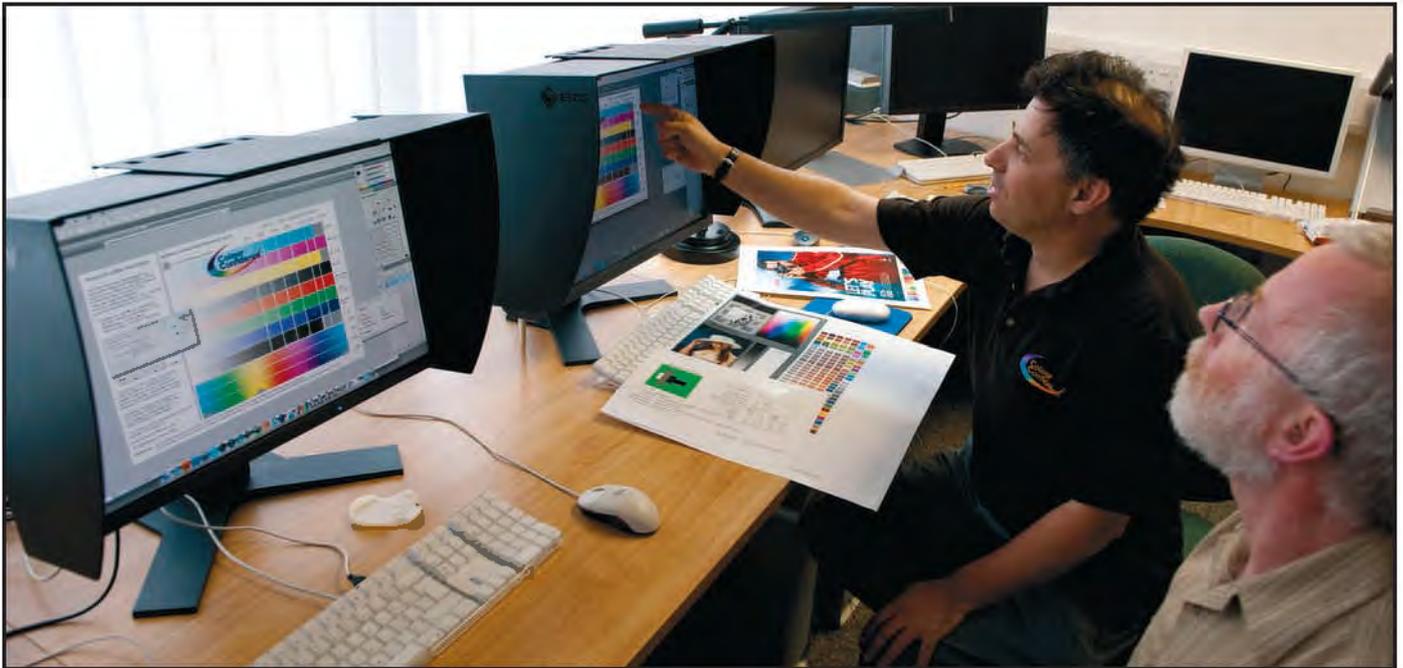
*Gannets Nesting*



*Out of the Mist*



*Ancient Stepping Stones*



Author Mike McNamee (far right) testing monitors with Simon Prais of Colour Confidence

# MATCHING THE PRINT TO THE MONITOR – THE EVER-PRESENT PROBLEM IN IMAGING

Mike McNamee FRPS is the editor of *Professional Imagemaker* magazine which caters for a predominantly professional readership and strives for the highest possible standard of colour accuracy within its workflow. The magazine also regularly tests papers and printers with a particularly stringent set of colour audit criteria. Here he discusses the perennial problem that is faced by all photographers who print their work – how do you make the print match the screen? The article concentrates mainly on monochrome prints as this eliminates a number of variables, colour testing is something for the future. The box on Page 17 defines some of the terminology that may be unfamiliar.



The testing area showing the viewing booth and monitor

**S**oft Proofing is a method of attempting to display, on your monitor, how a print is likely to appear when viewed under appropriate conditions. We can say right away that accurate soft proofing requires both the monitor and viewing conditions to be well controlled. The level of this control has a profound effect on how effective the soft proofing turns out to be, that is how much the eventual print looks like the screen view of the file.

When you soft proof, the system profiles for the printing device are used to make the screen imitate what the printer is actually going to print; it does this by using the same ICC profile for both jobs, printing and screen display. In Photoshop, soft proofing is accessed by clicking View>Proof Set Up>Custom. This reveals a new pane and you click the drop down list to select your profile

## Some Relevant Terminology

**Luminance:** This is a measure of the brightness of light being emitted from the screen. It is measured in candelas per square metre, abbreviated to  $\text{cd}/\text{m}^2$ . Monitor screen luminance normally ranges between 60 (very low) and 400  $\text{cd}/\text{m}^2$ . The low value is only seen on very old monitors which are beyond the end of their useful life. The high value of 400  $\text{cd}/\text{m}^2$  is eye-searing and used only by gamers or people working in full sunlight. Values between 160 and 75  $\text{cd}/\text{m}^2$  are typically used in high quality work stations used for graphic arts.

**Viewing Area Brightness:** This is measured in lux. A typical office might be illuminated at 120 to 200 lux. For critical colour matching, a high level of illumination is required, typically between 1,500 and 2,000 lux. For less critical appraisals 500 lux is sometimes used.

**ISO 3663:** This is the international standard which defines the monitor and viewing conditions to be used in the graphic arts industries.

**Fogra:** This is the European-based graphics and printing standards authority which sets the standards for colour

accuracy and certification of proofing prints, viewing areas and monitors. It mainly serves the printing industry.

**Viewing Colour Temperature:** This is measured in degrees Kelvin, a derivative of the Celsius scale. Normal daylight sits around 5,000°K, a blue sky as high as 10,000°K. A tungsten bulb typically has a value between 2,800 and 3,500°K depending on how it is made and powered. The standard setting for ICC print profiling is 5,000°K but this looks very yellow if it is used on the screen and many users prefer to lift the value to 5,700°K even though they measure prints at 5,000°K. This seems illogical but works in practice!

**Metamerism:**

This is a complex property of colours. The effect is typified by a leather hand bag matching a dress inside the shop but not doing so outside in daylight. The photographic equivalent is a print that looks neutral indoors but shifts to a green bias when viewed outdoors. It is an ever-present scourge to accurate colour matching.

(usually a printer profile, but it can also be a monitor profile). Your screen may or may not change as you do this, it depends on the relative size and shape of the printer gamut in relation to the screen gamut. However, your screen should now look more like the print that you eventually make from your printer. There are a number of sophistications available in the settings. You can alter the 'rendering intent' and, by doing so, explore how your print may change using one of the four available settings (photographers normally only use Perceptual or Relative Colorimetric, pre-press technicians often use Absolute Colorimetric, very few people use Saturation and it is not even available on some systems).

In Photoshop if you click Window>Arrange>New Work Space you can also open a second window and soft proof to a different, additional profile. You can repeat this a number of times and explore differences between different papers, printers and rendering intents, for example, see Figure 1

To soft proof accurately then, you must have an accurately calibrated monitor with sufficient gamut to display the gamut of your chosen output. Inexpensive monitors will never be able to do this adequately. Additionally, if you are trying to compare a print and a soft proofed screen view then the viewing conditions around the print must be optimised. The colour temperature in the

viewing area should closely match that of the screen and the overall brightness of the viewing area should be appropriate to the screen's luminance. Very bright viewing booths enable critical differences in prints and images to be detected, so the ISO 3664 standard of 2,000 lux is much higher than the illumination level at which prints are viewed in social/domestic environments. However, if you use a less bright viewing area to judge prints you should also drop the luminance of your screen. Inexpensive monitors may not allow this, even the expensive Apple Cinema displays are massively over bright. Indeed you may have to resort to additional software to dim an Apple Mac screen sufficiently. If

you dim an inexpensive monitor it is likely that the colours will posterise badly, making it impossible to use. As a rule of thumb, your monitor should be set at less than 160  $\text{cd}/\text{m}^2$  (the ISO and Fogra certification standard) unless you are carrying out critical assessments and also using a viewing booth. Most photographers can get by with luminances of under 100  $\text{cd}/\text{m}^2$  which is more comfortable on the eyes, increases the life of the monitor and also runs it slightly cooler. Many photographers find that values around 75  $\text{cd}/\text{m}^2$  are adequate for everyday use when colour grading images. In an article such as this you have to try to find the path between the cost of a

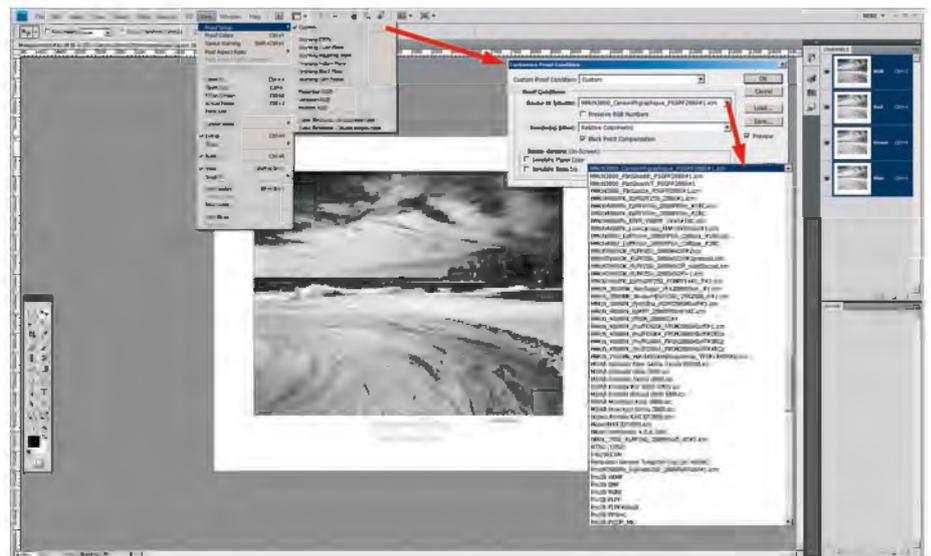


Figure 1: Soft proofing set-up in Photoshop



Figure 2: A print from Paul Gallagher was used as the basis of the testing.

fully calibrated studio and the wallet of the readership – they rarely match! The trouble is that most normally-visioned people can detect both colour and lightness differences between screens and prints – and this has little to do with the size of their wallet. The result is a predominance of dissatisfied photographers and this includes those who have invested to get partly up the calibration ladder, but not far enough. Monitors in the £200 to £500 range are unlikely to operate well when the brightness setting is turned right down, indeed placing the brightness setting on zero percent may still leave things too bright for optimum viewing. Reducing the brightness on less expensive monitors also reduces the available bit-depth for the display which in turn can lead to ugly posterisation of the screen colours. Rather perversely the cheapest solution can also be the best in these circumstances – buy brighter lights for your viewing area! One of the most important reasons for buying a screen calibrator is not that it adjusts the colours on your screen (by profiling) but that it enables you to measure and adjust both your ambient viewing brightness and your monitor luminance. The importance of this cannot be over estimated, matching brightness is actually more important than the chosen colour temperature. If you read the advertising literature on calibrators you could be fooled into

thinking that all you do is pay out for the gizmo and the problems will evaporate. Another common misconception (and also one peddled by the manufacturers) is that the screen calibration is the first and most important step in the quest for matching. It is not; it is one of the steps along a route that is always a compromise and very rarely results in a totally happy user. It is worth repeating – most normally visioned people will detect small differences which can only be eliminated with an expenditure of thousands of pounds. If this sounds negative please remember that there are some very successful photographers out there whose prints do not match their screens, never have done and never will. Once you accept that you cannot actually afford perfect screen-print matching you can get on with being creative – OK so you make a disappointing print now and again, it has not cost you £2,000. Having set the scene in a rather negative way, the reader now requires some concrete advice; it is as follows:

- 1 Buy, beg or borrow a screen calibrator. In the absence of solid, expert advice, set your monitor colour temperature to 6,500° Kelvin, your gamma to 2.2 and your luminance to something around 100 cd/m<sup>2</sup> ie less than the ISO standard of 160 cd/m<sup>2</sup>. How much less will depend on how low your system will allow you to go. If your image posterises raise your viewing brightness to meet the minimum your screen will tolerate (or buy another

monitor!).

- 2 Set up your viewing conditions to something standard, many find that 6,500K viewing is too cool and use closer to 5,700K. This is OK, all you need to do is match your screen down to this lower value.

- 3 Buy a corrected viewing light. Typical are the Colour Confidence Grafilites. You can also install a graphics quality fluorescent tube (see [www.lightbulbs-direct.co.uk](http://www.lightbulbs-direct.co.uk)). It is vital that the fluorescents are 'graphics quality' or you will run into trouble with metamerism. Graphics quality is defined by a high Colour Rendering Index (CRI) – a value of 80 is just about OK, 90+ is better; the Phillips TLD 90 de Luxe tubes give you about 95, but still only cost about £10 each (Phillips Graphica Pro TLD-90 58W/950, from Lightbulbs-Direct). These run at 5,300K (and are the ones we use at Professional Imagemaker). They also sell the T8 Activa Daylight Full Spectrum tubes which is a high CRI tube which runs at 6,500K.

- 4 A monitor with a hood is a much more efficient viewing environment. Colour Confidence do the excellent PChOOD, which is a universal fit.

- 5 Do not allow direct sunlight to fall onto your monitor.

- 6 Do not have crazy-coloured desktop colours.

At *Professional Imagemaker* we use screen values of 5,700°K, a gamma of 2.2, a luminance of 75 cd/m<sup>2</sup> along with a viewing booth set at 5,500°K and a luminance a bit under 2,000 lux. The monitor, viewing area and prints all pass Fogra Certification grade (and don't ask how much it all cost!).

**Colour and Monochrome Proofing**

Monochrome proofing is different from colour proofing. Normally you are looking for a colour match between either two print samples (say press and proofer output) or between a screen and a print. Variations in luminance may be masked by variations or similarities in hue and saturation when viewing colour. When it comes to monochrome (and assuming you do not have a colour-biased print) the only thing you have to go on is the monochrome luminance – actually a more difficult proposition. This article introduces the concept of soft proofing using the Epson Advanced Black and White driver (ABW). This is regarded by many as the simplest and most effective way to create neutral

monochromes but, until now, soft proofing has not been possible for want of correctly made profiles. Adobe's Eric Chan has solved the problem by posting ICC profiles for soft proofing (not printing profiles, proofing profiles, you still use No Color Management and ABW in Photoshop). See <http://people.csail.mit.edu/ericchan/dp/Epson3800/index.html>.

Our task was to put numerical values on the efficiency of soft proofing, to try to cut through some of the fog surrounding the topic. It is realised that we will be adding some fog because the topic is, by nature, quite technical! With due deference to the advice given above, the system used for the testing was almost as good as it comes and it will be of little comfort to the amateur to learn that we brought more than £16,000 of profiling- and test-gear to the party! For the test, our testers were presented with a very dark or very light screen image (Figure 2) and asked to adjust the image Brightness values until they felt that the screen soft proof matched the print standing in a viewing booth; they were prevented from seeing their correction values to prevent cheating! The viewing booth was set at 2,000 lux and 5,500°K; other tests, outside the viewing booth, were in mixed light of low strength. The screen was set at either 75, 80 or 160 cd/m<sup>2</sup>, but mostly at 75 cd/m<sup>2</sup>. The screen was the Eizo 243W, one of only four capable of passing Fogra certification standards (it was tested and passed against Fogra standards, as did both the viewing booth and the paper proofs in use). A significant advantage of the ColorNavigator software from Eizo is that you can easily switch between profiles and thereby change the screen luminance, colour temperature and black level.

An initial finding was that the testers improved dramatically, both in speed of adjustment and accuracy, in the first few attempts. One tester dropped from an initial error of 17 points down to consistent errors centred around  $\pm 2$  points over 10 attempts. The quality of the viewing environment also had an influence, darker viewing conditions were related to darker judgement settings. These initial 'learning' errors were eliminated from some of the statistical analysis. The graph (Figure 3) shows the results funnelling-in to more accurate judgments with time,

varying about the mean value in good viewing conditions, and consistently underestimating in dimmer conditions. Using a correct illumination level viewing booth, the testers' results varied both above and below the correct luminance value, suggesting that errors were in judgment, not a bias in the viewing conditions – if for example the viewing conditions had been too bright we would have expected errors biased in that direction. The judgment errors varied between  $\pm 7$  points in Brightness value equivalent to -10 RGB points and +6 RGB points (ie a 16 RGB points variation). To put some perspective on this value we print a target set here, set up at  $\pm 5$  points and  $\pm 12$  points so you can see the difference. This is a useful image as it tells you how much variation you can expect, in a more tangible form. If you want to see for yourself how much the errors represent, open an image, hit Ctrl U to bring up the HSB dialogue and drag the Brightness slider up and down 12 points or so. This gives you a real feel for how much error you can expect even in good viewing conditions. (See Figure 3).

After a number of hours of testing we came to the conclusion that you can just about soft proof with either the full colour or ABW profile but that differences in the viewing 'experience' mask any differences between the actual prints made with either ABW or using full colour to make monochromes. Our full-colour monochromes were made to very high standards of overall accuracy. The aim of this process was to test if it is

possible to adjust tonally a print on screen and then create a print that is both accurate and satisfying to the viewer. We often express this as delivering 'no surprises when the print pops out'. Our gut feeling is that this should be possible and that both ABW soft proofing and a good full-colour profile would deliver equal performance. The errors we measured are shown as samples here, but may not reproduce with complete precision. In hand, the inkjet prints were readily differentiated at the  $\pm 12$  level and just about at the  $\pm 5$  level (on brightness). The level achieved by our testers (nominally  $\pm 7$ ) therefore indicates that soft proofing is possible as a control measure but only if care is taken, it would not take much sloppiness for the whole thing to go belly up! The testing chimes quite well with our experience out in the field – error variations in different inkjet printers are usually less than these values of  $\pm 7$  and in general we find that reported errors are from misuse of settings and profiles, despite the fact that we are always assured that everything has been printed using the correct settings!

How did the prints 'look' against the soft proof? The print looked crisper and more tonally separated in the viewing booth than the screen soft proof. Most observers, we feel, would describe the actual print as having more 'quality' than the screen view. The differences between a 'full colour' and an ABW print were just possible to detect with the prints in hand and were confirmed

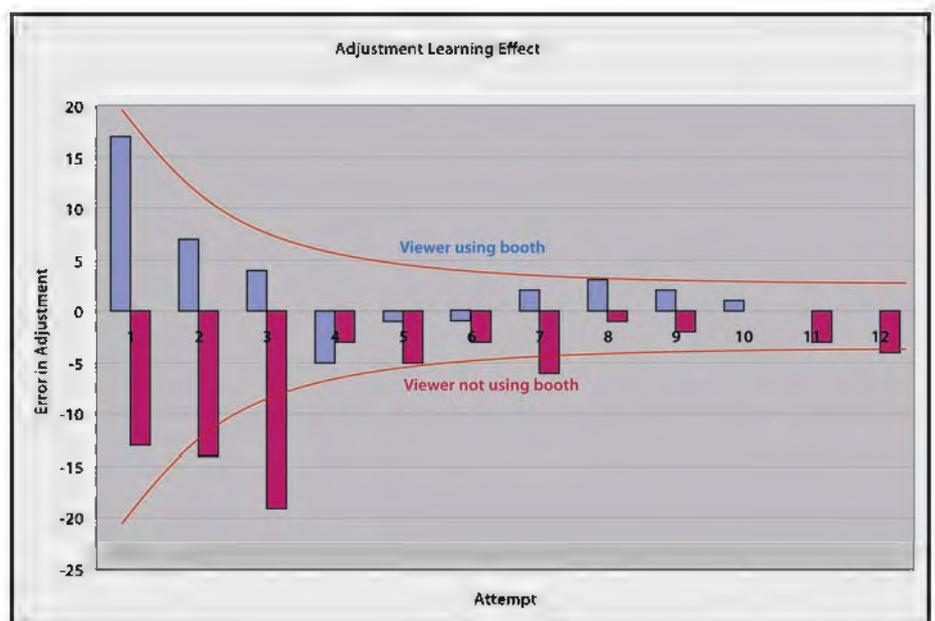


Figure 3: The graph shows the rapid improvement of testers with a little experience and the maroon bars the effect of testing in dark viewing conditions.

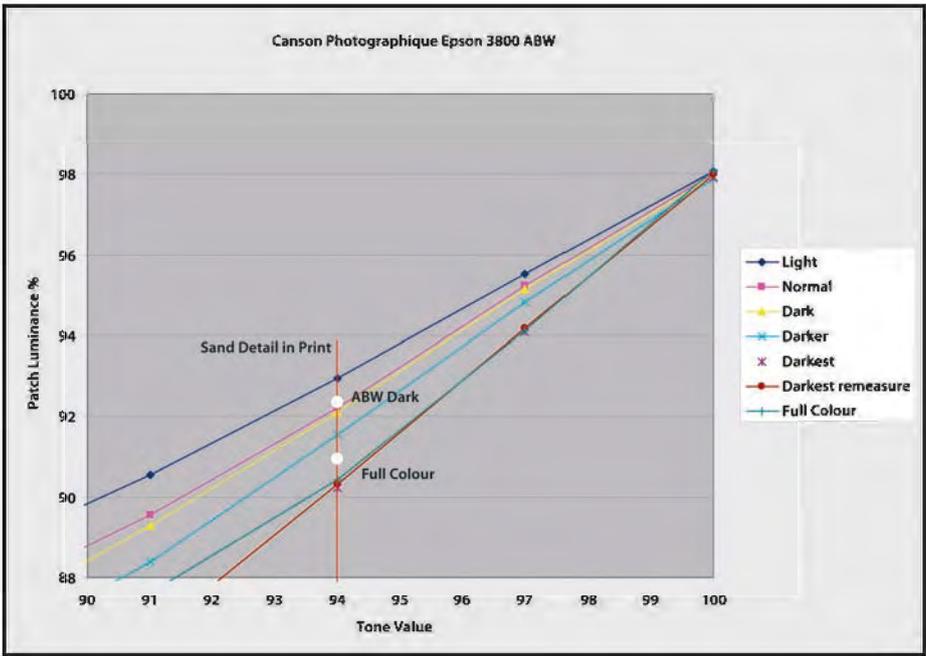


Figure 4: Differences in highlight detail were noted using different settings in the ABW driver and between print workflow routes. The area measured is ringed in the print in Figure 2..

as different when measured by densitometry (the ABW/Dark print was at 15.8% luminance in the top left corner, the full colour print was at 14.9% luminance. The file was around 12% luminance). The full colour print had more density than the ABW print in the shadows but the overall impression of the prints was that they were visually identical when viewed from a normal distance although there was a subtle difference in the highlight tone contrast levels (see Figure 4). We did manage to

detect the difference between the highlight rendering using soft proofing of both colour and ABW/Dark but we would not like to be betting the mortgage on our ability! We consistently struggled to differentiate between highlight levels from ABW and full-colour images in either prints or soft proof views, even with the images side-by-side. This is, of course, good news, they were, after all, excellent prints made singly by two routes, of almost equal merit. On-screen differences were slightly masked by

subtle differences in rendering of the actual screen, one print looked warmer at the top but then the result was reversed if the other print was soft proofed at the top of the screen. In hand, the full colour print looked slightly magenta and the ABW looked slightly greener. In reality the ABW was closer to the base white and the full colour was indeed about 1 Lab point towards magenta. (see Figure 5).

In conclusion then we have established the boundaries of how much variation you can expect when setting up (ie grading) an image using soft proofing, although only for monochrome images and only for overall brightness. The Eric Chan profiles are equally as good as bespoke colour profiles but both have their limitations. Experience has taught that a fully calibrated system reduces the number of disappointing prints but not eliminated them; there are still occasions when a print requires some final tweaking for competition or exhibition purposes. It is a fact of life in a world of colour that sometimes a print that is spectrographically perfect is improved by some lightening or darkening to suit the viewer's taste. It is also true that if a judge addresses his or her remarks to the compositional and creative content of a print and fails to mention the colour then you are close to target.



Figure 5: The test print adjusted to display the levels of error found during testing, ±5 in the top row, ±12 in the bottom row

# THE DIGIT CHALLENGE

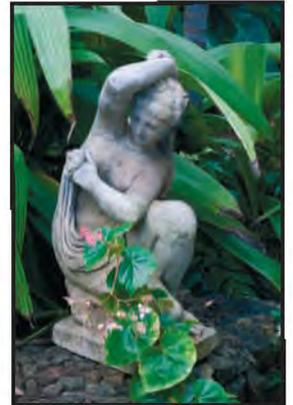
This time we have three images from DIG members who explain how they created them. I hope you'll find these interesting and helpful techniques to use in your own photography. If you do, why not join in and send some of yours to me at: davidfcookearps@gmail.com.



*Final Version E*

**Face in the Shadows by Carole Hewer-Irving ARPS:** I only had thirty minutes to spare and decided to see what I could create from a fairly 'boring' image of a statue. I started by cropping out the 'bits' of the image I was not going to use. The image (A) had been captured at 24MB. Then, using dry brush in Photoshop, I changed the appearance of the stone with only a slight tweak to soften the detail of the face (B). Next, I used 'change hue and saturation' in Photoshop to create the colour of the face and head. Then, by sampling some colours from a separate image, I created a palette of

colours to work with to create the darker colours. Working with both image C 'Palette' and image B open at the same time in Paint Shop Pro (a personal preference because I find the tools easier) I used the clone tool as if it were a paintbrush to change the remaining background of image B and I also picked up some other colours mainly the greys and white from parts of the original cropped image to add further highlights. Then a little bit of colour rebalancing (again using hue and saturation) a final crop and a border and the image was finished. D shows the partly painted image and E shows the final image.



*A: Original Statue*



*B Dry Brush*



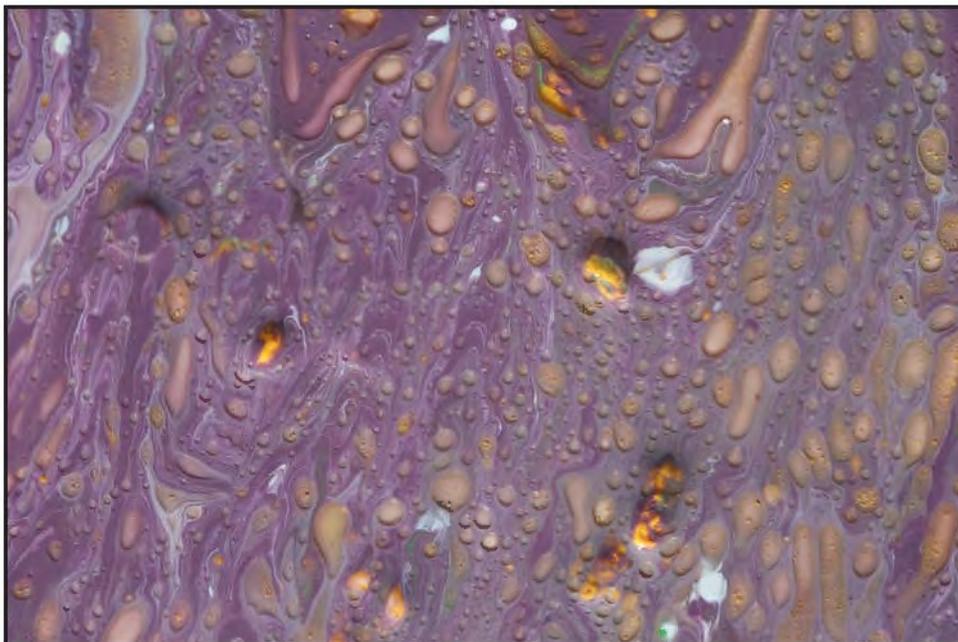
*C Palette*



*D Partly painted*



*Surreal Dream: The Final Image*



*Figure 1*

**Surreal Dream by Janet Haines ARPS:**

The basis of all of my 'dream' panel images is the strangest of beginnings as they start out as paint in a flat white flan dish. I mix the poster paints and splatter it into the dish. In this one I added oil and a few bits of oatmeal, to give the yellowish lumps, swirled it about a bit and then shot it with my camera on the tripod, using my macro lens in natural

lighting (Figure 1). Having produced around 30 of these coloured bases of various colours and textures they then 'suggest' the dream to me. In this one I could see rain on a window and knowing I had a rather strange art installation shot of pink and lilac umbrellas in my library, it started to come together. But I needed shots of folks with umbrellas. The weather came on cue, so I headed into the town and lurked beneath the cover of the

Town Hall and shot unsuspecting folk as they passed. On rainy days it seems no-body is in the least interested in a photographer with her camera!

With all the elements I needed I headed back to my dark room – well CS4 and lots of RAW images.

The first layer was the coloured base, with an appropriate sky from my 'skies' folder as layer 2 and the brollies as layer 3. The latter had a little of 'transform/warp' applied to make the brollies undulate like little hillocks. The opacity of layers 2 & 3 were adjusted to show the lower elements coming through. This merges the 3 base layers to give the overall texture and feel. (Figure 2).

The next few layers were the tedious ones – cutting out people with umbrellas. I found this didn't need to be meticulous as my method of blending them softens the edges and hides any small errors anyway. As my people had not pointed their toes and looked as if they were drifting downwards (why they wouldn't adopt the desired position I do not know), I had to do some 'filter/liquify' work to help them adopt the correct position. With

resizing, flipping, they slowly all became arranged to suit the composition. But I wanted it more surreal so came up with the idea of adding a couple of birds. So into the library I dug and found a great goose who appeared to be looking down and the jaunty little Puffin. I added their umbrellas and sticks and placed them in strategic places. Opacity levels and layer orders were then the next stage. Many of the elements had layer masks also, which enabled me to blend them in. But next I wanted to introduce the rain. A quick search on the web and I found some free downloadable Adobe Photoshop Actions, one of which was the desired rain effect. And so it rained. But interestingly it all looked too real so I found that a new layer, which was given a 20% filter effect in a co-ordinated colour, introduced the dream like quality as well as helping the rain to show up more. It was all a question of which layer to



Figure 2

put on top of which – all trial and error. The final element is the border, again from my library of many borders. At the final count there are 18 layers, 10 with masks (Figure 3). Each has a different opacity, some have had Topaz filters or liquify applied. Rather like a hairdresser cutting hair, it is difficult to know when to stop – when it is considered finished. Having got all the layers adjusted and feeling fairly satisfied, then the whole was flattened

and the final ‘Image/adjust/levels’ applied to give it that final little kick into life. Saved as a TIFF ready for printing. And after all if I find I still do not like some element of it then I can always go back to the stored PSD file, with its 18 layers, and tweak it again – and again – and again!

*Editor’s Note: This image was used as part of Janet’s successful ARPS panel*

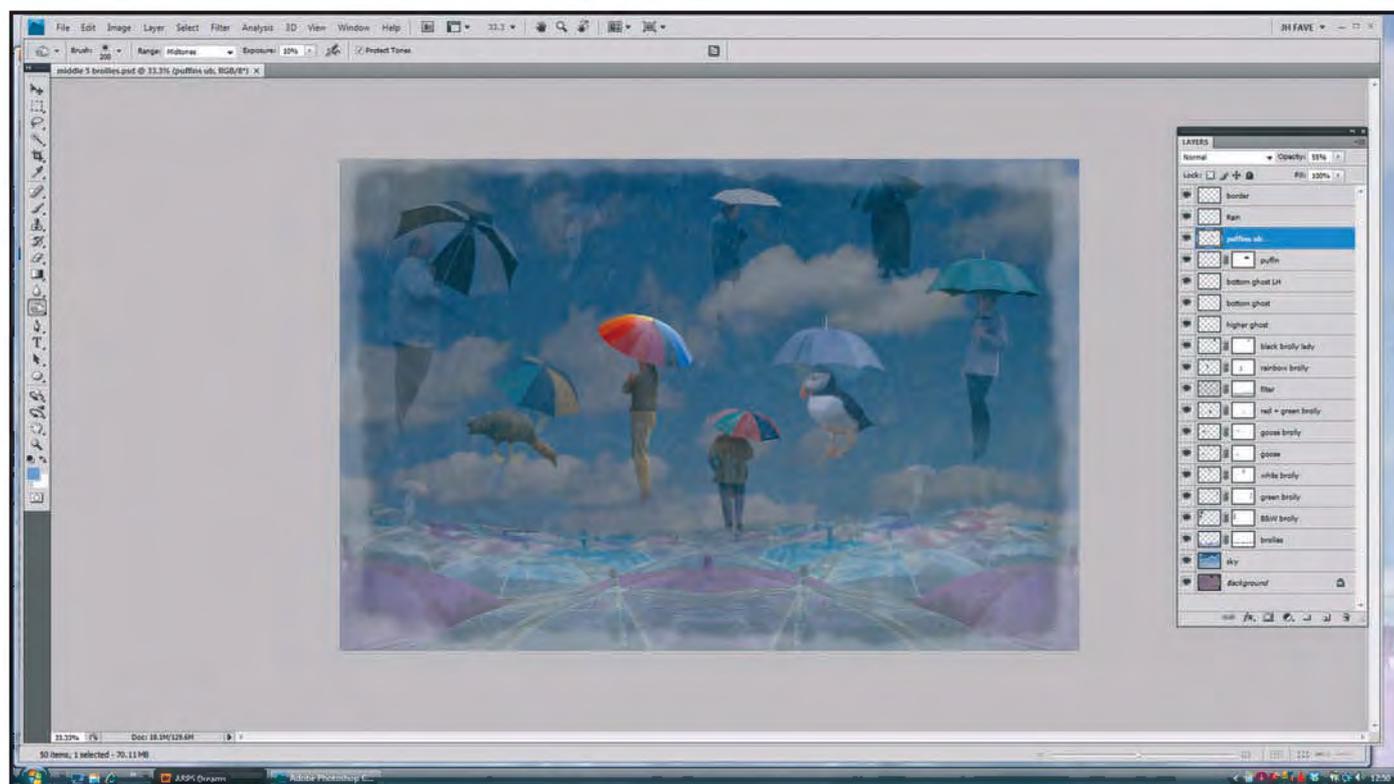


Figure 3: The layers and masks of the final work



The Final Image after Stage 8 - Shadow, Cloning and Dodge/Burn

The picture was taken on a very dull day with a featureless sky (Stage 1). This, combined with the graphic nature of the building, made me think of representing the shop as a line drawing, with key elements presented in colour so they would stand out from the background. At this point I must confess that I am indebted to Jim Hartje of Peterborough Photographic Society who pointed me at a technique I would never have discovered in a month of Sundays! Filters like *Find Edges* and *Poster Edges* are all very well, but the results tend to be predictable and a bit of a cliché. Jim pointed me at the *Smart Blur* filter, which has a little known *Edge Only* option. With care, this filter can be used to make a delicate and attractive line drawing, and it produced just what I needed with this image. First I duplicated the background layer and ran *Filter>Blur>Smart Blur* on the copy, selecting *High Quality* and *Edge Only*. The settings for *Radius* and *Threshold* are highly dependent on the original image, but I chose values which gave a delicate tracery effect on the building. The result of the blur is a black image with white lines (Stage 2), so the next stage was to invert the line drawing before adding a Levels adjustment layer to lighten its mid-tones considerably (Stage 3). The next stage was to add a bit of a colour wash into the rather stark line drawing, and this was done by duplicating the background layer, dragging it to the top of the layer stack, and then reducing its opacity to about 30%. There were a couple of areas where the colour was slightly too intense, but this was easily handled by adding a *Hue/Saturation* adjustment layer, clipped to the background copy, with a reduced saturation and an appropriate layer mask (Stage 4). I wanted the boldest parts of the picture to be the lettering above the supermarket and the bags in the shopping trolley, and this was achieved by making another duplicate of the background layer, moving it to the top of the layer stack, setting the blend mode to *Multiply*, adding a black layer mask, and then unmasking the relevant sections using a small white brush. The lettering was relatively easy, but care was needed with the bags as I wanted to avoid introducing colour into the wire mesh of the trolley (Stage 5). The shopper was reintroduced by adding another copy of the background layer, this time in



Stage 1 - Original

**“Taste the Difference” by Dr Ian Wilson ARPS:**

The original shot was taken during my lunch hour while playing with a recent purchase: a 15mm fisheye lens. Mounted on a full-frame camera (a Canon 5DmkII) I love the way it can turn ordinary scenes into something totally unexpected—occasionally, surreal—and this is what happened when I tried it at my local branch of Sainsbury’s. The distorted verticals of the entrance made the supermarket look like it was bulging at the seams, and I saw the woman as “speeding” across the threshold to do her weekly shopping. The title *Fast Food* came to mind immediately, but I was never truly satisfied with my attempts to impart a sense of movement to the shopper. In the end I abandoned the original interpretation, but more of this later...

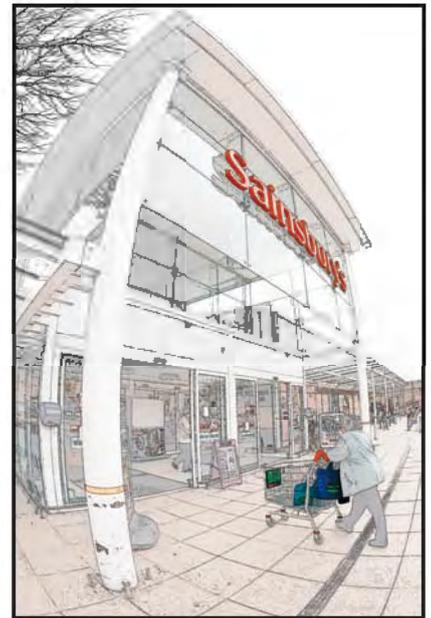
Normal blend mode, with an appropriate mask (Stage 6). The final stage in this part of the processing was to duplicate the “line drawing” layer, drag it to the top of the layer stack, and then set its blend mode to *Darken*. The effect was to re-introduce the solid black lines of the drawing, which also had the benefit of covering up any less-than-ideal masking within the lower layers (Stage 7).

The finishing touches were relatively subtle but absolutely necessary. Firstly, the upper “line drawing” layer needed to be corrected, as there was too much detail in some areas and not enough in others. As a result of the settings chosen for the *Smart Blur* filter, some of the important lines in the building were incomplete. Missing sections were cloned in, and extraneous black marks were removed by painting over them with white. The second correction was to clone out any distracting detail, which in this case was primarily related to the main pillar in the foreground. In particular, the large bolts which attach the pillar to the ground were rather eye-catching and had to go! The third correction was to add a small shadow under the feet of the shopper and the wheels of her trolley by painting in black with a very low opacity soft brush on a separate layer set to *Multiply* blend mode. Without the shadow it looked like she was floating in mid air, which rather spoiled the illusion. The final correction was some good old-fashioned dodging and burning, and my favourite way of achieving this is to add a new blank layer, set its blend mode to *Soft Light* and then paint on it with a very low opacity brush (8% to 10%). Painting in white acts like a “dodge”; painting in black acts like a “burn”. Of course, being on a separate layer, nothing is destructive and mistakes can easily be rectified. Also, because a low opacity brush is used, painting over an area multiple times gradually builds up the required effect (Stage 8).

So what happened to Fast Food? Well, my original plan was to separate the shopper onto a layer of her own, and then add motion blur to give her a kind of cartoon “whoosh” effect. After several attempts to add the elusive sense of motion (during which time I’d made her look ghostly, blurry and downright smudgy in varying combinations) I eventually admitted defeat. Such is life, but it serves me right for thinking of a title before processing the picture...



Stage 2 - Smart Blur



Stage 5 - Lettering, Bags and Trolley



Stage 3 - Invert Levels



Stage 6 - Person



Stage 4 - Colour Mix



Stage 7 - Completed Lines

# DIGITAL IMAGING GROUP PRINT CIRCLE 1



The Digital Imaging Group has had a thriving postal Print Circle for the last year or so. Andrew Brochwicz-Lewinski is the Circle Secretary. He explains how the Circle came to be part of DIG, how it runs and how to join. He also presents some of the images members have submitted.

## How has the Print Circle come to be part of DIG?

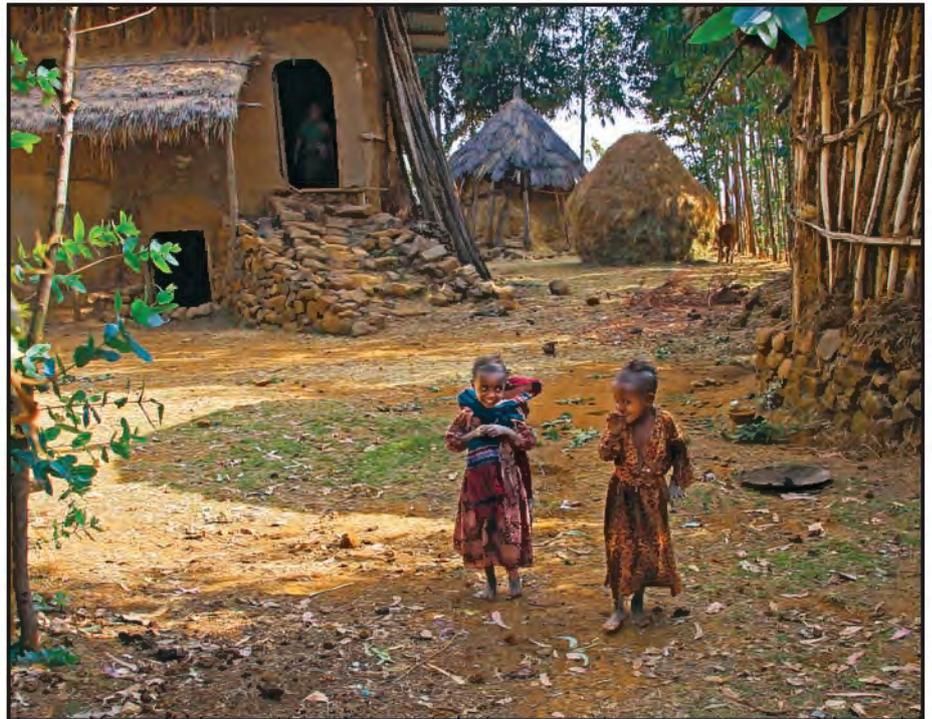
In its previous incarnation, the Print Circle belonged to the now-defunct Colour Group. When that group folded, the DI Group was very helpful in welcoming it into your midst. So those of us who were not yet members of DIG hurriedly joined up and, lo, we were operational. Since then, we have gained one new member. We can cope with 3 or 4 more members without becoming unwieldy and we should love to hear from anyone who feels this might be for them. The reason we were named 'Print Circle 1' by DI Group top honchos was that if there were to be an avalanche of interest, 'Print Circle 2' might be needed. But let's slightly overfill one circle first!

## What is a print circle anyway and why is it good fun?

Actually, that is two questions so I will deal with them one by one.

## How does it work?

In essence the concept is very simple and can be summarised as follows. There is a print Folio which circulates by post, going in turn round the members. When your turn comes, you add your own A4 print into your appointed transparent envelope, and fill in the title with any explanation about it on the provided Comment Sheet. Crucially, you then add your views on the Comment Sheets for everyone else's images. At the end of each Round, therefore, every image has a full sheet of comments from all the members of the Circle. When the folio arrives, each one of us has about two weeks to take out their own image from the previous round (together with the completed Comment Sheet), replace it with a new one for the next round and give thought to useful comments on all the proffered images. We also have a 'rolling log' in which we are all encouraged to write something about



*Andrew Brochwicz-Lewinski ARPS, Two Tiny Farm Girls*



*Mike Trendell FRPS, Haddon Hall Dining Room*

ourselves or our photography. This way we build up a rapport between a closely knit band of people who are scattered around the country and so do not meet often or possibly even ever. Finally, everyone votes in order of preference for their favourite images, so there is a winner for each round.

And that's it! We get through about 3 to 4 rounds per annum (we actually have 2 folios circulating at anyone time), so you can expect to process one folio per quarter. Not an onerous undertaking. The system works well as long as every member sticks to the send-on date given to each one - and on the whole it works very well indeed.

**Would you enjoy it?**

I hope so.

**Why is it good fun?**

Well, firstly, we are all enthusiasts who enjoy looking at and producing prints. There is, for us, something tangible and concrete about prints that is absent from projected images. With a folio, you can look at leisure at each image, comparing and contrasting at will. It is fun to examine and to comment, constructively, on the various images produced. It is certainly very instructive to read the views of colleagues about your own work and, indeed, about the work of other members. And, although we don't take it too seriously, it is nice occasionally to win a round. I do not think that a Print Circle or any other folio is a replacement for either exhibitions or club photography. But it is an enjoyable extra facet of our hobby. It gives each one of us the time to really think about what an image is trying to convey at greater leisure than, say, at a club meeting.

**What kind of images do we produce?**

There is no easy answer to that. We range from portraits and people images through landscape to pattern to record to close-ups. We like to think some of them are quite good! Lots of techniques of enhancement are used but we are not all 'techies' for techniques sake. We need variety and perhaps a touch of new blood. For instance, at present we do not have anyone who is heavily into montages or natural history. Maybe if you were one of us, you could provide a new angle?

**And now ...**

If you could be interested in joining the Circle or would like to know more, why don't you contact me on:

**brochwiczlewinski@talktalk.net** I'd be delighted to hear from you.



*Maurice Baker, Yellowstone Paint Pots*

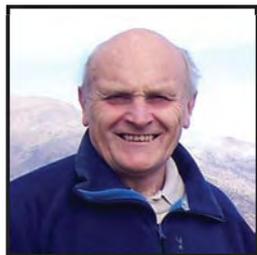


*Fran Kennedy LRPS, Elyse at 13*



*Philip Rock LRPS, Mist Over Water*

# EXPOSING FOR RAW CAPTURE: EXPOSING THE MYTH



In slide film photography tradition has it that you should ‘expose for the highlights and let the shadows take care of themselves’. In digital photography, although this may be true when shooting jpeg images, Roger Norton argues that the same is not true when shooting ‘RAW’. He explains why.

**W**hen we were shooting slide film, we worked to the well-tried method of exposing for the highlights and letting the shadows take care of themselves. This same philosophy applies when shooting JPEGs because burnt-out highlights cannot be recovered. The human eye cannot accept loss of highlight detail, while blocked-in shadows can be accommodated.

But what about RAW capture? There is a large consensus of opinion that opines that we should do the same. This article sets out the arguments which demonstrate that we should not.

It was a presentation by Guy Gowan that made me think about this. He talks about this, too, in the video “Setting up Your Camera”, (Guy Gowan, 2009). Referring to wedding photography, he advises exposing for detail in the groom’s suit and recovering “lost” detail in the bride’s dress using Adobe Camera Raw (ACR). I was sceptical until I came across a statement by the late Bruce Fraser (2004): *“You may be tempted to underexpose images to avoid blowing out the highlights, but if you do, you’re wasting a lot of the bits the camera can capture, and you’re running a significant risk of introducing noise in the midtones and shadows. If you underexpose in an attempt to hold high-light detail, and then find that you have to open up the shadows in the RAW conversion, you have to spread those 64 levels in the darkest stop over a wider tonal range,*

*which exaggerates noise and invites posterization”.*

**So let’s look at this in more detail.**

Modern digital cameras encode captured data using either 12 or 14 bits. A 12 bit file will contain 2<sup>12</sup> or 4,096 “levels” of information, while a 14 bit file will contain 2<sup>14</sup> or 16,384 “levels” of information. These levels are spread over the dynamic range of the camera as shown in Table 1.

While it is surprising perhaps that the brightest stop contains half of the information gathered by the camera sensor, it is more important to consider the shadows which make up only three per cent of the data gathered. Obviously, there will be more information within the darker stops for a 14 bit image. But even here, heavy manipulation of the shadows in an attempt to reveal detail may lead to noise and posterisation. There simply isn’t enough information to manipulate. The other fact that must be remembered is that judicious use of the exposure and recovery sliders in Adobe Camera Raw (ACR), or any similar RAW processing software, are capable of revealing apparently burnt-out highlights. In practice, this can amount to as much as 1 to 1.5 stops.

**What does this mean in practice?**

Contrary to popular belief, we should consider exposing for the shadows by optimising the exposure during RAW capture. The objective should be to bias exposure towards optimal shadow detail without blowing the highlights to the extent that detail cannot be recovered in ACR.

That’s quite a tall order! But we can make use of the camera histogram, can’t we? Well, yes, up to a point. A histogram of linear captured raw data would be unusable because of the way the information is distributed. The histogram has to be processed in the camera and is effectively a JPEG histogram. Clearly,

this limits its usefulness when shooting RAW. Unfortunately, there is no substitute for experience but, in general, over-exposing by half to one stop should improve shadow detail without compromising recovery of the highlights unless the scene is of very high contrast. The easiest way to get a feel for this is to set the bracketing function to, say, +1/3, +2/3 and +1 stops, and choosing the appropriate image.

**Workflow in Photoshop™**

- Open the image in ACR.
- Holding the alt key down, adjust the exposure slider until only the specular highlights are visible. Release the alt key.
- If desired, adjust the recovery tool. The image should now exhibit acceptable and detailed highlights, but the image will have become darker in the shadow areas. In this workflow, it is normally impossible to reduce this using the Blacks slider. The simplest approach is to use Shadows/highlight control in Photoshop (Image > Adjust > Shadows/Highlights) although the contrast masking approach is equally valid and possibly better (Warnock J., 1999). Sometimes this also affects the bright areas and it is often best to do this with a duplicate layer and judiciously erasing the brightened highlights allowing those of the background layer to show through. See the example on the opposite page.

**Final Comment**

The dynamic range of cameras is tending to increase with each new generation and built-in HDR capability is becoming commonplace. It seems likely, therefore, that these issues will diminish in importance as time goes by. Nevertheless, the above approach is both logical and workable. And if nothing else, this article hopefully will stimulate you into thinking about the way you approach RAW exposure.

**Table 1: Levels Distribution in Raw Files**

	12 bit	14 bit
Brightest stop	2048	8192
Next brightest stop	1024	4096
Third brightest stop	512	2048
Fourth stop	256	1024
Fifth stop	128	512
Darkest stops	128	512

Table 1

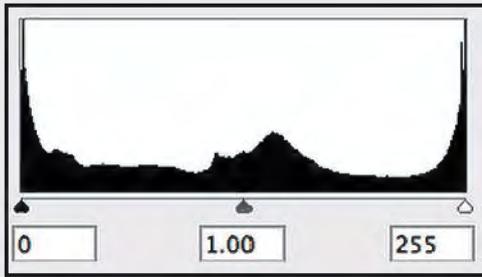


Figure 1: Unadjusted raw file. Note apparently burnt-out highlights and good shadow detail

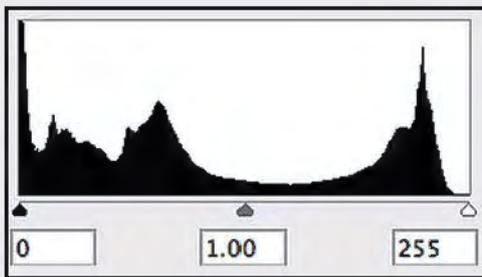


Figure 2: Raw file exposure set at -1.45. Note detail in highlights but darker shadow areas

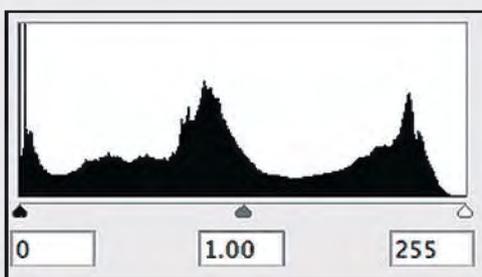


Figure 3: File adjusted using Shadows/Highlights. Note recovery of shadow detail.

### References

Setting up your Camera, Guy Gowan, 2009  
[www.professionalphotographer.co.uk/Magazine/Guy-Gowan/Episode-1-Guy-Gowan](http://www.professionalphotographer.co.uk/Magazine/Guy-Gowan/Episode-1-Guy-Gowan)  
 Raw Capture, Linear Gamma, and Exposure,

Bruce Fraser, 2004  
[www.adobe.com/digitalimag/pdfs/linear\\_gamma.pdf](http://www.adobe.com/digitalimag/pdfs/linear_gamma.pdf)  
 Coming Out of the Shadows, John Warnock, 1999  
<http://aikodude.tripod.com/PSRemoveShadows/main.html>

# INSIGHTS INTO IMAGING



Clive Haynes FRPS takes a look at some of the video tutorials presented by Simon Plant ([www.ProPhotoInsights.net](http://www.ProPhotoInsights.net)). In his series of DVD tutorials, Simon describes how to squeeze every nuance from the captured image to produce polished pictures with glowing quality.



Gumbet Bay Sunrise Before



Gumbet Bay Sunrise After

Last year, a colleague from the RPS DI Group, Midlands Centre attended a workshop organised by Somerset-based Simon Plant of [ProPhotoInsights.net](http://ProPhotoInsights.net). He was very impressed with the content of the course and with the practical, real-world teaching style of Simon. On the strength of this experience, we booked Simon for a presentation at one of our Centre Sunday meetings at The Old School House, Oldbury, near Birmingham. Simon gave an excellent day which contained a wealth of information about shooting, matched with meticulous image-management in Photoshop. Simon is a perfectionist: he has to be, for he earns his living as a professional photographer covering a range of subjects all shot on location from automotive to lifestyle in a very demanding environment. To reinforce the sessions Simon had a series of DVDs

available. Additionally, Simon hosts his wide-ranging website, [ProPhotoInsights.net](http://ProPhotoInsights.net), which contains much useful training information as well as downloadable versions of the instructional DVDs.

I downloaded a selection of the DVDs and I have been impressed by the level of detail and the numerous 'pro-secrets' revealed.

To give an indication of the topics and the level of detail covered by Simon, I'm going to mention some of the insights presented.

In the presentation about improving and polishing a panoramic-style landscape (a section of the Aegean coast in Turkey: Gumbet Bay Sunrise) Simon takes us through a series of logical steps to achieve a beautifully graded and sumptuous result. The techniques covered include stitching the image elements together, retouching,

improvements to micro-contrast, selective (hi-pass) sharpening, using Gaussian blur on the layer mask to smooth its application, and the control of compositional and tonal emphasis by judicious use of saturation and desaturation.

In the two-part DVD about changing the backdrop and making seamless location changes for shooting a Jaguar car, Simon makes spectacular use of the channels palette, introduces high-quality masking, and covers the creation of textures and the application of blend-modes. Additionally, Simon illustrates how to add highlights to the bodywork and introduce natural-looking lighting effects. The session also includes the use of the 'calculations' interface. When viewing the video material one follows Simon through the set of sensible workflow practices which have kept him at the forefront of his

profession. His approach is honest and workmanlike and he deals frankly with real-world situations. He describes snags and how to overcome them. Hi-Fi has been described as 'fidelity of representation with insistence upon detail' and this very much sums up Simon's approach to image-making and workflow.

I can recommend the series of ProPhotoInsights DVDs / downloads to everyone seeking to refine their technique and squeeze every ounce of power from an image. Simon's website

[www.prophotoinsights.net](http://www.prophotoinsights.net) offers a free sign up and with this there is a free video and an ebook. Simon also has an extensive portfolio of work at: [www.plantphoto.com](http://www.plantphoto.com)

## SPECIAL OFFERS FOR RPS MEMBERS

Simon has a some special offers available for RPS members. For details, go to

[www.prophotoinsights.net/49/rps-members-special-offer](http://www.prophotoinsights.net/49/rps-members-special-offer)

The offers will be available until the end of September 2011



Jaguar Before



Jaguar After



This 'grab' from 'Gumbet Bay' illustrates the multi-adjustment layer approach utilised by Simon. Each adjustment layer is targeted to a specific area within the picture. Shown here are adjustment layers to control Curves, Levels, Photo Filter, Colour and Saturation. To keep things tidy, Simon labels each layer and he makes efficient use of Layer Groups.



The tutorial about adding an improved background for the Jaguar car, includes how 'Lighting Effects', one of the lesser used filters in Photoshop, can be used to great advantage when in the hands of an expert.

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A searchable, cumulative contents list of previous issues is available from the downloads section of the group's web site at: [www.rps.org/group/Digital-Imaging/downloads](http://www.rps.org/group/Digital-Imaging/downloads)

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