Day-dreamer by Dr Adi Sethna FRPS

This image from Adi Sethna was chosen by Barrie Thomas FRPS
as the winner of DIGIT's on-line competition to celebrate the
150th Anniversary of the Royal Photographic Society.
A cheque for £150 was presented to Adi at the Digital Group's Spectacular.

Letter from the Chairman
Dr Barry Senior ARPS

Firstly, a warm welcome to all our new members. The Group membership is now over 1000 and continues to grow. I should like to encourage all members to take part in the Group's activities and so I thought it would be useful to highlight the benefits membership has to offer.

The web site www.digit.org.uk is well worth a visit if you have an internet connection. It provides space for up to 12 of your images, a monthly competition, a forum for discussion of matters digital and a folio for discussion of your images – plus all the images from the past and current print exhibitions. You will find it is easy to up load your images and use the other facilities the site offers, some of which are reserved for members only.

The Annual Print Exhibition is selected in April each year and tours venues around the country. It is also published on our web site. All members may enter. Everyone entering will have a print accepted and all accepted images will be published in the catalogue edition of DIGIT.

DIGIT: We aim to publish our magazine four times a year and here I should like to thank Bill Henley LRPS who has edited DIGIT for many years and has decided to retire as editor - in order to have more time for his photography. Thanks also to Glenys Taylor ARPS who, apart from all the other work she does for us, has edited this edition and to Geoffrey Carver LRPS who has volunteered to take over as Editor. Please help to support your magazine by making suggestions for articles and providing copy if you can.

The Digital Imaging Group's objectives, as defined in our constitution, are to support all areas of digital imaging. To this end we are working with the AV Group and the Film and Video Group – so if these are amongst your interests please watch the events notices.

Currently the Group holds two major meetings each year – the AGM and selection of the Exhibition and the Rugby Spectacular. The Spectacular is our annual highlight. We were again well supported by many trade stands and our speaker Ben Willmore, whose popularity as a speaker is overwhelming, was brought over from the USA for the second year running. Not least the raffle prizes provided by the Trade Stands present had a value in excess of £1500. The event is planned again for 14th November 2004 with speaker(s) yet to be decided.

One of our strengths is the many local Groups around the country which provide an opportunity for members to meet, attend lectures and show discuss their work and problems in a friendly atmosphere. If there is not a local Group near you - why not form your own. Advice and help is available.

Remember: It is your Group and is to a large extent what you make it!

Contents

Making 3D Pictures

by The Red / Green Method (Anaglyph)

Clive R. Haynes FRPS

What is a 3D image?

Our human optical system surveys a scene and transmits messages to our brain which are, in fact, the contents two simultaneous, two-dimensional images, spaced about three inches apart. In making a 3D image we need to convince our optical system that, just as in real life, the two flat images presented add together to make a stereoscopic (3D) picture.

In Victorian times 'bioscope scenes' viewed with a hand-held 'stereo viewer' were very popular. Two pictures were taken of a scene and pasted together side-by-side for viewing through simple lenses. They were very good with excellent depth and clarity.

How to do it.

The first requirement is to take two pictures of the scene, one left one right. Obviously it's best unless using a specialist stereo camera, to avoid scenes with movement.

The viewpoint for pictures for most normal scenes, using say a 35mm to 100mm focal length lens (35mm photography) need to be about 3 inches apart - this is the average distance between the left eye and the right eye. Special devices can be bought to do this with extreme precision, however it can be done quite successfully by the 'rock from one foot to the other' method. To do this take one picture (left) then rock from the left foot to the right so as to lean to the right - go about 3 inches (75mm) keep everything level and without twisting the camera, take the second shot (right).

'Toeing-in'

An improvement upon the simple 'move to the right' method can be made by 'toeing in'.

This is what you do.

When taking the left shot, look at the centre of the scene area for a 'reference object' and remember where it is within the frame.

After moving the 3 inches to the right, pan the camera back into the original scene area (this is 'toeing in').

Place the 'reference object' in the same spot as it was in the left image.

Take the shot.

The slight 'pan' almost re-aligns the image elements, however, they remain displaced by 3 inches to the right and this gives the stereo effect.

The 'toeing-in' is to reduce the amount of image area that spills beyond the frame of each shot when combined in the 'anaglyph'. In this way a more complete image area is restored. Actually it's far easier and more obvious to do than explain!

The two resulting pictures can be viewed as a stereo pair. If they are slides, then a double viewer can be used to recreate the 3D scene.

If prints, then find that placing two 5" x 7" prints (one 'left', one 'right') side by side about 3 feet away and deliberately going cross eyed to view them works crudely. Some people find that going cross-eyed is not at all easy - so it's not something that I would recommend.

An Anaglyph

A popular form of 3D picture is a two-colour image that recreates depth by making each half of the stereo pair a different colour; this is known as an 'anaglyph'. Usually red and green is chosen for this.

To achieve a result we need to make the left eye image red and the right eye image green. (This is the convention, it could just as easily be the other way around - provided we view it that way).

Digital imaging has made the production of anaglyphs simple.

The word anaglyph incidentally, derives from the Greek - anaglyphos, anaglyptos - in low relief - ana, up/back, glyphein, to engrave or carve. 'Anaglypta' wall paper has the same derivation!

Making an Anaglyph (red/green) 3D picture

What follows looks long-winded because I've detailed *every* step. In practice the whole process is very quick and I can run through it all, once scanned in, to a final 3D image, ready to print, in under two minutes - honest!

1 Import/scan the 'left' and 'right' images into Photoshop in the usual way. NB Should the images be JPEG files, convert them to .PSD (Photoshop) files by 'Save As'. If the images remain as JPEG's, the 'Duplicate Channel' functions listed below will not function correctly.

2 Make any obvious corrections, bearing in mind that the two images will ultimately overlap each other to form a single optical composite.
NB Do not make any alterations to the pixel dimensions either by 'Cropping' or 'Transformation' at this stage. If alterations are made, the 'Duplicate Channel' functions listed below will not function correctly.

3 Go to the 'left' image and de-saturate it. Do this via Image > Adjust > Desaturate

4 Go to the Channels palette and click on the RED channel (it highlights in blue)

5 Go to the horizontal right facing arrow at the top right of the channels palette and click. In the menu that opens choose 'Duplicate Channel'

6 In the dialogue box that opens go to the Document box and click on the drop-down arrow and choose 'New'

7 In the 'Name' box (not the 'document' box), type in the name of the image you are working on. (If you've already saved the left and right originals then choose another title otherwise the system will have great pleasure in telling you that the file name is already in use!). Click 'OK'.

4

A new monochrome image will now appear

8 Minimise or close the 'left' original. Keep the new monochrome image running

9 Go to the 'right' image and Desaturate it. Do this via Image > Adjust > Desaturate

10 Go to the Channels palette and click on the GREEN channel (it highlights in blue)

11 Go to the horizontal right facing arrow at the top right of the channels palette and click. In the menu that opens choose 'Duplicate Channel'

12 This time in the dialogue box that opens, go to the 'Document' box, click on the drop-down arrow and choose (click on) the file name you gave in step 7. Click 'OK'

13 Go back to the 'right' original and re-peat steps, 10, 11, 12 *this time* selecting the BLUE channel in step 10

14 Minimise or close the right original

15 With the monochrome image running, created from the three separate colour channels (red = left, green & blue = right), go to > Image > Mode > RGB and as if by magic, the monochrome image becomes a red/green (and blue) anaglyph

16 Put on your stereo red/green specta-cles and view in glorious 3D

17 All should be well but some adjustment may be necessary. See 'tweaks' on my Website

18 Print the picture to matt paper as re-flections from a glossy surface may be distracting

Digitally I am in isolation. Not by choice but by a set of circumstances. I am unaware of any group of people within a reasonable distance of me who have any interest in Digital Imagery. For that reason I was asked how I became involved in digital imagery without the benefit of like-minded people. Well, first of all I don't consider myself a Luddite so I was happy to embrace computer technology. Secondly this led to seeing the possibility of digital imagery and, of course, the final and most

Tony

important reason has nothing to do with digital, analogue, watercolour, paint or any other medium of expression I simply find images stimulating and communicative. Their shape, colour, pattern and form all appeal to my visual sense. It all boils down to the fact I love images and I hope people like looking at my creations as much as I like looking at theirs. How images are created is of very little incentive to their appreciation.

Concern for how an image is produced is why we have people arguing over "Proper" photography. A print is a print whether it comes out of a 'wet' darkroom, an inkjet printer or a lithographer's press. You view it for what it is, mess it up and few people will be interested in it.

However, digital imagery implies much more than just looking at pictures. If one wishes to use the medium in the same way as a 'wet' process then you have to learn something about image manipulation, and, under these circumstances, isolation is a big draw back. While there are a number of applications that allow image manipulation most of us use Adobe Photoshop, and teaching yourself Photoshop is no easy task. For DIG members Barrie Thomas, Peter Clark and Dr. Adi Sethna have partially come to the rescue, but having a lecture circuit and being able to discuss techniques with like minded people is a distinct advantage. There are tips and tricks that come from group discussions that you can use to build upon the basic techniques, and these make the difference between going bald tearing out your hair and producing a satisfying image that expresses your idea

At present any prints I produce come from the digitisation of my slide and negative collection which is the result of 45 years of photography. These have the potential of treatment never envisaged at the time they were taken.

Who would ever consider trying to retouch a 35mm slide ? No one in their right mind I'll wager. this has all changed with the introduction of film scanners and from my point of view I could probably spend the rest of my days working through my photographic library. I don't have a digital camera yet, but I feel I am not too far away from embracing this new tool.

My speciality is Nature Photography in all its forms, animal, vegetable and mineral. As there are rigid rules regarding nature photographs, I have also been asked how I can rationalise the manipulative facilities of digital images with these Nature rules. Well, Nature Photography isn't just about winning medals. There are other aspects to the subject in which digital imagery can provide time saving assistance. For instance one example can be found with the Customs dept. One method of identification of reptiles is The scale pattern on

Two heads

the snake. To help Customs officer identify smuggled reptiles they can be provided with a line image of the scale pattern. In the past this was done using lith film and the Tone Line process. Now with Photoshop this can be done in a relatively short time using the Pen and Ink or Black Line technique we have seen from some of the members. The example is not a snake but a legless lizard.
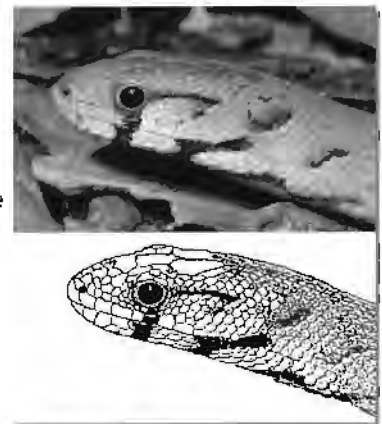
So all in all for me digital imaging is very satisfying and it allows me to find expression in ways I never dreamed possible years ago. It also means I can now produce folios of work that were out of the question in the past but I would still like to have someone with whom I could discuss the techniques face to face.

The Spectacular 2003

On November 9th 2003 the fifth Digital Spectacular took place at the Benn Hall, Rugby. The committee have chosen this venue for four years running because it is so centrally placed, allowing participants from both the south and the north of England to reach it easily via the M6, M1 and M40. The accommodation is excellent, the staff are organised and helpful and there is free parking for all.

Ben Willmore

Last year's Spectacular, when we brought Ben Willmore over from America, was so successful that we were persuaded to invite him again to give us more insights into Photoshop. This year Ben again gave two lectures back to back, allowing one hundred and fifty people at a time to watch and learn from two separate seminars. Ben told us about levels, grouping with previous layer, style blending and layer masking among other things, and maintained his usual clear and explicit lecturing style.

The exhibitors in the main hall, ably organised by Malcolm Cartwight of Jessops, offered paper, printers, plug-ins, cameras, digital storage and books. Around the outside of the Jessops stand was a magnificent display of prints

brought by the attendees to compete for a £50 prize. The winner, selected by popular vote, was Irene Froy with her print "Vineyard Cottage in Early Spring" *(see back page)*. The prints proved a great talking point, and many people met up with friends from all around the country to discuss the pros and cons of each image.

At the Spectacular Adi Sethna FRPS was awarded the special £150 prize, offered to celebrate 150 years since the founding of the Royal Photographic Society. His print was selected as winner from those entered on the Digital Group's website. The judge was Barrie Thomas, our past president, on a visit from his new home in Australia.


Adi Sethna FRPS

Winner of the On-Line Digital Competition being presented with a cheque for £150.00 to celebrate the 150th anniversary of The Royal Photographic Society.

Towards the end of a great day the usual draw was held, based on the number on everyone's ticket. It has always been a rule that you must be present to claim your winnings, and on this occasion a crowd of not much less than 300 people watched lucky winners carry away around £2,500.00 worth of prizes.

Plans are already in hand for next year's Spectacular, and the committee intends to consult with the members about how to make it even more of a success.

TO CONVERT RGB TO BLACK LINE

Dr Tom Williams
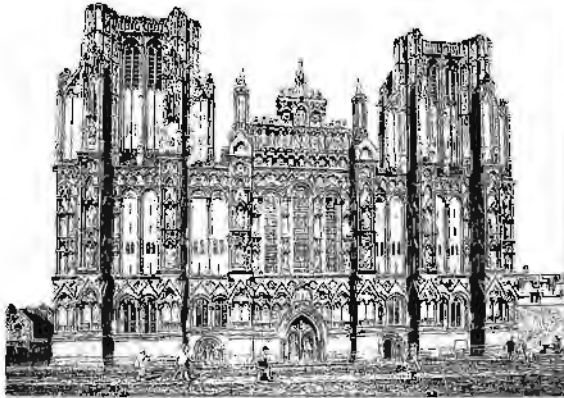
Wells Cathedral

Use a rather flat picture, areas of deep shadows will produce as solid black.

Stage 1:
Filter...sharpen ...unsharp mask
Try amount   50
     radius: 2 - 5
     threshold: 0
use small radius for low pixel counts and large radius for higher counts.

Stage 2:
Filter...artistic...poster edges.
try: edge thickness: 2
      edge intensity: 4
      posterisation: 3
varying edge intensity has most effect.

Stage 3:
Convert to black and white

a) Rough Method.
        image...adjust...threshold
        move slider for optimum effect.

b) Better Methods.
either   i) image...mode...greyscale
or   ii) image...adjust...curves
move white end of curve to left and black end to right 'fiddle' about until the result pleases.
Stage 4:   Print: in properties set to Auto and ink to Black - print at 720dpi.
NB: It will be found that the best results are obtained with pictures having high

TO CONVERT TO A TONED EFFECT

pixel counts, say 240ppi upwards.
Stage 1 and 2 as above.
Stage 3:
Convert the black and white but in RGB
        i) image...adjust...desaturate
        ii) image...adjust...levels
A. open drop down menu for red adjust mid slider to right to modify effect
B. open blue move mid slider to right to modify effect
C. when you have got the idea move the sliders please or until madness supervenes.
        iii) print in RGB
NB: This technique for toning can be used with any RGB Picture. It is more fun and less dangerous than small darkroom chemicals.

TO MAKE A 'TINTED' INK DRAWING

Use a low pixel count, say about 100 ppi
I) make a copy of background layer:
drag background layer on to New Image icon
ii) stages 1, 2 and 3 as in Convert to RGB to toned
iii) double click on background layer to float it,
drag to top of layers, change blending mode to multiply, adjust slider opacity to taste.
iv)   print in RGB

Autumn

Ashcroft Miners Settlement—Gaston Alzairy ARPS

Anne at Watersmeet—Robin Mellor ARPS

Corner Store—Hugh Thompson LRPS

Catherine—John Miller LRPS

Zushkhan Jodeci
June Cook LRPS

Leaves on Lilypad– Mike Pollit ARPS

Lunch—Vincent Lowe ARPS

Rainman - Ray Pavett LRPS
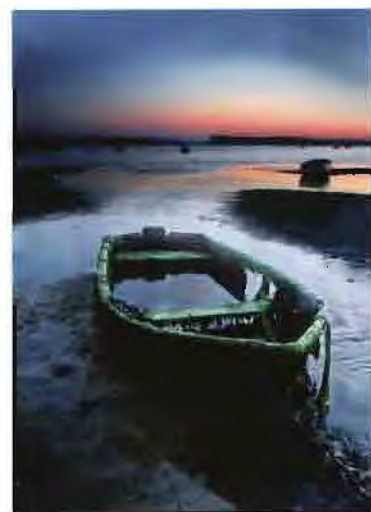

Golden Eagle - Adrian Cray

Fountain Bike—Brian Jenkins LRPS

Woodbridge Quay—Brian Beaney ARPS

Early Morning, Keswick – Paula Davies LRPS

Poole Harbour
Roger Holman ARPS

The Mono Darkroom from Dishes to Digital
Peter Clark FRPS EFIAP

As an avid, some might say experienced, darkroom worker of more than 20 years standing my transition to digital imaging in monochrome involved much heart searching, particularly in the critical area of print quality. I still have those concerns, but so long as the finished image is viewed from an appropriate distance under the right lighting conditions I can live with them.

My first love has always been for the monochrome landscape and the transition to digital imaging has not changed that, but merely strengthened it. The infinite degree of control which can be exercised in the digital darkroom is pure manna to one used to working in the dark for so many years and the ability to source images from colour slides or negatives widens the scope for new images. Surprisingly, perhaps, my first and still one of my most successful digital monochromes to date – 'Storm over Glencoe', originated from a Kodachrome 64 slide.

Storm Over Glencoe

My images are all sourced from scans of mono or infrared negatives or colour slides made on a Nikon Coolscan III or IV film scanner – I cannot recall the last time I shot a colour negative film! – although the greater exposure latitude of colour negative film vs. slide is clearly an advantage in terms of recorded detail. All scans, including those from mono/infrared negatives are made in RGB in Adobe RGB (1998) colour space and converted to monochrome in Photoshop®. The only ad-

justments made at the scanning stage are the selection of the scan area and the use of Digital ICE for colour slides. I prefer to make *all* image corrections in Photoshop®, but those who use Silverfast scanning software may have a different viewpoint on this. An RGB scan contains 3x the amount of information of a greyscale scan and opens up a multitude of options for a controlled conversion to monochrome and for subsequent adjustment of the image.

Millstones

Photoshop® and other imaging programs provide many ways of converting colour images to mono and, with a few exceptions, no one way is better than another. In no particular order the methods commonly available are Greyscale, Desaturation, Channel Mixer, Gradient Map, Hue & Saturation, Lab Colour, Calculations and Third Party Monochrome Filters e.g. Silver Oxide and Actions e.g. Digital B & W Pro and Digital IR from www.fredmiranda. com . There are other ways, of course.

Wave Walker

Of all these methods Greyscale is the least satisfactory; detail is lost by reducing the image to 256 shades of grey and the resultant image is single channel. Likewise the simple desaturation of a colour image produces a very mediocre monochrome image which conveys neither mood nor emotion to the viewer and which will not match the quality of monochrome images produced by other methods, even after much adjustment. Channel Mixer is perhaps the most reliable and versatile of all the methods listed and has the advantage that the effect of standard monochrome filters – red, green and blue can be simulated to some extent on scans from colour originals.

Last Light on the Dunes

These viewpoints are not necessarily supported when the same colour image is converted to monochrome by each of the conversion methods noted above and the Histograms compared one against another and against that of the original image. The distribution of the shades of grey is different for most, but not all conversions, although some of the differences are quite subtle. The natural conclusion is that it really doesn't matter which method of conversion is used – unless an RGB mono (a contradiction in terms?) is required for specific adjustments at a later stage. Clearly some methods give a greater degree of control over the conversion to monochrome than others.

My own preference in converting to monochrome is for Channel Mixer or Gradient Map and I generally put Adjustment Layers for both onto an image, switching between them for comparison. If the scan is from a mono negative I rarely adjust the channel settings in Channel Mixer as the appropriate filter was invariably used at the taking stage. Experienced darkroom workers have the ability to 'read' a negative – in this case I 'read' the converted image to determine which method of conversion is most appropriate to my perception of the finished image. In some cases I will use another method such as Lab Colour or Calculations and, very occasionally, a Third Party conversion filter or Action.

Forsaken

My digital imaging is not limited to pure 'darkroom' work and I relish the ability to make changes to an image to increase it's pictorial qualities. 'Storm over Glencoe' 'Wave Walker' and 'Furrows of Time' are straight images, but 'Last Light on the Dunes' is a combination of a colour slide of the dunes with a mono infrared sky to produce a much stronger image.

'Forsaken' is a combination of a mono negative (foreground) with some elements removed for effect and a colour slide (sky); 'Millstones' is made up from two infrared negatives and the millstones have been rearranged.

Sandstone Waves

With 'Sandstone Waves' I was interested to see how a digital mono, containing very subtle tones would fare when output to an inkjet printer – I was not disappointed and although one viewer was kind enough to compare the quality with that of a print from a 5 x 4 negative I really couldn't agree!

Furrows of Time

The final stage in the production of a monochrome image is the one which gave me most concern at the outset, namely that of printing. The method I have settled on produces images of an acceptable quality given that they are viewed from an appropriate distance under the right lighting conditions

My prints are output from an Epson 1270 printer at 1440 dpi using black ink only on one of three papers - Epson Photo Paper 194 g/m^2.
- Patterson   Exhibition Gloss 270 g/m^2.
- Permajet Matt Plus

These are the only papers I have found which give a 'true' monochrome print; if anything the Epson paper can be slightly warm, which is wholly acceptable and the Patterson has a fairly cold tone, again quite acceptable. The Permajet is fairly neutral. All the other papers I have tried – and there have been a fair few, have exhibited a distinct green cast.

A further selection of my monochrome prints, both conventional and digital, can be viewed on my web site www. monolandscapes.co.uk where there are also details of two Photoshop$^®$ eBooks co – authored with Dr Adi Sethna FRPS. Book 1 includes an extended section on converting colour images to monochrome.

What is Broadband?

ADSL is one of the principal forms of broadband.

ADSL stands for Asymmetric Digital Subscriber Line.

In more simplified terms, ADSL is a line that runs over a normal telephone line. This means an extra telephone line is not needed to gain access to the internet and the existing phone line is free for you to use while on the net.

ADSL is in expensive to run, straight forward to install, reliable to operate and predictable to budget for.

With ADSL broadband there are no call charges just a flat regular tariff.

What can broadband do?

Broadband ADSL allows you to send and receive large attachments very quickly. Websites can be downloaded and viewed in seconds, employees can access their company's network when working from home and offices can be connected together for data sharing and collaboration.

Broadband ADSL allows information to be backed up offsite more quickly than is possible over narrowband, and these backups can be in addition to those made in the office. It makes monitoring of web servers that are hosted elsewhere easy, while allowing remote checks on the status of servers in the office to be made offsite.

DIGROs - Ray Grace LRPS

The DIG is now the largest 'Specialist Interest' Group within the RPS, which is indicative of the continuing growth of digital imaging and the interest shown by RPS Members. Like the RPS, our Group is organized into regions, each one being looked after by a Regional Organizer, a DIGRO.

The DIGROs do a great job in spreading the word by organizing digital entertainment to the benefit of our members. Their commitment and involvement is invaluable and their efforts are appreciated immensely. However, although we have a number of DIGROs throughout the UK mainland there are a number of areas where we have no representation at all. So, the regions having DIGROs are served to a greater degree than those areas without. We would, if possible, like to redress the balance. Are you able to help? Would you be willing to take on the role of DIGRO and support your area? There is no pay, just the satisfaction of doing your bit to promote the role of the Digital Imaging Group in your local area. Listed below are the regions covered by DIGROs along with their contact details. If your area is not listed - there are many, please think about whether or not you could provide the service needed. Get in touch and join in.

Digital (East Anglia) Ray Morrison LRPS
joyandmike@wandsnework.freeserve.co.uk
Cumbria   Harry Bosworth
harrybos@aol.com
Central   Clive Haynes
haynes@fotall.wanadoo.com
Central Southern   Dr John Nathan LRPS
johnnathan@globalnet.co.uk
Wessex   Maureen A bright LRPS
maureen@gmx.freeserve.org.com
Scotland   W adam Knight LRPS
ajphoto@btinternet.com
East Midlands   Bob Rowe ARPS
bob.rowe@ukinternet.com
Western   Glenys Taylor ARPS
glenys.taylor@tiscali.co.uk
Southern   Barry Senior ARPS
barry@lirtlap.es.freeserve.co.uk
North Wales   Mel Starworthy LRPS
(No group meetings - one big meeting a year)

As you can see from the above list there are many parts of the UK that are DIGROless. If you can help them please get in touch with me, or any other member of the comm tree. He is your fellow DIGGER!

You have taken your image, you have worked on it in Photoshop; you have taken great pains to perform profile controlled colour adjustments and made test strips. It is now exactly the way you want it so you print it. But was it all worth it? How long will it be before the image over which you toiled becomes literally a fading memory?

The answer unfortunately, is likely to be "much sooner than you expected".

More than one person I have talked to has experienced the frustration of finding that an image sent to an exhibition comes back a very different colour to the one it started with. Me included.

The manufacturer's claims speak of years; may tens of years, and yet your image was on the circuit for only a few months. Are the manufacturers lying - no - read the claim in detail.

The one thing you know right from the start is that the manufacturers have not tested the ink and paper combination for the length of the claimed longevity. The technology has not been around for 20 years so no test has been done for 20 years. What they do is conduct a high pressure test (controlled bright light of a particular intensity) for a specified period and then examine the effect on the printed colours.

The very fact that they talk of a period of years means that fading took place. The question becomes how much and how long. Based on the controlled test made in unrealistic accelerated conditions, the scientists then attempt to estimate what might happen under a different set of conditions and from that they make a longevity claim. Read the claim and the caveats about light conditions, humidity and temperature - does they describe your circumstances - certainly not mine.

I have heard more than one person speak highly of alternative papers and alternative inks. Will they last? Unchartered waters. When you use a manufacturer's ink and the same manufacturer's paper, the one thing you know is that the two are chemically compatible. Chemically compatible? Isn't paper just paper? No - a significant part of the longevity process is in the chemical make up of the paper and when you mix and match you are likely to reduce longevity substantially. You may be lucky but not likely.

A simple test - take a small piece of BLUTAK,

warm it up and put it on plain paper. You can peel it off easily. Now do the same with your manufacturer's paper. You will not get it off Epson Matte paper because the BLUTAK has bonded chemically with the paper. Try it on your other papers. If you get it off, the paper is inert. If it sticks, the paper is chemically active but will it be the right reaction for the ink you are using?

So if I could not use the manufacturer's claim for longevity - what could I do? I conducted my own extensive extreme test. I printed up a simple test strip in the form of a target showing full red (255,0,0) full green, full blue, full yellow (255 255,0) full magenta (255,0,276) and full cyan (0 255,255). I also printed on both sides a grey scale gradient from black to white. These strips were then cut in half with one half being stored in an envelope in a darkened drawer in a mid temperature environment. The other half? I exposed it in a south facing window for 60 days over the summer of 2003. Where we were in France the sun shone brightly for most of those days.

What did I test? I used an Epson 1290 (dye based ink) and an Epson 2100 (pigment based ink). I used Epson Matte paper, Glossy paper, Archival paper. I used plain paper Daler Rowney backing card, Daler Rowney water colour paper. In all there were 22 tests. Many of the combinations showed significant differences in colour but that was not the objective. I wanted to see if the individual test strips changed colour over the 60 days. The results?

At the end of the 60 days I took the test strips out of the window and matched them up with their other halves. All of the dye based ink tests had faded unacceptably. Exactly as expected, the fading was more pronounced where the paper was not Epson. The magenta component appeared to fade the most followed by the cyan. This meant a shift in the overall image to a green tint. The grey gradients showed a strong green cast.

Would this happen only under strong sunlight? No, any light will cause the fading - as experienced by those with images in exhibitions.

What about the pigment tests? We compared the results and after 60 days in bright sunlight we could not see any difference! I do not have the laboratory test equipment to measure the results - I just have my eyes and what I saw was that the test strip which had been in the sun and the control strip which had been in the dark looked the same.

My conclusions were simple: dye ink did not

Forthcoming Events

231103	Central Southern	10am	Bracknell	John Tween	01737 355513	central. southerndig@ntlworld.com
171203	Symposium	10am	University of Westminster	RPS		www.rps-isg.org
250104	South Western	10am	Taunton	Glenys Taylor ARPS	01823 323986	glenys.taylor@tiscali.co.uk
Jan 04	South Wales		Cardiff	Mel Stallworthy LRPS		
170104	Scottish	10am	Glasgow	Alastair Knox LRPS		akphoto@btinternet.com
180104	Scottish	10am	Edinburgh	Alastair Knox LRPS		akphoto@btinternet.com
180104	Joint DI & Film and Video Groups	10.30	Smethwick	Graham Whistler FRPS	01243-266053	graham@gwpmultimedia.com
250104	Midlands		Smethwick	Hilary Roberts	01926 420105	hilary-roberts@ntlworld.com
070304	Midlands		Smethwick	Hilary Roberts	01926 420105	hilary-roberts@ntlworld.com
250404	A.G.M.	11am	Smethwick	Glenys Taylor ARPS		glenys.taylor@tiscali.co.uk
160504	Midlands		Smethwick	Hilary Roberts	01926 420105	hilary-roberts@ntlworld.com
180704	Midlands		Smethwick	Hilary Roberts	01926 420105	hilary-roberts@ntlworld.com
050904	Midlands		Smethwick	Hilary Roberts	01926 420105	hilary-roberts@ntlworld.com
311004	Midlands		Smethwick	Hilary Roberts	01926 420105	hilary-roberts@ntlworld.com

Contact details: Eiger—Joy Hancock FRPS   Wessex—Maureen Albright ARPS
East Midlands - Bob Rowe ARPS Southern—Dr Barry Senior
PLEASE NOTE Meeting are held in various parts of the country and as Digital Imaging Group members you are entitled to attend. Please check that meetings are not fully booked by contacting the organiser .

AGM 2004
Smethwick Clubrooms 25th April 2004
Including a lecture by
BARRY BECKHAM
Selection of prints for the Annual Exhibition

BEWARE OF EXPERTS

An Ex is a has been and a spurt is a drip
(A word of advice sent in by Tony Poole LRPS)

(Continued from page 14)
last the tested and faded unacceptably

- a mismatch between the manufacturer's dye ink and paper faded even more
- dye ink fading introduced a strong green cast due to the fading of the magenta dye
- pigment ink did not appear to have altered during the same extended exposure
- pigment ink was stable on all of the papers including artist's water colour paper

Yes we have kept our 1270/1290 for printing items which do not require colour stability over time or which will be exposed to only short bursts of light (reports, handouts, club competitions, etc). But for images which could be exposed to protracted periods of strong light of any sort (direct sunlight, exhibition light, reflected sunlight, etc) the pigment based inks win without question. Our Epson 2100 was a worthwhile purchase.

Current Digital Group Officers

Chairman: Barry Senior ARPS
barry@littlepics.freeserve.co.uk

Vice Chairman: Ray Grace LRPS

Treasurer: Peter Roberts ARPS

Secretary: Glenys Taylor ARPS
glenys.taylor@tiscali.co.uk

Web Master: Bill Henley LRPS
Weh@wycliffe.co.uk

Exhibition co-ordinator: John Long ARPS
Johnlong@lineone.net

Regional co-ordinator: Ray Grace LRPS

Web site updates: John Long ARPS

Publicity : Clive Bailey LRPS

HAVE YOU SEEN OUR WEB-SITE RECENTLY?

All entries for the on-line competition won by Adi Sethna FRPS can be seen on
www.digit.org.uk

ALSO ON THE WEB SITE
A monthly competition, won last month by Brian Beaney ARPS, is open to all
Digital Imaging Group members.
A Folio - with all images commented on in a friendly way by other participants.
A Forum —with discussion pages, where information on various subjects can be sought
and given, we have recently introduced a page where members unwanted digital items can
be bought and sold, there are future events, links to other sites, etc.
It is YOUR site please take part

"Vineyard Cottage in early Spring"
There were over eighty images entered for this years competition at the Spectacular, the voting was spread among the entries but the winner by a small majority was "Vineyard Cottage in early Spring" by Irene Froy FRPS.

Submissions for inclusion in DIGIT are very welcome. Please note that the editor will assume that all persons submitting material have ensured they own full copyright of all images and text submitted., and that any legal infringements are the responsibility of the submitter.
Copyright of the material published is reserved in all countries on behalf of the RPS and the authors. Any views expressed are not necessarily those of the Royal Photographic Society nor of the Digital Imaging Group.
Both John Long and Glenys Taylor can amend and add information on the website.Please keep John Long informed of any events that you would like to see advertised on the website. Please include non RPS events, exhibitions, publications and programmes in which DIG members may be interested.