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# DIGIT

Summer 1997 Issue 3



A portrait photographer ensures that the appearance of the subject, and the context in which he or she is seen, conform to a previously determined mental picture which conveys much more than just the physical nature of the face and body. The scene is manipulated to influence the viewers impressions, opinions and aesthetic awareness. It is not a lesser art because of the manipulations. The darkroom technician employs chemical science to manipulate the basic image produced in the camera and to match it to a creative vision. In both cases it is this vision which matters and the physical arrangement of the lights, objects or the chemical processes are simply the means to an end. It is the final result which either pleases or offends; stimulates or lacks inspiration. This issue looks at some of the issues surrounding the assessment of digital images alongside traditional methods but let us not become bogged down with these problems. Digital Imaging is a natural progression of the use of science and technology in the pursuit of pictures and a picture is what we want it to be, whether to illustrate a technical manual or to hang on the wall of our living room. If you are reading this you will be a person who enjoys creating and viewing pictures. I hope that you will want to share your work and your experiences with others, whether you are an absolute beginner or a professional.



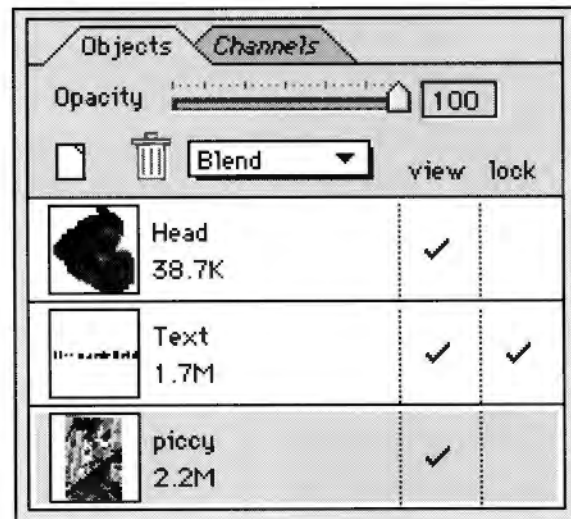
The Royal Photographic Society  
Digital Imaging Group

# Photoshop for free!

Well not quite but xRes 2.0 for the price of a magazine. Issue 48 of MacFormat from Future Publishing in Bath had in addition to the usual cover CD ROM a second CD ROM with a full working copy of xRes 2.0 from Macromedia. Not save disabled nor time limited. (back issues £5.00) The issuers obviously hope that you will pay their special upgrade price for version 3.0 but there is no obligation to do so and version 2.0 is in itself a very useful tool. Macromedia have advertised xRes as a complementary program to Photoshop but it is to all intents and purposes a viable alternative. It has the facility to work in a mode which speeds operations on large files and reduces the RAM requirements. If you are used to Photoshop it is at first a little confusing as there are many similarities but also some major differences. If it is your first attempt at Digital Imaging then there is a need for some initial tutorial guidance but it provides an excellent introduction and at £5.00 is very inexpensive. xRes runs on both Windows and Mac platforms but the MacFormat freebie is a Mac only version. An added bonus is that the MacFormat cover CD ROMs have a large collection of digital images which may be used for experimentation. They range from samples from commercial collections to contributions by readers. Articles in subsequent issues of MacFormat have utilised these images for tutorials in the use of xRes. Whilst you will eventually wish to import your own images via Photo CD or scanner, these images

provide an instant resource for learning the techniques. My advice is to use the images at screen resolution (72 dpi for the Mac, 96 dpi for the PC) in order to speed the processing and reduce the demands for RAM and disk space. It is probably best to import the high resolution image, reduce its resolution and then save and quit. When you reopen the saved image all the previous excess memory will be freed and you will be able to work with the minimum memory requirements. Be aware that in addition to the RAM required for your system, the program and you image there will be extra memory requirements for the processing. Your selected mode of working will determine how much of the RAM and hard disk will be required at any point. You may need to compromise between having a document which has effectively many levels of undo so that you can return to the original image and one in which the changes are finalised but for which less memory is required. Saving versions to disk can provide a way back when you take that inevitable step too far and a truly wonderful picture is ruined. When you have your final creation you can share it with others in a number of ways. If you have a colour printer fine but if not a photograph of the screen can

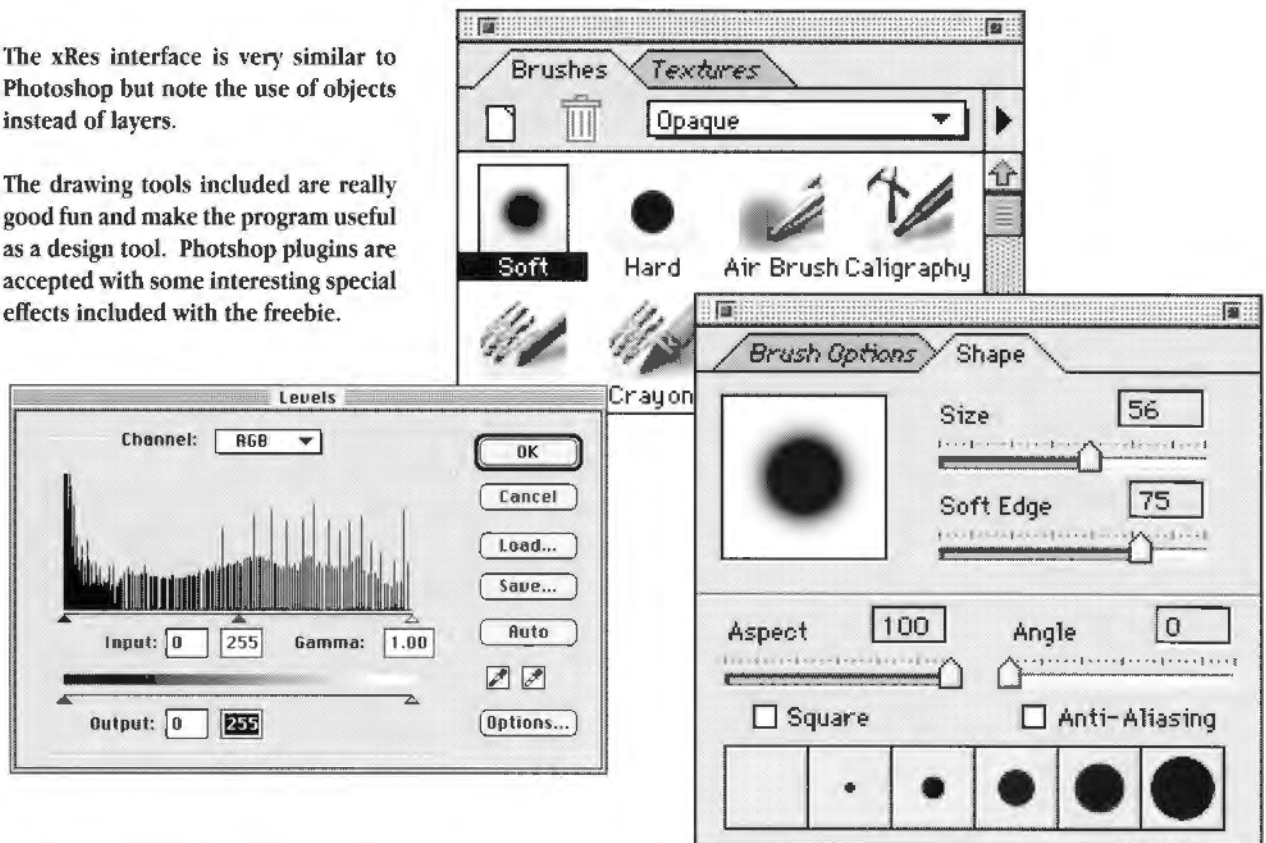
be very effective. Remember to use a very slow shutter speed to avoid seeing the screen raster, but otherwise a tripod and through the lens metering work fine. Of course you can also drop the file onto a disk in JPEG format and submit it for inclusion on the disk portfolio, in DIGIT or on a Web pages. The low screen resolution may be unacceptable for a printout and once you are happy with the processes an increase to 200 dpi images may be appropriate. There is generally no advantage in working at resolutions higher than this. Other full working versions of programs given away with the cover



CD of MacFormat in recent months are the Desk Top Publishing program Pagestream and the Printing and Photo Manipulation program Color-It. Colour-It is also available on a sister magazine from Future Publishing called Computer Arts Interactive. The cover CD for this magazine is PC and Mac compatible. The Color-It program is included with the July/August

The xRes interface is very similar to Photoshop but note the use of objects instead of layers.

The drawing tools included are really good fun and make the program useful as a design tool. Photoshop plugins are accepted with some interesting special effects included with the freebie.



► 1997 issue. For the PC there is a full working copy of Image Pals. In dual format there is a Photoshop tutorial with a Photoshop demo. The June issue of PC Review has a full working copy of Photosuite.

(Note: Some scanners come with Photoshop included)

There must be many other interesting offerings with other journals which I have missed. I should welcome information about them from readers. What is certain is that there is a great deal of useful and interesting software included in the cover price of many magazines. Some have disk or CD ROM issues but for full value a CD ROM player is essential. Such a player will provide resources well in excess of their cost in addition to giving you the facility to use your own photographs on Photo CD. Go for the fastest drive you can afford !

**Bill Henley LRPS**

**Innocence**

**Barrie Thomas**

**FRPS, FBIPP,  
FMPA, EFIAP**



# Another Problem and a Suggested Solution

In July of this year, John Chamberlin, FRPS, a leading member of the RPS Creative Group, showed a local meeting a dozen or so prints and slides which he had made from images produced on his computer. They were all manipulations of a straight shot of sunflowers and their leaves, digitised on Kodak's Photo-CD, fed into the computer, and manipulated with Photoshop. The first few were easily recognised as derivations from the original photograph, but quite soon, the pictures became completely abstract. As such they were fascinating, but they were completely unrecognisable as photographs or as images of sunflowers. These extreme manipulations, we understood, were as easy (or as difficult!) to produce as only slightly distorted images, although they took longer.

How are we to treat such material in exhibitions? The originals were photographs by the author, and all the manipulations were done by the author, so no copyright or authorship problems arose. And yet, all resemblance to

photography had disappeared. There was no way of telling that these pictures had not been produced solely by using a powerful drawing or painting programme in the computer. Put another way, the manipulations had become more important than the original photograph; the original "image made by radiation" had disappeared.

It would seem a pity to ban such efforts from photographic exhibitions altogether, but how and where can we draw a line? This is already a real problem for the organisers of, and the entrants in, open exhibitions. I would like to revive a possible solution, one that I first suggested in my prize-winning FLAP essay on "The Limits of Photography" (1993).

The essay argued that a photograph is an image made by radiation of any wavelength using any means available. This is the widest definition of photography, but for our purposes here, we can restrict it and assume that the radiation is limited to the "normal" photographic wavelengths, i.e.,

visible light, infra-red, and ultraviolet.

Granted that any image made with light is a photograph, no manipulation with light alters this - neither multiple exposures, nor sandwiches of two photographs, nor normal enlarging procedures such as holding back, burning-in, etc., etc. You only start to depart from pure photography when you manipulate the image by other means, such as chemistry, in 5, paints - or computers. My suggestion is that all such images should be shown in photographic exhibitions, but should be put in a different category from pure photographs; they should be marked on the entry form, in the catalogue, and on the exhibition label in some distinctive way. One simple possibility would be "P Plus" or "P+", since they are photographs with the addition of something non-photographic.

At the same time, I argued in the essay that the distinction between colour and monochrome has become so blurred today that it should be abolished.



If these suggestions are generally adopted, we will be left with two visual art exhibition categories only: Photography, and Photography Plus. Both pure photographers and manipulators will be able to "do their own thing" to their heart's content, and will still be sure that their work will be acceptable in photographic exhibitions. And, what's more, viewers will know what they are looking at.

Of course, you have to trust entrants to be honest; but has this not always been the case?

**Sir George Pollock**  
**Hon FRPS**

# Digital Manipulation of Photographic Images

An attempt to obtain clarity and guidance on what is acceptable for photographic competitions. These are personal views on which the comments of others are invited.

## My Hypothetical Case Studies

CASE 1. A digital image can be created in a computer by an amateur photographer like myself and then digitally manipulated without recourse to a photographic picture source at any stage. The final image could be printed out on paper using any one of a wide variety of computer printer types. Should such a non photographic image, the sole copyright of which belongs to the author, be acceptable?

My suggested answer: No! Apart from any incidental photographic process in the printer the final image would not have been a derivative of a photograph obtained by means of a camera. The rather loose, initial SPF statement would apparently allow this although I'm sure that that was not its intention.

CASE 2. Using commercially developed software in a computer one can produce and digitally manipulate fascinating and complex monochrome or polychrome images eg fractals or 3-Dimensional pictures. Such digitised images may be fed directly to a high quality laser printer to produce prints with a visual quality equal to or

exceeding that of a conventionally produced photographic print? Should they be acceptable?

My suggested answer: No! As with Case 1 the final image is not a derivative of a photograph obtained by means of a camera.

CASE 3. If the above computer generated images were displayed on a display monitor, photographed with a camera and then processed would they then be acceptable?

My suggested answer: Yes! A photographic process involving a camera is involved and although it might be argued that the true creativity lies within the software, it is a fact that the selection, photography and copyright of the final image is the author's alone.

CASE 4. If a conventional photographic picture taken by means of a camera is converted by an optical scanner or other means into a digitised image, then electronically transferred to, stored, and subsequently digitally manipulated in a computer to produce an alternative image form, is that derived image acceptable?

My suggested answer: Yes, provided that the author took the photograph and had sole copyright of it! A photographic stage of activity involving a camera has been an essential part of the sequence. The subsequent digital conversion and

manipulation are merely more modern forms of image derivation akin to multiple printing, lith masking techniques, solarisation, etc. and, therefore, are just as valid.

CASE 5. It is now possible for a photographic print to be produced digitally from start to finish without recourse to any conventional cameras, films, papers, chemicals, materials or darkroom techniques eg a scene may be recorded and stored in a digital array camera, transferred electronically into a computer store, digitally manipulated or not, and then output directly to a suitable printer which can generate a final, high quality, monochrome or polychrome picture print. Are such digitally generated pictures acceptable?

My suggested answer: Unequivocally yes! The picture has been produced from a scene perceived by a photographer in exactly similar circumstances to those which apply to the conventional photography that most SPF members practice now. CASE 6. It is possible for those engaged in the digital manipulation of photographic images to access and exploit digitised photographs that are not their own eg those which come copyright free as part of the digital processing software

or are taken from a CD ROM library of pictures. Are final images based in full or part on such picture material acceptable?

My suggested answer: Unequivocally no! Here the picture material is not owned by the author and although it is copyright free he does not have sole copyright of it. He/she did not create it and in SPF events should not be allowed to exploit it!

CASE 7. It is possible for the digital manipulator of a photographic image to modify it or add to it using graphical devices that are computer generated to his/her own design eg line borders, geometric shapes, freehand sketches, paint box colours, etc. Are such hybrid images acceptable?

My suggested answer: Yes, provided that the essence of the final images are based on photographs taken by a camera and that both sources of picture material are the sole copyright of the author.

CAVEAT: In the limit the final image could be just one photographic pixel (or picture dot) with the remainder of the picture pure graphics. Such a picture might qualify as computer art but not as a photographic image. This is why acceptability of the final image should be dependent on it being essentially based on a photograph.

John Riley LRPS



# The Dreaded 'D' Word

You could almost taste the hostility in the air. There was suddenly a tension where a minute before everyone had been relaxed and interested. How was this effortless transformation achieved? The dreaded 'D' word had been mentioned amongst an enthusiastic group of monochrome printers, during notices about fixture events. There was a prolonged stony silence that only dissipated when the next more congenial event was announced, and a collective relaxation of hackles. Previously I had imagined that everybody interested in producing pictures would like to know more, but I soon found that the photographic world polarises into the 'Fascinated' the 'If that's what they enjoy let them get on with it' group, and the kind that would like to throw Digital Imagers to the lions in the Coliseum tomorrow, brigade.

Before long the Digital Event presented by Barrie Thomas took place, in an excellent auditorium with the monitor projected onto a fourteen foot screen. It was a superb day, and the one or two who freely admitted that they had gone for fuel to inform their objections went home with the intention of buying computers! Eventually a group of about eighteen met Chez Swearman for extended conversation, ranging from 'which computer printer program shall I buy?', to admiring some of the excellent images being already produced by a few. It quickly seemed that most Photographic Societies had at least one or two members ready to embark on a 'bit of digital' and it seemed time to develop a more formal group. An exploratory meeting was held in October and at this moment there are forty two members in the group. I hope to develop a structure with three separate smaller groups meeting regularly in their own areas, who will also meet as one for major events. Future plans include a postal portfolio, a circulating Newsletter which includes problem pages and wanted or for sale adverts, 'self help' group information, and presentations by more advanced members or any available experts...

Enthusiasm is enormous, as is the search for information, which is not always readily available. I don't think there can have been so much excited discussion since photographers travelled with wheelbarrows and tents in which they coated their

glass plates with emulsion. At any meeting I attend Digital Imagers seem to coalesce into a group which is always the last to leave, and still in animated conversation in the car park having been forcibly ejected by the key rattling caretaker.

Is it coincidence that digital enthusiasts seem without exception to be such nice people? The people in our group are helpful, willingly share information and warn of any traps they have encountered, while Barrie Thomas is reassuringly at the end of the phone with the latest information when needed. Perhaps a sort of siege mentality also emerges, in that the magazines are full of adverts which promise the earth at rock bottom prices, but promptly lose interest when the cardboard and polystyrene arrives in your house! At one point my computer engineer son rang a 'helpline' about my flatbed scanner. He quickly discovered that the person at the other end would have been fully extended in giving instructions on using a vacuum cleaner! The conversation ended with the request for my son to ring them back with the relevant information when he discovered a solution. \*\*\*\*\*!

My own propulsion into D.I was delayed because my last year as a full time teacher gave me plenty to occupy my time, but on retirement I incautiously agreed to help a local technology high School acquire the images they needed for back projection during the course of a Musical Production. The initial commission was easy, Scala slides of a local fishing port at dawn. As each request was completed the subject matter became more taxing until we came to the production 'Poster' This mission was as follows -the four protagonists bursting from a clock with no hands. Glass flying in all directions, together with the dates, title time etc! Photographically this was not an easy request. Time for the computer, and a rather vertical learning curve. Step one found me lying flat on the floor of a school hall in one of my better outfits, having been teaching elsewhere for the afternoon.

Since it was now dusk I had to use flash, never my favourite, as I 'snapped' each of the four charging towards me. I scanned the resulting prints, discarded the backgrounds, and then scanned a cardboard infant teaching clock and removed the pointers. Using a 'filter' I then made another oval shaped clock.

Computer work successfully complete, it was time to talk to an artist. One of the staff joyfully did a paste-up, and I photographed the result plus all the printed information. For various reasons this was then scanned urgently onto a CD disk. It sounds easy if you read it quickly, believe me it wasn't, for two reasons. Much of what I did was with 'Inside Adobe Photoshop', a thirteen hundred page book that weighs about a hundredweight open beside me, and a psychotic computer that kept declaring 'illegal operation at --' and throwing me out of the program.. How much was the computer's fault and how much my own inexperience I will never know. We had previously tried to save my son's precious free time by buying cheap, rejecting his offer to build us one. This strategy eventually used more of his time than if he had built us one, but eventually the snarling machine was reduced to cringing in the corner and I became more and more fascinated as I was able to use my hard won knowledge.

Let us for a moment consider some of the anxieties frequently expressed. I do not for one minute believe that a beautiful picture, either monochrome or colour, produced by a camera will ever be obsolete. In the fixture the camera may record the picture digitally instead of on emulsion but that gives the possibility of re -cycling failures and keeping your successes. Can that be bad? Several people have expressed an opinion that digital work is in some way unfair, or even cheating. It may seem that way superficially, but in reality it is no more unfair than spending a few days in the dark room to produce some kind of derivative or montage. People who assume that a slide is scanned in to an expensive program followed by pressing a key marked 'masterpiece' are living in fairyland.

You have to have a very clear idea of what you wish to produce, and be willing to spend many hours learning how to do it!

The idea that you can make a poor picture look wonderful is equally a non- starter. You can remove a

fault, but few people would waste time on a poor picture anyway. It is, however, quite easy to make a moderate picture look really terrible. I state that with some authority. Another fallacy is that only the seriously wealthy could begin D.I. That was once true, but now you are likely to spend more on a well equipped dark room. As someone whose lungs really dislike chemical fumes, I am happy to spend time making pictures in my dining room.

Photography is about the enjoyment of creating images by any chosen means, not about cut throat competition. Let's enjoy whichever branch of photography gives us satisfaction, fun or excitement. My only complaint about 'Digital' is the fact that if I decide to allow myself an hour on the computer when I have completed everything more urgent, my next glance at the clock tells me that it is about one o'clock in the morning and I know I am going to regret burning the midnight oil yet again!

**Anne Swearman ARPS**



**Come the Millenium Derek Dorsett ARPS**

## Before and After

Many of our members use Digital Imaging for restoration of photographs or to make them more suitable for technical illustration. Can you supply an example of an image manipulated for this purpose with the original and the manipulated. It could be a reconstruction of a damaged print or a smart tidying up of an image to remove distracting features.

# And The Answer Is...

## Barrie Thomas answers some questions

When Glenys Taylor, our new Secretary, told me of the programme for a day at the Octagon I must confess to a twinge of panic. It all sounded so informal; people would discuss their own photos during the morning and I would speak in the afternoon. No specific topic was given, I had given a slide lecture in the south-west recently and did not feel that it could be repeated so soon. Panic! I armed myself with prints, slides and anything else I could carry and headed down the motorway.

Had I known what a success the day was to be I could have slept easy. The Group members were superb and the

whole day a mammoth triumph. Thanks again Glenys, and thanks also to those who so willingly shared their work and experiences in DI with fellow members to the benefit of all.

Far from having insufficient material we in fact ran out of time, with many unanswered questions remaining which I had recorded from the morning talks. A few of these I am going to attempt to answer here, in the hope that it might be of help to others as well.

## Printing on water colour paper

Almost any type of paper can be used since the print head does not actually touch the paper surface. This is part of the excitement of the process since we are able to experiment widely to see what happens and make our own judgement of the success or otherwise.

Generally absorbent surfaces will produce a more blurred watercolour effect whereas sealed surfaces will limit the inks spread.

No normal art paper surface will produce the intensity of colour that we see on the manufacturers own papers since these have specially prepared surfaces designed specifically for their own inks. This is why the new and ever growing list of independent inkjet paper manufacturers struggle to compete, since their papers have to work on all printers.

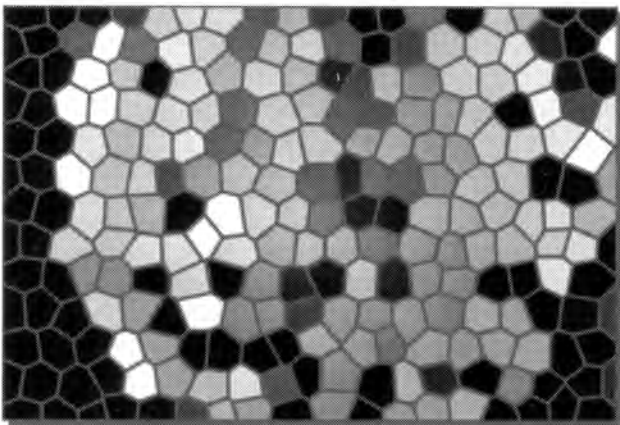
All inkjet prints use water based inks and they are susceptible to damage and fading, they therefore need protection. The varnish used by artists and available from any art shop is an effective solution but is expensive, another

approach that I have been made aware of but not as yet tried is the use of the much cheaper clear automotive varnish.

Protection can also be provided by physically covering the surface, either with professional laminating materials or by simply sandwiching a sheet of high quality acetate (as used for airbrushing) between the image and the mount.

If additionally this incorporates some sort of UV protection so much the better since this is one of the principal causes of fading and image deterioration.

At the risk of stating the obvious it is necessary to bear in mind the colour of the paper, since printers do not produce white, and therefore any highlights in the image will take on the base paper colour.





## Cheap test prints

To produce a test print or printer calibration sheet without wasting expensive inks and paper.

First build a sheet of A4 paper using - File > New > and then inserting the figures 21cm x 29.7cm for your A4 sheet size.

In the resolution box insert the pixels/inch figure that you intend to use on the final print. This would normally be somewhere in the range of 150n300. Click OK.

You now have an A4 sheet without any image and should then open the image you are to use for the tests.

Resize your image to the same resolution as the sheet that you have just produced and from your image select a small representative area with the marquee tool. Cut this area to the clipboard and close the image.

Paste the small portion of the image to the blank A4 sheet and move it to the top left corner of the page. Beneath it use the type tool to record the settings you are about to use for the printing and then print at those settings.

For the second print run, on the same sheet of paper, paste again from the clipboard, position alongside the first image so they do not overlap and then delete the already printed first sample image. You now have a second sample ready for printing that does not conflict with the first and you are ready to make new settings on the printer, record them, and then run this test also.

Continuing like this it is possible to try many different combinations, either of print settings or colour settings, all on the same sheet and to end up with a useful reference for future use.

## Inserting colour into a mono image

This is easily achieved within Photoshop -

Open the Image > Adjust > Hue/Saturation dialogue box.

Select the Colorize box in the lower right hand corner which will turn the whole picture to a fully saturated red tone.

Reduce the saturation to an acceptable level by moving the small triangle under the saturation bar to the left and/or change the colour (hue) by moving the triangle beneath the hue bar.

If areas are selected in advance they can be individually coloured and an effect much like hand tinting is easily achieved.

**Barrie would welcome further questions for future editions of DIGIT.**



**A scene from  
Confusions  
by Alan Ayckbourn**

**Bill Henley LRPS**

# There's no gain without pain!

To upgrade or not to upgrade. That is the question...as,er one of our more distinguished literary figures might have put it. I've just gone through this debate, again, and I thought my experiences might be worth sharing with those of you who are feeling the urge to spend a lot of money and then revisit their bad language reserves. I'm probably like most of you and have relatively limited powers for predicting the future; choosing a computer is one of those activities where these limited abilities need to be strained to the utmost. When, about three years ago, I found that my previous computer was getting rather arthritic and was certainly not upgradable to run the type of software I was interested in, there was only one option and that was to buy a new one. My choice had a 486 processor with a 340 MB hard disk, 8MB of RAM and lots of bundled software. I purchased from a nationally advertising company.

I upgraded on various occasions adding a

further 8MB of RAM, a sound card, a CD ROM drive and a second hard disk. Each of these presented problems in installation - some physical, but mostly in the area of software ie just getting the damned things to run. Herein one major problem came to the fore. The computer company had help lines but the software version had a premium rate number, which wasn't too bad because it was bordering on the impossible to get anything other than the engaged tone (this raises the subsidiary question of "why" - could it be that there were a great number of other people experiencing difficulties?). On the occasions when I did manage to get through, I obtained conflicting advice. Faxes were ignored. But enough of that.

My scanner came bundled with Photoshop 2.5 limited edition and good fun it was too. In my computer though it ran, to be very polite, just a tad slowly - preparing to print images could be accompanied by visits to the kitchen to cook three

course meals and to the garden to grow the accompanying vegetables. I took the decision to upgrade again. Oh woe!

486 powered computers are now obsolete - pentium chips can't be slotted in; new mother boards are the order of the day. This time I decided to use a local guru. He was a little short on social graces, but at least I could walk in the shop and tell him that the damned thing wasn't working properly - I didn't have to use a carrier to return the carcase to distant parts of the country.

My upgraded pentium powered beast fairly zips along now. The cost has been moderate, the frustration level considerable. The sound card ceased working; previously compatible software packages grew paranoid and took vengeance on their neighbours. So from my experiences I've distilled what I hope will be some helpful guidelines:



## DO

use local rather than distant suppliers

buy the highest performing system you can afford

try to tailor your system towards what you intend to use it for

spend time researching your requirements

## DON'T

buy a system with lots of bundled software (you'll never use it)

buy purely on price

Finally, and they say confession is good for the soul

in a computer context I suffer from that well known condition to hell with the ball, let s get on with the game . Having completed this article, I m going to try the tutorial that comes with my upgraded Photoshop package. **I want the gain with minimum pain!**

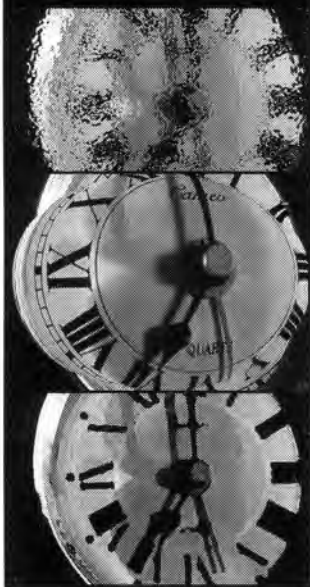
Geoffrey Carver LRPS

# Wacom Art Pad

Anyone who has ever tried to draw an object using the conventional mouse will know how difficult, even impossible it is to get any accuracy. I remember some years ago I wanted to draw the shape of a single jigsaw piece for one of my images, and admitted defeat with the mouse. I had to resort to making the shape with a piece of gardeners wire and then scanning it in along with the print.

Thank goodness those problems are now all in the past since I purchased the Wacom AS ArtPad and UltraPen.

**Do you recognize the photoshop filters which have been used for the clock images?**



The ArtPad itself is not much bigger than the typical mouse mat with an active area of 204mm x 154mm, and the really useful innovation is that the pen has no physical connection to the pad like an umbilical cord. The UltraPad sends out electromagnetic signals with a certain frequency and which act as the pens energy supply, so there is no need for any batteries or connecting cords. The down side is that I have been known to slip the pen into my breast pocket and leave the studio.

At the top of the ArtPad is a control panel with 16 preset buttons such as print, cut, copy, and undo etc, and another five user-defined buttons which you can allocate to any often-used combination of keystrokes such as control/alt.

Getting it up and running was simplicity itself, although Windows '95 does make things much simpler. Just connect the ArtPad to the serial port (it gets its power supply from the serial port as well) and when prompted, install the driver from the floppy disk supplied.

And if you are unsure about ditching your mouse.. don't. They can work alongside each other.

I have to admit that it takes a bit of getting used to, but once I had customised it for my preferences for angle of pen and pressures, I found the speed and ease of use ahoy. The pen tip has up to 256 pressures which is wonderful for when you are working in any of the major graphics packages because the heavier the pressure you put on the pen tip the thicker the brush stroke and the denser the colour. This facility alone will speed up your productivity.

On the side of the pen is a little toggle switch which is very useful, as it can be programmed for the right mouse button, double click or for macros and function keys.

The Pen also has an eraser at the back end which can be used like a normal pencil eraser.

One final touch which I really found to be very useful. The pen doesn't have to touch the ArtPad to make things happen as

it is sensitive to within 5mm of the surface. This means that you can place an illustration, magazine or thin book

on the ArtPad and trace over it with the pen.

I have been using the UltraPad now for about two months and I would never go back to using the standard mouse.

Oh yes .. price. I am always reluctant to mention prices because the difference between what I paid for it two months ago and what it would cost now (March '97), and also what it would cost by the time you read this but lets say somewhere in the region of £250 and £300.

Go for it.

**Jack Casement ARPS**



# Capturing Images

If you have a video camera or video recorder or of course just a TV, you have a magnificent source of images. You just need to be able to digitize them in order to create a computer file. This may well be a cheaper option than purchasing a digital camera. (The low screen resolution is ideal for manipulation on computers with limited speed, RAM and disk space.)

Your computer will require a video input card to be installed. You will need to seek advice on the card most suitable for your computer, video input and method of use. If you want to record, edit and play back full screen video then the specification of your computer will need to be very high. Each frame of a video may be a megabyte of data with twenty five frames per second. BUT if you just wish to grab a frame for image manipulation then all is possible with a standard specification machine. PC owners will find a review of video capture cards in the June issue of PC Format. Macintosh users have the option of third party cards of the standard Apple video card for their machine. I currently use an aged (in computer terms) Performa 630 with a TV tuner card (and as it happens also a DOS card with Windows 95). It has both an input for Radio Frequency input direct from the TV aerial and separate video inputs for the use of the CamCorder. The software automatically tunes for all stations, displays teletext screens and accepts input from a Video Camera/Recorder. The video play program has a recording option which grabs the frames and saves them as compressed files in a QuickTime movie. There is a choice of screen size from full to quarter. If I ever get round to using my Power Mac for image grabbing I will be able to work with moves at full screen size. On my Performa 630 I restrict myself to short movies at quarter size or one or two frames at full size.

Now QuickTime movies are magic! I can save them to my clipboard, paste them into my scrapbook and place them in my word processed document. They may even be included in Adobe Acrobat documents and published on the Internet in a form which is readable by any type of computer. When you play a QuickTime movie you can either let it roll complete with the soundtrack or just move a slider to select an individual frame. There is software to edit the movies and to introduce special effects but for image manipulation on

the screen I just need one frame. A screen capture program such as Flash-It on the Mac enables you to do just this to create a PICT image which can be pasted into your image manipulation program.

**Bill Henley LRPS**

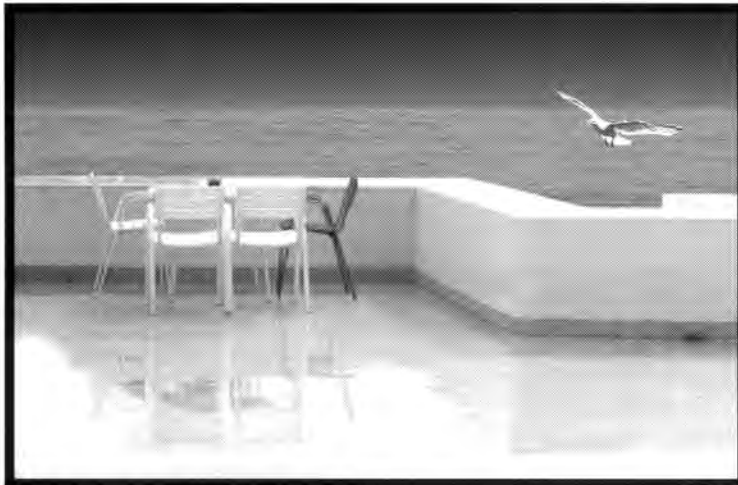
## End of Season

In this picture I wanted to give the feeling that it was the end of a holiday, and you were sitting behind a window looking out at the bleak and dismal day and feeling it really was time to go home. The first transparency scanned in was the table and patio area, there were a lot of bushes, and odds and ends in the sky area so I selected everything above the wall and cut it out. I then took a strip of sea from another picture and added it, I then used a graduated filter for the sky. The seagull (I have used this seagull over and over again its a good job I don't have to pay it a commission) was selected from another transparency rotated a bit and put in the sky area, I then changed the picture colour to soft cyan. This is the second attempt at this picture as the first time the seagull looked more like an albatross and all the chairs were white, It was suggested that it might be a good idea to change one of the chairs to red, I tried it and liked it, although I have the red chair with its reflection and ashtray on a separate layer in case I change my mind. I often keep variations in layers although it does take up disc space. I use Adobe Photoshop in a PC.

One of the beauties of DI is that you can change anything and everything, even after the picture is finished. I do find it difficult to be objective when I have spent a lot of time manipulating an image so I value other peoples opinions (not that I always take much notice of them). I have joined the folio and feel that there is a tremendous amount of benefit to be had from it.

**Glenys Taylor ARPS**





**End of Season  
Glenys Taylor ARPS**

## Regional Groups

**Below is Glenys Taylor ARPS who is Secretary and Regional Coordinator to the Digital Imaging Group, attending the New Members day in June this year in the Kodak Gallery at the Octagon in Bath. The opportunity was taken to meet with new RPS members and to explain about the activities of the Digital Imaging Group. A Macintosh computer together with a flat bed scanner and video input for slides helped to demonstrate the use of Photoshop and other imaging software. There was also an opportunity to see the Digital Imaging web site at:**

**<http://wycliffe.co.uk/rps-digroup>**



Since I was elected to the Digital Imaging Committee I have been trying to get Regional groups going in various parts of the Country - with mixed success - Following the spade work by Dr Michael Austin I have written to a DI member in each area asking if they were willing and able to be the Regional Organiser for that area. I have had some enthusiastic replies, for which I am truly grateful, I have also had replies from others who got in touch with members in their areas and found that the members were not keen on meeting together as a house group. In some areas I am still looking for someone to be an organiser as the members I wrote to were unable at this time to help.

The Committee felt would be a good idea if small numbers of members could meet about every three months in one anothers houses to discuss and show their DI work., working on the same principle as the Creative group. Although the main responsibility of a Regional group Organiser would be to keep in touch with members in their area, we would also like to see some local and not so local events arranged, where larger numbers of members could get together, swop ideas, catch up with all the DI news and generally enjoy themselves by listening and talking about their favourite hobby.

**There are a lot of DIGIT members who already fall into one of the RPS DI Groups that have started, but if you are not sure if there is a group running in your area please get in touch with me, I will pass your name on to the Regional Organiser (if there is one) or we can do our best to get a group started.**

**Glenys Taylor ARPS**

# Electronic Imaging for Photographers 2nd Edition 1996

by Adrian Davies & Phil Fennessy  
(Published by Focal Press)

This is an extremely useful reference book for anyone contemplating a step into the world of Electronic Imaging. It explains the whole process in great detail, starting from input, on screen manipulation and the various means of output. Whilst not recommending any specific system, it advises on the minimum requirements needed, and also talks at some length about the Adobe Photoshop software and explains what it can do.

It starts one with a blank screen: the subsequent process is still up to the imagination and skill of the photographer. One does not have to be computer literate to understand this book - it even explains what a pixel is!

There is a comprehensive glossary of terms at the back and also a chapter on communication and the internet. There are, perhaps, times when the explanations are unnecessarily detailed and I found myself skipping some of these pages. It is, however, the first time that I have fully understood how to determine the required resolution of an image for output, and I found this illustrated chapter with its various examples particularly useful.

At £19.99p (Oh! The tedious psychology of the minus one pence) it would prove a valuable addition to any photographer's library and it could stop one from making an expensive mistake.

**Sheila Edwards ARPS**

## Digital Imaging Group for the North West

The group plans to meet six times a year on different week days and occasionally on Sundays. Activities will include clinics, talks, demonstrations and project work. The July meeting at Grappenhall Youth and Community Centre (south of Warrington and just two miles from junction 20 on the M6) with a print clinic, launch of the first interactive project, photo restoration and a question and answer session. Subsequent meetings are planned for September, October, December and February. A £1 charge on the door. Further information from Martin Avery ARPS at [mavery2242@aol.com](mailto:mavery2242@aol.com) or Tony Myers on 0151 260 0111. You would be very welcome.

## The Art and IT Project

A recent in service training seminar for teachers at the RPS in Bath revealed the potential for Digital Imaging within the National Curriculum Art Teaching. Kevin Mathieson the Project Officer for this National Council of Educational Technology initiative presented many exciting examples of pupil work. This must be an opportunity to attract young people to photography in a manner which exploits the fascination of many of them with the new technologies. Images may be created which are instantly accessible to a world wide audience via the Internet. The World Wide Web also hosts a vast library of digital image resources. If you are involved with students who are producing photographically based digital images please submit the best for inclusion in DIGIT. For more information about the Art and IT project contact Kevin Mathieson by telephone at :

**01203 416994**

or email :

**Kevin-Mathieson@ncet.org.uk**



Black backed jackal Masai Mara, Kenya  
(Two images combined)

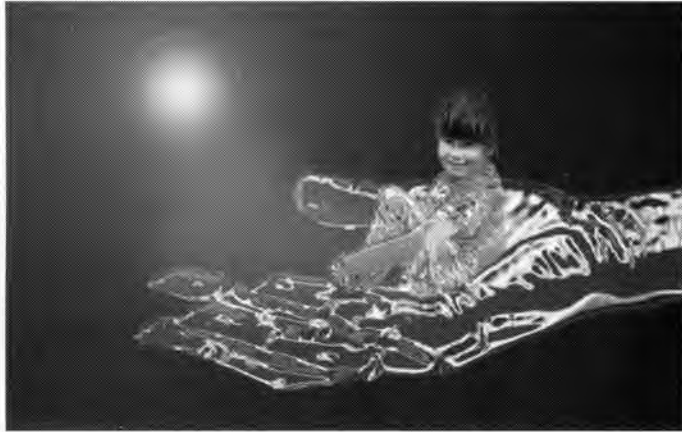
**Dr Michael Austin  
Hon FRPS**

## The Holography Group

At the University of Westminster, 309 Regent Street, London W1 on 18th October 1997 a meeting with

the title **Creative Displays 2**. The topics to include Digital Photography, Digital Art, Holography, Stereoscopic Displays, 3D Displays, and Stereograms. A one day event from 9.30am with a

lunch. Contact Mr KC Brown, Chairman, The Holography Group, Tel. 0181 877 3733 There is a request for suggestions for individuals or companies to assist with the day.



**Hand  
Glenys Taylor ARPS**



**Lighthouse  
Anne Swearman ARPS**

Imaging Frontiers is a major initiative which will recreate the National Museum of Photography, Film & Television for the next century. It will harness emerging technologies to bring the visitors face to face with the excitement and potential of the digital age. Launching in the New Year 1999, among the range of attractions will be:

A cutting-edge gallery dedicated to electronic and digital imaging  
New education and media facilities, allowing schools and students to explore the creative potential of the new technologies  
Electronic media and networking facilities - supporting growing educational research and a virtual gallery

There is an emphasis on global partnership between higher education, museums and the media industries. Opening on the eve of the millennium, the landmark Digital Gallery will be a milestone in the creative interpretation in the digital revolution transforming our lives. Interactive environments will invite the visitor to explore first-hand the many worlds of computer based image creation, manipulation and dissemination, special effects, interactive television, medical imaging and more.

**Do you have a digital image that may be published in DIGIT and/or distributed on the portfolio disk?**

## Do you have a web site?

If you have your own web site it could be advertised on the Digital Imaging Group site at:

<http://www.wycliffe.co.uk/rps-digroup>

Just email your address to :

[weh@wycliffe.co.uk](mailto:weh@wycliffe.co.uk)

**Please state if you would also like your email address to be published. and if you could offer to advise other members on particular topics then please tell us.**

# A Digital Imaging Group Logo

The group needs to have a Logo. The size needs to be no larger than 5mm wide x 3mm high. It should be distinctive, clear and suitable for monochrome use. If you have an idea the committee would be pleased to see it. The decision needs to be made within the month. Send your ideas to Barrie Thomas, preferably on a disk.



**In addition to the DIGIT Magazine it is planned to issue intermediate news letters in order to notify members of late breaking news and regional events. If you have contributions for these please send them in good time.**

**All contributions for DIGIT and the newsletters should be on disk if possible. Text and images can be scanned in from hard copy if necessary but disks do save time. Save as ASCII text and 200 dpi jpeg images in PC or Mac format. Images should not be too large.**

**Unless you state otherwise, it will be assumed that you agree to the material submitted for DIGIT, newsletter or the portfolio being published on the Internet. ►**

The digital imaging group consists of members of the Royal Photographic Society who have elected to pay an extra subscription to receive the group's journal DIGIT and to work together via meetings and a circulated portfolio to promote digital imaging.

Copyright of all the material published here is reserved in all countries on behalf of the RPS and the authors. Any views expressed are not necessarily those of the Royal Society of Photography nor of the Digital Imaging Group.

#### The committee:

**Chairman:** Barrie Thomas

**Vice Chairman:** Geoffrey Carver

**Treasurer:** Dr Michael Austin

**Secretary:** Glenys Taylor

**Editor DIGIT:** Bill Henley

**Other members:** Margaret Collis Adrian Davies Colin Myers

► You may wish to submit one image in greyscale for the DIGIT and another in colour for the Web.

Contributions for the PC and MAC portfolios should be addressed to Barrie Thomas.

## Would you have done it this way?

Do you have images which you feel could be improved if only .... If you would like to seek the comments and advice of other members you could do worse than attend one of the national or regional meetings. I am sure that we all need the stimulus of an audience. Some space in DIGIT is also available



for the display of pictures from which we can all learn. Please do not hesitate to submit pictures for constructive criticism. Do not be put off by the extremely high standard of some contributions. This group exists to help us all. To start the ball rolling the picture above is one of mine which misses. How would you have done it or would you not have bothered!

(The original in colour.) Bill Henley

#### Contact details:

**Barrie Thomas** FRPS, FBIPP  
85 Beech Gardens  
Rainford  
WA11 8EB

01744 883541

**Glenys Taylor** ARPS  
10 Shoreditch Road  
Taunton  
Somerset  
TA1 3BU

01823 282516

**Bill Henley** LRPS  
Old Manse  
Middleyard  
Kings Stanley  
Stonehouse  
Gloucestershire  
GL10 3QD

01453 825068

weh@wycliffe.co.uk