

# Digital Imaging Group Info Tech

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Electronic imaging will have an impact on almost every aspect of the Society's work. In some areas it has already arrived and been absorbed; in others we have yet to imagine how to harness its power and creative potential.

I welcome the formation of the Digital Imaging Group to concentrate our energies and to focus our attention on important issues and topics. I am confident the Group will enormously increase the pace with which the Society embraces the future.

Barry Lane - Secretary of the Royal Photographic Society

## Welcome to the Digital Imaging Group

from Robert F. Moore FRPS FBIPP President of the RPS

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 whole-hearted support and I intend to send off my subscription to the group immediately.



## Digital Dilemma

Not long ago, if you'd said Photoshop to me I'd have thought you meant Jessops. Then Barrie Thomas comes to Solihull Photographic Society to talk about digital imaging. To talk about what? Well, yes, I get the vague idea, and it's very interesting, but obviously far too expensive and high tech to think about seriously.

After several weeks of listening to me rabbitting on about Barrie's lecture, colleague at work gets fed up and points out that if partner and I stopped going on expensive holidays to far-flung places, taking hundred of pounds' worth of slides we then threw away, we could easily afford to buy a computer.

### No More Holidays

Why didn't I think of that? I resolve never to suggest we go on an expensive holiday again, persuade partner that we need a computer and get him to agree to pay for it, promising that I will pay back my half by instalments. Ring Barrie Thomas and ask him what to get - place order for three thousand quid's worth of grey plastic.

Arrange to go and be shown how to do it by Barrie. Have twenty slides put on CD so we can take them to Barrie's to learn on. Travel to

Rainford from Leamington Spa, open CD to put in Barrie's drive and discover that the disc remains in our drive, at home. Feel embarrassed. In spite of this setback, try to look intelligent all day, and as if I am understanding what Barrie is talking about. Barrie says that his fee includes us being able to ring him up to ask him things if we get stuck - fool!

### Computer Arrives

Computer is installed. Consider having wheels fitted, as half the things don't work/haven't been installed properly etc. Shop won't come to us, so days are spent carting everything backwards and forwards. Ring Barrie a few times - he remains quite calm.

Go on holiday to Crete and find a very co-operative old bloke in the park in Rethymnon, and another who insists on taking us on a taverna-crawl. Both agree to be photographed. Come home and decide to start work in earnest on manipulating slides. Partner discovers

Solitaire and Minesweeper and says they are improving his mouse skills.

### Stress Management

Crouch over computer for hours on end, working on the two most difficult images I could have chosen - one is virtually all white, and the other all greys. Finally, produce masterpieces. Learn, with a lot of blood and sweat, and 'phone calls to Barrie, how to back up on to disc, and send to lab for conversion to slides. Slides come back - green. Barrie says it is all quite simple, really. You just alter the image on your screen until it goes green, and then subtract the number you first thought of, send it back to the lab again - and it comes back magenta and with several stripes in crucial places. Try to hurl computer out of the window, but can't, because I have seriously injured my neck with spending seven or eight hours at a time on it. Keep trying to get acceptable images from lab. Things get worse. Tell partner he can stuff the computer. I am not going to pay him any more instalments as the whole idea was a disaster - I am a nature photographer, and I shall stick to photographing butterflies.

Ring Barrie in hysterics. Barrie gets message that I wish I had stayed at home that night he came to Solihull. Barrie remains calm and polite.

### Eureka!

Come out of hospital after nervous breakdown, find alternative lab and get good results. Feel very enthused. I have paid off all my instalments to partner. Decide it is time to read the instructions. Work through a few pages of the tutorial, and actually manage to learn how to do several things.



Call That Music? -  
Hilary Roberts ARPS (Original in colour)

*My Brother the Father -  
Hilary Roberts ARPS (original in colour)*

Partner tells me one day that he has accidentally wiped Adobe Photoshop off the computer - but he is now managing to complete Minesweeper faster. Persuade partner to invest in more RAM. He decides to buy a sound blaster as well.

model release form, and she will sue.

**It was worth it**

Twelve months after we bought the computer, I am finally managing to turn out reasonable images which are getting



*Hilary should have added that there has been a further, equally frenzied, call since this was written.*

*This time the excitement and jubilation was due to her win in the Solihull Photographic Society Annual Competition with a digital image. It not only upstaged prints by THE Cliff Thompson but also by another gentleman who takes the odd good picture!!!*

*Bob Moore ... (Yes THE Bob Moore!)*

*Well done Hilary!*

**Wacky Professor**

This means we can watch an American who calls himself a 'wacky professor' telling us how to do things we are unlikely to want to do - but I do manage to pick up a few useful tips. Make regular visits to osteopath who charges £25 for twenty minutes. Buy hair dye from Boots as have gone completely grey. Transfer old blokes from Crete to places they have never heard of, and put my ex-foster-daughter outside a hovel in Portugal. She says she never signed a

acceptances in exhibitions. My eyesight, my neck and my temper are permanently damaged - but the pictures have won six awards and a Mamiya. Cliff Thompson (theCliff Thompson) tells me he admires my slide! The computer shop tells me that the computer is now out of date and the chip is unavailable. Tell partner that it is essential we book very expensive holiday so I can get suitable images to manipulate. Barrie Thomas has a lot to answer for.

# Where Do We Go From Here?

What is electronic imaging, does it or will it affect me and my photography, can I afford to do it - can I afford not to?

These are perhaps some of the questions that photographers of all types, amateur and professional are asking themselves. Many people are hailing the new "imaging revolution" but is it really? True, the photographic process that we use today is essentially the same as it was when Fox Talbot and others first invented it, and the world of computers seems a long way removed from it.

## Revolution?

But most computer imaging is merely replicating work currently carried out in darkrooms - changing the brightness and contrast of images, adjusting colour balance, retouching and most contentiously, manipulation. So, images can now be created on computer screens (and are

done so virtually every day by certain members of the tabloid press!). But haven't we all been doing this in our darkrooms for a long time? Oscar Rejlander certainly was back in the 1890's, and the propaganda work of John Hartfield in the 1930's certainly created new images from old ones. So what is the problem?

I suspect that one thing is the sheer speed of development. Five years ago, a computer able to manipulate images cost several thousand pounds. Today - under a thousand and getting cheaper all the time. Several digital cameras can now be obtained for a few hundred pounds, and everyone can acquire digital images very cheaply from the likes of Boots and Jessops by having PhotoCD's made of their negatives and transparencies.

## Evolution?

It seems to me that we are in just another stage in the evolution of the imaging process, one which will continue to evolve. It will affect all areas of photography and the photographic process - the picture taking stage, the processing be it scientific analysis or creative manipulation, the storage of picture libraries, and their transmission around the world via things like the Internet.

It is precisely for these reasons that the Digital Imaging Group has been formed, to help disseminate information throughout the RPS, and not become a clique within it. I would sincerely hope that its success will be measured by the disbanding of the group, its job done when all areas of the Society have seen the potential of the technology. Some will hate it, and steer clear of it at all

costs, while others will jump in all the way, abandoning wet silver-based photography completely.

## The Generation Gap

I have students on my full time course at Nescot who come to college never having taken a "silver" picture; many schools now have their own digital cameras, using them to produce their own newspapers; my own 12 year old daughter desk top publishes her homework! In five years time some of these children may want to join the RPS!

For most people, like myself, we will embrace those parts of it which suit our own area of imaging, and retain traditional technology as appropriate. I am a natural history photographer, and I certainly don't see digital cameras replacing my favourite Kodachrome or Velvia for a long time. But maybe if a blade of grass is covering a bird's eye, or the bird is looking in the wrong direction and spoiling the composition, I might use a computer to retouch or manipulate the images, but that is another story ...

## We Need a Voice

**There is a clear need for all organisations central to photography, including the RPS, to urgently address the new developments and not be left wallowing in the wake.**

**Unfortunately this cause has not been helped by the decision to deny us a representative on Council. Other Groups do!**

**I hasten to add that this has nothing to do with us being digital but is simply an attempt to reduce the size of Council, which is both sensible and necessary.**

**The solution is to elect our own representative and I would urge you to use your vote in the forthcoming elections. There is at least one person standing but I am not saying who!!!**

**Adrian is Senior Lecturer in Digital Imaging at NESCOT - The North East Surrey College of Technology.**

**NESCOT regularly run courses in digital imaging and have a well deserved reputation as being among the leaders in the 'digital revolution'.**

## Digital Imagers do it in the Light!

Lichfield Camera Club has suffered from an absentee Chairman this Year. I'm the guilty party, but I have to plead professional demands as my explanation. Sod's law has contrived to place me in, or in transit from, London and Cardiff on an unreasonable number of Wednesdays, our meeting night.

Good then, that I've got a competent and patient deputy. It was frustrating to find that in my absence on a recent evening, the members had been much impressed by a visiting lecturer who had demonstrated the joys of digital imaging. They now have something of the flavour of what attracts me, and I suspect many others, to this latest of the black arts.

### Chemistry v Physics

On the train somewhere north of Milton Keynes the other day, eyes looking vacantly at the familiar undulations, I was mulling over what had drawn me into digital imaging. I think it was then that I began to see the connection with some professional decisions I made years ago. I was trained as a physical scientist, and as a student I was generally inclined to the chemical aspects of my studies. Pretty coloured, fragrant chemicals and the odd involuntary flash and bang were much more preferable, and exciting,

than the rather more cerebral and coldly calculating world of physics. So it might have remained but for my realisation that the bangs carried you off instantaneously, the chemicals took a few years to do the same and the delightfully aromatic liquids expunged you long before retirement age. The decision to concentrate on being a physicist had been made on the grounds of dedicated self interest and self preservation. After all, the hazards therein are rather limited - electrocution (but only if you're careless), and glowing in the dark (so make sure to confine the nasties to their lead lined containers as much as possible).

### Dangerous Habits

The parallels with these observations translated to photography are illuminating. Don't mix water and electricity - risk of shock! We do it constantly in the darkroom. And if that wasn't enough, have you ever experienced the tears of joy(?) when diluting acetic acid or wondered exactly how toxic selenium toners are?

Digital imaging avoids these obvious pitfalls; you can do it in the light; there are no known

health hazards (Try telling that to Hilary Roberts! - Ed.) and the results are just as satisfying. So you don't finish up with a pallid face, don't upset your spouse by creating evil smells, don't disfigure the bathroom porcelain and you can answer innocent enquiries about what you are doing without having to scream "DON'T OPEN THE DOOR!" The improvements to domestic relations are immeasurable.

### End of Wet Plates?

We must be at the equivalent point to when wet plates began to go out of fashion. I suspect that digital imaging will soon start to mushroom. The advantages and the convenience are just too good to ignore. Look back in ten years time and see if I'm right.

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**Geoffrey is acting as the Secretary of the Digital Imaging Group until the AGM - which will be held in the Autumn.**

**Queries related to the Group should be addressed to him.**

*'Early Warning' Barrie Thomas LRPS FBIPP*

*This is one of my few monochrome digital images. The background shading is a conical gradient from black to white produced with Kai's Power Tools, centred around a 35mm colour slide of the Jodrell Bank Telescope. The sky was 'patched in' from another colour slide using Photoshop, and an air-show shot was duplicated, resized and repositioned upon the background. The whole was resized downwards, tone corrected, sharpened and then saved as a JPEG format compressed image to reduce the file size.*



# Made For Each Other - AV and the Computer

The advantages of using a computer to produce images for audio-visual sequences seems abundantly self-evident. But, surprisingly few amateur AV practitioners seem to have cottoned on to this. I just do not understand why this is so.

It seems obvious to me that the computer and AV production were made for each other.

## A Perfect Match

I would go so far as to assert that the computer has more applications in AV than in most other aspects of photography. Forget for a moment the benefits of the word processor in editing the many drafts that an audio-visual script usually goes through. Forget the use of the computer in recording and editing sound tracks and concentrate solely on the visual elements of AV.

Just consider for a moment. In AV we need opening and closing titles for our sequences and sometimes other illustrative graphics within the sequence. All too often we see very crude attempts at lettering, using badly spaced rub-down characters photographed onto lith film or, even worse, amateurish attempts at hand lettering. With a modestly-priced draw programme and a computer, professional-looking titles can be achieved easily with little or no artistic skill. Lettering is automatically straight, properly spaced and there is a wide choice of fonts in an infinite number of sizes. Words can be made to take on different shapes. The choice of colours for both lettering and background is also infinite. Many computers offer over sixteen million colours!

Lettering superimposed on a photographic background or photographic images that appear within letters can be very effective. The more ambitious may want to produce multi-frame titles where graphics are built up in stages or change colour. These effects require each slide in the sequence to be in perfect register - which can be achieved easily by computer but is very difficult by other means.

## Image Manipulation

Just as important as the production of effective graphics by computer is the manipulation of photographic images, or digital imaging. Creative AV producers have always used the techniques available to them to "manipulate" photographs to produce an eye-catching series of images. In the past, of course, these effects relied on the use of filters, chemicals, masks, sandwiched slides and the rest. Now a "paint" programme (Photopaint, Photoshop, Photostyler, Paintshop Pro etc) in a computer provides simulations of all the techniques of the past, plus many more ways of changing or enhancing images. And no darkrooms or smelly chemicals! With the reasonably-priced availability of Kodak PhotoCD we can easily feed our images into the computer and create undreamed-of series of visual effects. What is possible is limited only by the creative imagination.

## Custom Masks

Hard and soft masks, often used in AV production, are available commercially but "custom-made" by computer they can be made to fit any situation and give much greater precision. Photographic slides in AV sequences sometimes need to be in perfect register with each other and, as with graphic slides this can be achieved when printed to film from a computer file by a bureau. In this article I have not gone into any detail about digital imaging or graphics production.

I have assumed this knowledge is already known or available elsewhere and have attempted to show what a useful tool the computer can be in the hands of anyone who is producing AV sequences.

Stanley's assumptions on digital imaging and graphics production knowledge may well prove to be unfounded. It is the intention of this Group to help at all levels, even those who are at the baseline.

We need you to help us with articles, hints, tips, experiences which can be shared and may well benefit others.

Can you give us some practical AV tips?

## Digital Portfolio

A small group of enthusiasts have for some time been running a postal portfolio of digital images. It operates along the following lines -

Members of the folio place a heavily compressed JPEG image, and their comments on others work, onto a single floppy disk.

It is posted to the next person who repeats the process until the circuit is complete.

When it returns to the start their general notes from the first round and their image are replaced. The notes on other images are left until next round so that all are able to see the full set of remarks on any picture.

If you are interested in being part of such a folio please let me know. I will return full details and make the necessary initial arrangements.

Barrie Thomas

## Basic Equipment List

**I promised a number of people during the excellent Photo Forum weekend at the Octagon (Thank's Bob!) that I would give a list of reasonable requirements for an efficient PC suitable for digital imaging. It looks something like this ...**

**75MHz Pentium on a PCI Motherboard.**

**16MB RAM (EDO is faster)**

**1GB EIDE Hard Drive**

**4x CD-ROM**

**2MB Accelerated PCI Graphics Card**

**15 inch NI Monitor**

**MS Windows 95**

**Image Editing Programme**

**(Adobe Photoshop is still the best but PhotoDeluxe a much cheaper and simpler cut-down version is also available.)**

**It is possible to start with less than this but you are likely to be dissatisfied and quickly want to upgrade - which is a waste of money.**

**In all of the hardware components above more is better but nowhere is this more true than with RAM. Although Photoshop 3.0 will run with 12MB of RAM it is definately not happy and 16MB is barely sufficient.**

**You may have noticed that I did not mention a scanner. If money is short forget it for now and use the money saved to buy extra RAM. You can always get your pictures onto screen cheaply via PhotoCD and buy a scanner later if you really need one.**

**If I can twist Adrians arm we will print a Mac version of this list next time around.**

# Digital Imaging For All

Let me start by telling you a little about myself. I live in Taunton, I am the Western Region Audio Visual Organiser for the Royal Photographic Society. Until digital imaging appeared on my horizon Audio Visual was the great love of my life, now I have two competing loves and at the moment digital imaging reigns supreme, still all is not lost as AV is the perfect medium for some work produced on the computer.

I came to digital imaging about eighteen months ago and at once became hopelessly hooked, in fact you could say I became besotted with the idea of producing and creating pictures in a never ending variety. I have always played about with slides, copying, montaging, making sandwiches, solariizing, using dyes and lots of filtering, so as you can see the computer is an extension of what I like doing best.

My computer is a Pentium with a 17" screen. I use Adobe Photoshop and find it a source of endless pleasure, it can do almost everything I ask of it and sometimes things of its own, or that's what it seems like! I have used Photostyler and Corel Paint but although Photoshop was the most difficult to learn it definitely gives the best returns, the layers system makes it perfect for the AVist, with exact registration and a very good indication of what the fades will look like.

At the moment the computerised image is viewed with interest and with some reservation by many camera club

members, who consider that fiddling about with a computer is not quite playing the game. I really believe they forgot that fiddling around in the darkroom is exactly the same but more messy, most of what is produced on the computer could be done in the darkroom by a very skilled worker. I am not saying that you don't have to be a very skilled worker to produce good results on the computer.

Digital imaging is flying high in the exhibition halls and in competitions but a word of warning, the general public is very fickle (I am sure I don't need to tell you that) and the obvious filter effects are soon going to look very humdrum, we are the pioneers of this new Group of the RPS, it is my hope that we can share our knowledge with one another and push forward the frontiers of this new medium using and producing photographs in a way that encourages even the most staid members of the photographic world to view digital imaging as a normal progression of photography (which it is) and not as something which comes close to cheating (which it is not).

One point all photographers have to remember, and maybe digital imagers more than most, is that the finished picture is only as good as the creator, no matter how expensive your equipment is, or how many gadgets you have. The picture is what you are going to be judged on by the rest of the photographic world.

## Mono Magic



Original image after conversion from colour



Image after the initial repairs



Background lightened and contrast reduced to separate the old gentleman from the background

Digital imaging is not just for colour! The image below was initially digitised from a colour slide via Kodak PhotoCD and changed to mono in the computer. This is a straightforward process requiring only a couple of key clicks. The image was then magnified in order to draw accurately around the old man and create a mask.

### Masks

Once an area has been 'drawn-around' to form a mask and the selection saved, it can be re-selected at will and used either to cover the main subject (in this case the man) or the rest of the image. By using the *select inverse* command. This then permits you to manipulate the picture as if it were two separate images and apply alterations to either of the parts without affecting the other. Only one mask was used here but there is no limit, so additional masks can be made and used as and when required.

### Mending

The second photograph shows the initial 'repairs' made to correct flaws, either in the original image or as a result of subsequent manipulation in the computer. The unruly plant and intrusive bright leaves behind the mans left shoulder and others which cut into his hat and body on the left of the picture have all been 'pruned' and the fuchsia falling out of the bottom left of the photo completely uprooted! In addition the very bright highlights on the lower plant and window hinge were dulled. This was achieved by *cloning* from other parts of the image and then merging them into the surrounding area by using *blurring* and *smudging* tools, not a difficult process but one which can take some time if satisfactory results are to be obtained. Because of the very deep shadow falling from the mans head onto his shoulder I then reversed the mask and used the *dodge* tool to lighten this portion slightly so that the lapel could be seen. If overdone this can look very artificial but with care can help the overall image appearance.

Other minor alterations were made which included the removal of marks on the mans jacket and on the windows. Retouching on a computer is slow but not difficult and when carefully carried out modifications should be indistinguishable.

### Multigrade

The photo left illustrates an option much vaunted in photographic circles, the ability to vary contrast within selected parts of the image. In this case I have elected to lighten the background and decrease the contrast, in order to provide greater separation between it



*Background filtered and texture-screen applied to the area. This would be very difficult in a darkroom but because of the masking it is easy on a computer. With further masks you can apply different texture effects to other selected areas.*

*The final picture shows the full potential of using a mask for part of the image, it permits you to select and totally remove any piece of the photo and replace it with a section from a different picture altogether or indeed one which you may construct yourself.*

and the man. This is very straightforward and simply involves adjusting sliding bar controls for both the *contrast* and *brightness* between maximum and minimum settings. Controls are also available to adjust the tonal range of the picture.

#### **Manipulation**

For me the most interesting and visually stimulating aspect of electronic imaging comes after the initial 'sorting', since this is where the magic of manipulation begins and the full capabilities of the computer, used solely as a photographic tool, come into their own. Almost anything is possible in terms of filters, creative screens and surface treatments, all of which can be applied with relative ease to the whole picture or any part of it.

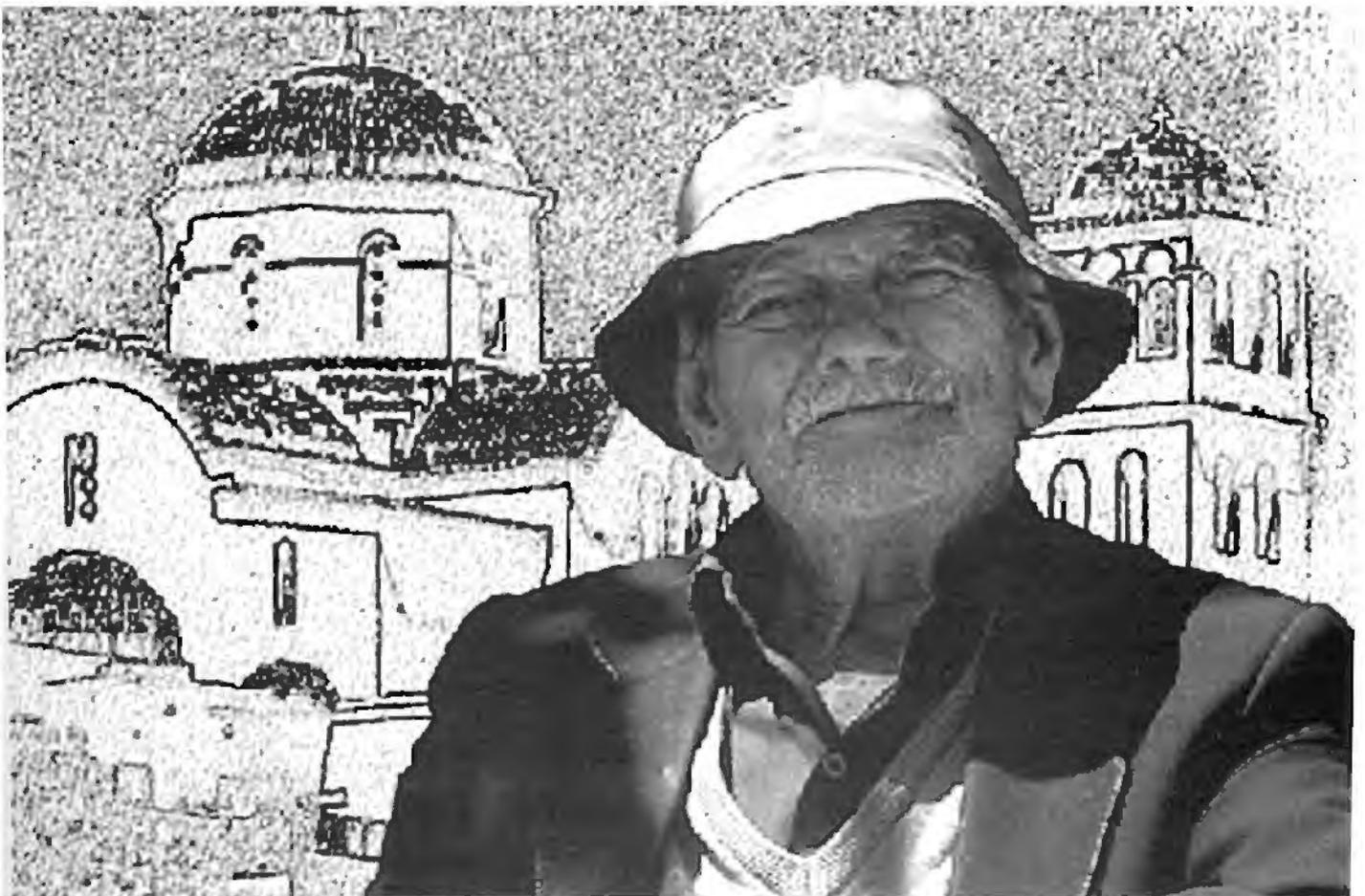
Many filters are available in the numerous image manipulation programmes, even the less expensive ones, and thousands more (literally!) are available as add on units for major software packages via *plug-ins*

#### **Magic!**

The remaining images show other possibilities open to the creative photographer. The scope of Digital Imaging is so vast that this short piece does not even begin to scratch the surface of what is possible and when colour is added to the equation, the only limiting factors are creativity and imagination.

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**This article was originally printed in the Creative Group Newsletter**



## Tas Photo - PhotoCD Viewer

The Kodak PhotoCD system is an excellent way to obtain digitised versions of your photographs. The subsequent use of the PhotoCD to give coherent shows on a TV, while being much more convenient than the equivalent slide show, may lead to frustrations because of your inability to manipulate the images in anything more than very simple ways. The Kodak PhotoCD player allows one to change the order of display of the images and select an area and zoom to it by a standard ratio. The Tasman software under review will extend these facilities at a small fraction of the cost of Adobe Photoshop.

TasPhoto is specifically aimed at the amateur or hobbyist photographer and, therefore, is produced only in a version for PC computers. The minimum system requirements are Windows 3.1 or later, 256 colour display or better, 4MB memory (8MB preferred) and a CD-ROM drive. As I work with a Mac, I have tried out this programme on two different PCs belonging to friends, it proved easy to install and operate. The basic programme building functions of TasPhoto are similar to those of the Kodak player, the contents of the PhotoCD are displayed at low resolution and are selected as desired for incorporation in the show. At any point in this process the operator can adjust the

brightness, contrast and colour balance of each image. There are also some "effects" which can be applied, such as sharpening, blur, and embossing. None of these are as sophisticated as the equivalent Photoshop controls but with care in use, tone and colour can be matched for continuity. While making these adjustments a preview is shown in a sizeable, movable panel. The sharpness function, available at one of six levels, appeared to be rather coarse and I found that the lowest level was about right for correcting the slight lack of bite which is a regular problem with PhotoCD scanning, level two was way over the top. All settings of the control functions are held in memory and applied each time the image is displayed.

The user can decide whether to display the programme at full screen size or at up to sixteen smaller images at once. An additional major feature of TasPhoto is the ability to caption each image, using a display panel under the picture frame. The text size, font, style and background colour can be determined for each image. There is a useful spelling check provided.

The programme is supplied on one 3<sup>1/2</sup> inch floppy disc with a bare minimum of instructions. However, once installed, the programme contains a comprehensive, detailed "Help" menu.

This programme provides a low cost way to produce superior programmes from PhotoCD, which will considerably extend the usefulness of the system for the home user. If it were available in a version for the Mac I would be pleased to use it.

TasPhoto is shareware and is available at a trial price of £5.00 through dealers or direct from Tasman Software, Freepost LS2369, Leeds LS6 2YY;

## Microtek ScanMaker III

This scanner has been on the market for nearly two years, in that time, in common with most of its competition in the marketplace its price has fallen significantly, a 50% price cut was announced in November 1995, and it should be possible to acquire one now at about the £1000 mark.

The ScanMaker III looks just like any other A4 flat-bed scanner but it has two special features, 36-bit colour and a maximum optical scan resolution of 600x1200 dpi (2400 dpi with software interpolation). In practice, the 36-bit colour will not be of direct help to all users, as it is not supported by all image manipulation packages, (you are O.K. with Photoshop 3) and so the default mode is standard 24-bit. Several of the image enhancement features are disabled if 36-bit colour is used.

The standard package with the ScanMaker III includes a transparency adapter, which was not provided for this review, and a full range of software including the Microtek scanning program ScanWizard. This proved to be quick and simple to install on my Quadra

**This is a shortened version of a review produced for the RPS Journal.**

**Michael has kindly offered to discuss it more informally with Group members.**

**Telephone 01271 72482 or  
mike@rps-jps.demon.co.uk**

650 Mac and the scanning process is launched via the Photoshop Acquire command. There are two levels at which control of the scanning process can be exercised. The first step is always to produce a Preview scan, from which the final cropping and framing can be controlled, this is displayed together with a window for the user to set type of original, scan resolution and scale of reproduction, and to choose whether to have "auto" tone and colour correction. To set up the system for auto colour correction involves a scan of the Kodak colour chart provided, the calibration is carried out automatically. The more complex operations are accessed via

the Advanced Image Enhancer dialogue box. This part of ScanWizard offers a wide range of aids to improved scanning, the effects of which are shown in real time via two "before" and "after" thumbnail views. Tone control can be effected, in increasing order of sophistication, by "Brightness, Contrast and Exposure", "Shadows and Highlights", and "Curves". Colour balance and saturation are controlled via

"Tints", which incorporates a colour chooser disc. A few filters are available to control sharpness, including an effective unsharp mask facility.

The least satisfactory part of the system is the manual. Although the descriptions of the various functions are clear, there is no attempt to guide the user in the best ways to apply them. It could take a novice a very long time to learn how to drive the system effectively. The illustrations are amazingly poor, in particular, many of the B&W figures totally fail to show the desired features.

I liked the scans which I produced during the review, they were crisp and clear, with no scan marks or banding. Starting from a good original, the simple automatic controls produce acceptable tone and colour reproduction. It was possible to make really useful improvements to scans of problem originals such as those requiring tone and colour corrections or poor quality half-tone prints. A desirable feature in scanners is speed of use; the quoted speed is 20ms per colour line but this is affected by any image processing required, so use of the unsharp mask or descreening extends the scan times noticeably.

In summary a good buy if you need higher than average performance and the user has the knowledge to drive it with confidence but not the best choice for a beginner.

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*Green Man with Rose ...*  
by Graham Blackwell ARPS

*(Original in Colour)*



## Love - Hate in the Digital World

In Freudian terms the PC/Mac is the definitive 'other'. It sits there, fast, slim, knowing a lot and remembering everything, hums quietly and pretends to do what you want. You can almost see it gazing at its nail polish. Is it any wonder that buying one smacks of immorality; do I deserve one? Will it do what I ask? If it does will it finish so fast that I'm left standing. It's a bit like having a butler in a semi, you'd creep round dusting at night so he wouldn't see the scratches. Paranoid- me? Well yes after 9 months (very significant that) I know that I love it best, but I still dread that moment when I open up- just in case. In case it won't, in case I can't remember where I put things, but in the final analysis in case what I am doing just pales into insignificance before its abilities.

### Digital Rat Race

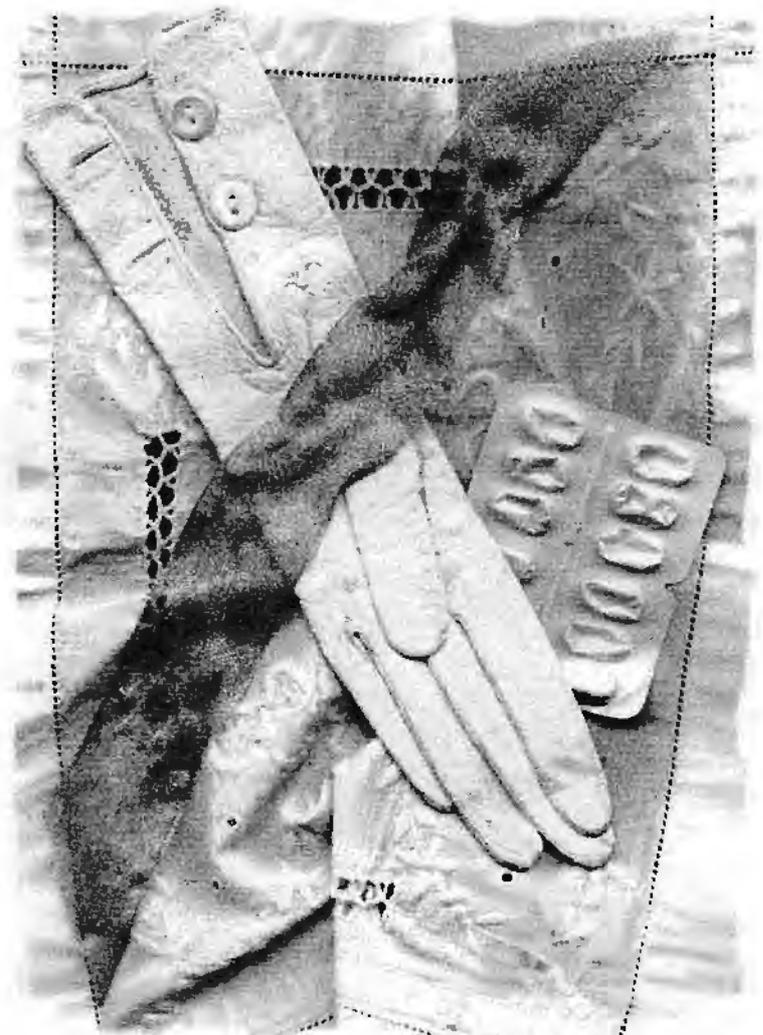
So why did I join this digital rat race? Lets get the nots out of the way. Not to play games, not to type letters, not to keep household accounts, not to go on the Internet. Just to make pictures. I confess to a little text for advertising exhibitions, all very minimal. But its the ability to make constructed images, to try out ideas, to nudge, adjust, experiment, without accumulating buckets full of ruined paper, and moreover, and here I really am sticking my neck out, to do it easier. Now this really is a debatable point, and ultimately a personal one. Of course a lot of it is psychological. Knowing it can be done means that you try to do it. Feeling it probably can't - or at any rate can't be done well enough to be interesting means that you probably just don't bother. When the chips are down I think that if you know that something is desperately hard

work, and carries only a small chance of success, you have to be a bit manic to go ahead.

### Manic and Paranoid

So all you manic and paranoid people out there, we now get to the crunch- the 'how to' bit. Just as if there was a recipe! I have real doubts if much that I experienced can be much use to anyone since I came here from such a strange position, but one hurdle we all have to jump- the salesman. Would you believe that I began by thinking that I could go to a company and tell them what I wanted to do and that they would find the right equipment for me? Then I

progressed to thinking they would sell me something that would do the job, but would be too big and expensive. Then I realised that if I allowed them to advise me, it would not only be too expensive but it stood a strong chance of not being able to run the software at all. Maybe some of them knew about word processing packages- maybe. One thing is sure- there are no salesmen who understand Photoshop or its ilk. Don't let them kid you with glib jargon. Like "sure you can run Photoshop3 with 8MB RAM- but it's faster with more." Oh Ho Ho. When the manual specifies 16MB minimum?



Memory by Annella Birkett FRPS

*The original is very delicate and in soft shades and tones ideally suited to the image. It is printed onto a creamy textured paper. Annella sits on the Visual Arts Pictorial Panel and will be a real asset in any discussions taking place re. the future of digital imaging within the RPS.*

### Buying a Mac

This Group didn't exist and I knew only Mac people so I bought one. Yes I did consult Barrie and was tempted by the cheapness of the PC but I knew only one thing for sure: working completely alone, if things went disastrously wrong I needed some familiarity with the machine. I probably paid over the odds for a set up that became too small within three months but I'm into the work, I'm learning, I've actually made some pictures. If you are coming to this cold, you have a wider and harder choice- like me next time. Next time?! I don't think that it's unrealistic or cynical to say that without a working knowledge of a graphics system you will probably get a package that isn't ideal, but, and this is really important, it will allow you to learn.

### Printer Problems

For instance. I read up on printers and came to a conclusion: A was best, B, second. I would see them demonstrated. They handed me demonstration prints, A was best. Right conclusion, wrong evidence- most printers have more than one way of printing, different qualities of output. I should have asked 'how were these produced?'. Worse. I asked to see (also hear) them printing. Image out from B approx. 1 minute. Ten minutes later A was still running. I know that A was parallel processing, but the salesman was too dim to tell me so. Yes I bought B. I think the Group should have a shopping escort service for people like me, or at least we ought to be able to get a friendly hand to hold while making the crucial decisions. Except that actually they aren't crucial. My printer works, pretty well, now I've figured out a few things.

### Ignorance is bliss

Ignorance can sometimes be an advantage. I'd decided to import my images on CD. Fine. When making the big purchase of course I needed Photoshop. There was a special offer: buy a scanner (£300 ish) and get PS for £100. What a bargain. And it was, for me. I love that scanner. Admittedly I'd spent a lot of time in the previous six months squashing a par-boiled sheep's heart into a photocopier, so perhaps it's just my style. Now I can work spontaneously, any image, thing- within reason- can all be scanned, combined, on the spur of the moment. I really enjoy it. For sheer pleasure it beats TV any day. But it wasn't on my list, I hadn't planned for it.

Is there a moral here- Hardly. But maybe a hint of practical advice. **Do It.** Get started. I can't believe that anyone who has begun won't feel that the pleasure outweighs the pain- unless there's someone out there who hates it all with a really big Mac going cheap- my phone No. is...

### Scanned Origins

With that build up the picture has to be a scanned one, in this case all objects. Actually the colours are what interest me, but I would say that wouldn't I? Seriously they are a mixture of greys and pale yellow sepias- but lets get down to technique. I didn't do much to this image by comparison to some, but I was really careful at the scan stage, examining all the options and correcting the levels and curves until I had a safe scan- that is one where I might want to leave something out but nothing was really missing or so I thought. White is however a bit of a problem and I had a grey

and white moiré pattern in patches in the whites. I tried the standard procedures- see Mac Bible- but in the end it worked out better just carefully removing using a combination of rubber stamp and smudge. I then adjusted the colour range, warming it all up a bit, and softened the edges after putting it onto a bigger canvas. Very little work. The idea came after reading a book in which someone remembers their mother, elegant, distant, remote, then finding drawers full of pills after her death. Very sad. No way a great image, but I enjoyed making it. But the same can be said of all the stuff I've laboured over in the darkroom. and disc or no I imagine it will go the same way in the printing- to soot and whitewash in comparison with the 'original' which is not on disc, it's in colour on a soft cream paper. You see I'm an old fashioned girl at heart really- the print 'in the hand' has it.

### Q. When is a Photograph not a Photograph?

### A. When it's Digital

**Well that caught your attention didn't it? This is unfortunately the view of many people and will undoubtedly persist for some time.**

**Lord Brain kindly sent me extracts from the 'Copyright, Designs and Patents Act 1988' which heavily abbreviated states the following ... "Photograph means a recording of light or other radiation on any medium on which an image is produced or from which an image may by any means be produced,"**

**After discussions with several members there appears to be some confusion re current interpretation by the RPS panels. I understand that discussions are taking place at this time, and I will ask Michael Austin to give us the definitive position in the next Newsletter**

**Comments would be welcome from Panel members and others.**

# Windows 95 Problems?

When Microsoft launched Windows 95 operating systems for PCs with a lot of media hype my reaction was to leave well alone, stick with Windows 3.11 and let others find the bugs. Then in March of this year I had a conversation with Barrie Thomas, who has a similar set up as mine, and he advised that having installed Windows 95 soon after the launch. He hadn't experienced any problems, and sang the praises of the new operating system for PCs.

## **Bad Track Record**

I should explain that my track record with computers is not a good one, in that my last two computers purchased, a previous 386 machine and last year my Pentium were both purchased from Companies who went rapidly out of business following my acquisitions. However following my discussions with Barrie I decided to take the plunge and buy the CD ROM version of the Windows 95 upgrade from Windows 3.11.

Having received the CD ROM disc and a very slim instruction manual, I diligently followed all instructions to the letter and upgraded the system to Windows 95. All went well at first with all the existing programs and files being accepted as they were previously set up. After about two days I noticed programs that I had been using following the upgrade, had suddenly disappeared, including my CD ROM drive, which would no longer work and was not shown in the System Devices.

**Graham has since phoned to say that at least some of these problems were connected with an intermittent hardware fault which has since been corrected.**

**Perhaps an update in the next issue would be useful, together with other peoples direct experiences with Windows 95.**

**I think it's wonderful!!!**

When my computer supplier went out of business, I decided to take out a Support Contract with Microsoft for telephone assistance when problems occur, so I telephoned them for 'Help'. Their first reaction was that there is nothing wrong with the software therefore I had to have a virus on my computer. A copy of Norton Anti Virus was quickly purchased however no virus was found. Following contact with Symantec (the makers of Norton Anti Virus software), They requested that I copy various system files and send them to their headquarters in the Netherlands. After a further two weeks and no reply I telephoned Symantec to be told that there was no known virus on the files sent.

## **Microsoft Defeated**

After many further telephone calls to Microsoft and trying dozens of options, they eventually conceded defeat in trying to get my system working as set up. They recommended that I take the advice given by Adeptec, which was to re-format my hard disk and load Windows 95 without loading DOS or Windows 3.11. They informed me that you can load Windows 95 upgrade without having DOS or Windows 3.11 on the system, provided you can place the Windows 3.11 Disc No. 1 in the floppy when requested, this means you can load Windows 95 without all the previous programs, files and data stored in a host of existing files.

With this done I had Windows 95 running and then proceeded to load all my programs and to restore backed up data. All went well for a few weeks until I started getting corrupt files and many system crashes.

Microsoft then advised me to re-install Windows 95 from the CD using L:\SETUP/D/P/F (L: being my CD ROM drive). The switches following SETUP allow the system and all programs to be re-installed (clearing any corrupt files) without loosing all existing programs or data. It Worked.

## **Wonderful Windows**

It is now some five weeks since I first loaded the software and all appear to be working. I actually prefer the new system environment. Don't be put off by my problems with Windows 95 because it is good.

However from my experiences I would recommend that before commencing to load the software you should print off and read the extensive guide to the new system to be found on the CD ROM under 'Admin\Reskit\Helpfile' entitled 'Win95rk'. This is an extensive set up and problem solving 'Help File', making a good reference text book of hundreds of pages.

**(This can be purchased as a book - Ed.)**

My second piece of advice would be to back up all your data files, format your hard disk and load Windows 95 without DOS or Windows 3.11, giving you a clean system and then reload all your programs and data. Note: This advice is based on my limited experience only, I am not a computer expert.

Good Luck. In the end it is worth the trouble provided you have either good luck with everything working well first time, or the patience to stick with it and solve the problems that may arise.

# News and Views

### **A Difficult Birth!**

Since this is the first edition of the newsletter it seems appropriate to give a few details of how the Group came to be formed and the people behind its origin.

A meeting was arranged and publicised in 'The Journal' to explore the possibilities of forming a Digital Imaging Group of the RPS, and this took place at the Soroptimist Club in London on the 20<sup>th</sup> May 1995. Over fifty people had expressed an interest and sixteen turned up on the day.

The mood of the meeting may be summed up by an extract from the letter which Michael Austin returned to all those who had expressed an interest

**'The meeting started with a long debate on whether a special group was needed; the importance of DI to the future of photography was not in doubt, indeed it was the knowledge that photography was soon to be largely taken over by DI which lead some members to question whether an "exclusive" group was the right approach. We were aware that some Groups were already including DI in their activities and it became clear that whilst a DI Group could provide a valuable service to its members, by means of contacts, information and meetings, it might play a more important role by facilitating the spread of DI throughout the Society as a whole ...**

**Finally it was agreed that, since there appeared to be a sufficient degree of interest, a working party should be formed to put proposals to Council for the constitution of a Digital Imaging Group. The working party should bear in mind the desire for the Group both to serve the personal needs of its members and to be a channel through which the Society can promote its DI interests' ...**

The following members agreed to form the working party:

Michael Austin HonFRPS,  
Geoffrey Carver LRPS,  
Adrian Davies ARPS, FBIPP  
John Henshall FRPS, FBIPP  
Barrie Thomas FRPS, FBIPP

Geoffrey subsequently agreed to take on the initial Secretarial duties and myself the Editorial role, for this issue only.

As stated on the letter all further communication (to save cost) was to be via the 'Journal'.

Michael undertook the difficult task of formulating a draft constitution which was circulated and agreed by the steering committee. This was discussed, amended after its first appearance before Council, and subsequently accepted.

The Group constitution was approved by Council at the February meeting and the steering committee met at the Octagon a few days later when we were joined by Barry Lane. Discussions took place to actually set the Group in motion.

### **Why are we here?**

The Constitution states that ...

The aims and objectives of the Group shall be to:

1. Disseminate information about digital imaging.
2. Promote good technical and ethical practice in the application of digital imaging.
3. Facilitate the interchange of information and ideas among the members of the Group by providing a programme of events and activities, including talks, workshops, exhibitions and publications.
4. Work towards a state of integration of digital imaging with silver-based photography such that eventually there ceases to be the need for a specialist Group.

### **Where are the photos?**

Unless you want to spend the next few issues browsing through my old pictures, and to stop me from waffling on about nothing in particular, you had better pull out all the stops and provide an alternative!

Seriously, we are desperately in need of articles and pictures for whoever picks up the task of producing this Newsletter and come to think of it we are even more desperate for someone to put it all together as Editor. It is to be hoped that as the Group grows in size members will willingly contribute, for the mutual good, but at this time we have few members and most of these I do not know.

At this time I do not even know who the members are! (See below)

Please, please help. We need you now and however insignificant you might consider your experiences you have the satisfaction in DI of knowing there are others out there who are way behind you and looking for help.

Until we get an Editor please send your work to me, preferably on a disk which is readable on a PC.

### **Sorry**

It really hurts to begin with an apology but I know that some have already complained that they joined, waited, and then received... Nothing!

DIG was formed when the computers at Bath were being changed and consequently, through no fault of the Group, we did not even know who the members were! Apologies if you have been kept waiting.

### Planned Events -

**25th September 1996**

**'Current Work' - Edward Bowman talks about digital work he is doing as part of a Masters course.**

**University of Westminster, Marylebone Campus (Opposite Baker Street tube station) - 19.30**

**15th October 1996**

**Bradford NMPFT - 19.30 to 21.30**

### Your Contacts -

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### Surfing with the DIG

John Henshall FRPS FBIPP - A member of the steering committee 'is an acknowledged expert in digital imaging and at the forefront of the new technologies.

It is my intention to run profiles of prominent practitioners such as John, but if you cannot wait try his Web site for full details of the work which he does - <http://www.epicentre.co.uk>.

He has very generously offered us space for the Newsletter on this Site. The first issue will be posted and subsequently the contents and a sample page will be shown to encourage new members. You will also be able to discuss matters of interest with other members 'On-Line'. Thanks John.

### Are You 'On-Line'?

If you are a member and can be reached by way of E-Mail please drop me a line or contact me directly.

It is my intention to publish and regularly update a list of all members who may be contacted electronically. Much regular and routine information could be exchanged this way.

Who knows, if we ever reach a stage where all of our members are connected, think of the convenience and savings on postage. Please send some details of your photo experiences on the 'Net'.

### The Good News

I could not allow this issue to go to press without a mention of real progress in the recognition of digital imaging.

Many of you will already know that very recently I obtained Fellowships of both the RPS and BIPP with similar digital Panels. This alone would have been cause for much personal celebration but to add to the delight the latter went on to be awarded the 'Best Panel of the Year' at a presentation in The House of Commons.

This is not just a cause for me to celebrate. The finished Panel was printed onto an art water-colour surface, using a standard desktop inkjet printer and this is believed to be a first within both organisations. Recognition at last that digital imaging is coming of age.

Details of the Panel and how it was produced, together with some of the photos, will be in the Journal at about the same time as you receive this newsletter.

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*'Genesis' by Derek Dorsett FRPS*  
*Very appropriately named for this first edition ...*

