



Retouch and go

Gordon Laing shows how to save what might have been the perfect photo, ruined by blots on the landscape: don't bin it, scan it, and use every trick in the book to total unwanted tourists.

This month, I finally get to bore you with my holiday snaps, thinly disguised as a feature on the tricks and morals of photo-retouching.

But first, the news. Intel's Pentiums with MMX enhancements have finally been announced, so in last month's *PCW* we tested eight MMX PCs. We tried out Adobe Photoshop 4 and CorelDraw 7, both featuring MMX code, on a Pentium 200MHz with MMX. We timed filters, image rotations and colour-mode changes under Photoshop and a screen redraw of Corel's Snowbarn file at a resolution of 1024 x 768 in 16-bit colour. We then swapped the MMX chip for a standard 200MHz Pentium without MMX, and repeated the tests.

The Photoshop results showed speed increases of up to 45 percent, but Corel's faster redraw was thanks mostly to MMX's doubled Level-1 cache. Slightly disappointed, we later discovered that the graphics-card drivers will have to be updated to make use of MMX chips, and only then will we see redraw improvements.

Those wanting a top-of-the-range PC

today, particularly for multimedia applications, should go for an MMX model. But the rest of us should be content to wait until we're running mostly 32-bit apps under NT4, then make the more significant upgrade to a Pentium Pro chip — soon to be seen with MMX enhancements too.

Anyone seeking a major hardware upgrade for graphics work should still consider more RAM before plumping for a faster chip. The photo-retouching I describe here involved working on 28Mb files, using a PC fitted with 32Mb. By the time Windows 95 and Photoshop had their share, the system almost ground to a halt. After one very slow day, I took 32Mb of RAM from my home PC to boost my work PC to 64Mb. The difference was amazing, with operations taking mere seconds rather than minutes.

As my main subject this month involves photography, this is a good time to mention digital cameras. Users of Casio's popular, but slightly toy-like, QV-10a and QV-100 cameras may be interested in considering third-party lenses. The Kerridge Computer Company offers a kit for either camera,

featuring a 1.5X telephoto and 0.65X wide-angle lens for £64 (plus VAT). A 2X and 4X macro lens kit is also available for the QV-10a at £64 (plus VAT), while a 2X-only macro lens for the QV-100 costs £49.50 (plus VAT).

Kerridge also offers a lighted base and stand, to photograph transparencies with the aid of the optional macro lens. We haven't yet had the opportunity to test these products but those still making their choice of digital camera could do worse than opt for Sony's new DSC-F1, reviewed in this month's *First Impressions* (page 70). It's a 640 x 480 pixel model with flash, LCD display, infra-red port and the kind of sexy styling at which Sony excels, for £595 (plus VAT).

The morals of manipulation

When I was 14, I stopped mucking around and started taking serious photos. I remember recoiling in horror when I first saw one of my photo pals use a filter: rendering the sky that graduated shade of tobacco so popular in those days. But now,

his picture would be inaccurate! The event had not been recorded properly and anyone looking at the picture would be falling for a lie!

Suffice it to say, this extreme response disappeared as soon as I had a go myself. Suddenly, photography had become much more than just finding something nice-looking, pointing the camera at it and clicking. It had finally dawned on me, the number of ways in which a photographer could manipulate a picture without even changing position or lenses. More to the point, it became much more fun.

Later, I found myself spending much longer in the darkroom than outside taking the pictures. Dodging and burning to bring out otherwise hidden details became an obsession. As regular readers will know, my darkroom now resides within my PC and applications like Photoshop, but the principles, goals and morals still remain.

A touch of professionalism

Digitally painting out dirt and scratches can be seen by all as beneficial. You can selectively darken, lighten or even recolour areas of a picture, even though some may consider this to be cheating a bit. Take a one-off trip to a far-off land, for instance: an otherwise perfect photo could have been marred by an overcast sky. Many would consider themselves fairly beaten. But while there's nothing better than capturing the perfect shot, first time, there's still no need to bin a less-than-ideal pic. Why not scan it in and add a blue sky? Or at least darken the area to bring out more detail in the highlights? You may at first share the same horror I experienced when witnessing my first filter, but if you can get over this you'll never look back (the professionals use every trick in the book until they get the picture they want).

This neatly brings me to the biggest graphics job I've ever completed: printing a collection of holiday photos taken during the past two years. Wanting the very best final results, I chose to use professional slide film: Fuji Velvia (50 ASA) and Fuji Provia (100 ASA). Choosing slide film, however, proved to be a bit of a mistake since the 10in x 8in prints I desired were going to cost over £10-a-go at professional labs. Besides, I had originally wanted 12in x 8in prints to show the full 35mm frame, but these had been even more expensive. Consequently, the processed slides just sat there in their sleeves... until now. Towards the end of last

year I decided to use my PC to scan the films and print them out the next time I got my hands on a decent colour printer. At the same time I could make any digital enhancements I desired.

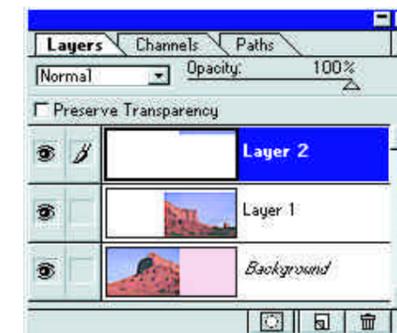
Admittedly, I'm still not keen on the idea of selecting an overcast sky and replacing it with deep blue (the guilt still twinges, deep down). Nevertheless, I suddenly found myself to be not so bothered about man-made aberrations in my otherwise perfect field of view: those horrible signposts, telephone wires, fences, tracks, or even stray holidaymakers, could be easily wiped out using my PC.

Look — can you see the join?

Of course, you should still try to make life easy for yourself by trying to line up your shot to minimise the amount of post-processing work required. For instance, I once came across an extremely long fence crossing my entire field of view; I couldn't climb it, so instead I walked right up to it and pointed the camera along it. There's still a nasty fence to get rid of, but rather than crossing my entire frame, it only measures a couple of millimetres wide.

I also saw opportunities to digitally join two photos to produce a panoramic shot. Here, the usual tips apply; try to use a tripod, or lean on a fence to make sure the shots line up vertically. In one case I had to make do without a support and discovered later, at the joining stage, that the shots were about ten percent off so one of them needed an extra portion of sky. But after a little copying, pasting and smudging between the joins, I am pleased with the results I achieved.

Incidentally, there is an excellent tutorial on the CD that comes with Photoshop 4, which shows how to create a complex



Far left Utah's Monument Valley is just begging for a panoramic shot. I took two photos with my 35mm camera and stuck them together using layers in Photoshop 4 (above)

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Clockwise, from top left: Central Park with a lamppost, then without. My terrifyingly white legs... but hey, who are those two blokes by the rock? I'll get rid of them! Monument Valley by moonlight and a cunning car headlight trail; but perhaps it looks better without? A tranquil Californian beach scene... but hang on, spot that fella with the rucksack? He's history! All the above retouching was easily done with Adobe Photoshop's clone tool

panoramic shot, taking multiple frames and foreground parallax into account.

Before letting my photos and their captions do the talking, a short word on the PC hardware employed. I needed an excellent 35mm film scanner and was not let down by the superb Nikon Super CoolScan, a 2700dpi 36-bit model which quickly produced 28Mb (maximum) files. This was connected to an Adaptec 2940UW SCSI card, which also controlled a

secondary 2Gb Quantum SCSI hard disk.

The 166MHz Pentium PC I described earlier was fitted with 64Mb RAM. I used Photoshop 4 under Windows 95 and, to maximise performance, set Windows virtual memory to 2.5 times the amount of RAM for both minimum and maximum quantities, thus preventing Windows wasting time resizing its swap file. I also set Photoshop's scratch disk to the physically separate Quantum hard drive, independent from the

drive that Windows was using for its own virtual memory. I can't wait to go away on holiday again!

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