

# MACFORMAT

ISSUE 15 ■ AUGUST 1994 ■ £3.95 WITH HD DISK

## State of the Arts

Get creative with your Mac! We review the latest art programs, test the top graphics tablets, and show you the tricks and techniques the professionals use



### COMPLETE!

Superb image-editing program which produces amazing quality results on a StyleWriter!

**MACFORMAT** Disk 15 AUG 94

**GrayStation**  
The perfect image-manipulation program for editing greyscale PICTs. Complete, fully usable commercial software

**VistaPro**  
Generate whole landscapes in glorious detail out of thin air! Full program reviewed inside; this demo requires a 5Mb Mac

**Susan**  
Pit your wits against your Mac in this oddly-named game of skill

**Quill**  
Read any Mac word processor file, without the original WP program

**Plus**  
AliasZoo ■ Fixicons ■ MoonTool  
Escape Dammit ■ PhoneLogger

See magazine for more details and compatibility information

**2.5 MEGABYTES OF GREAT SOFTWARE!**

If your Disk is missing, ask your newsagent

### Which Works?

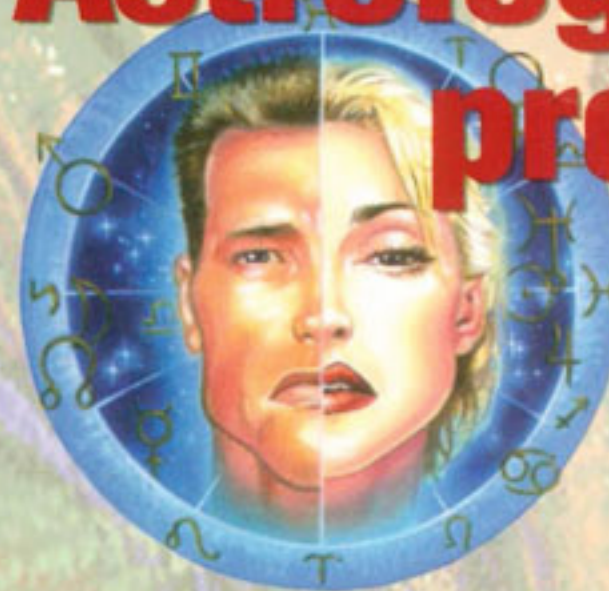
Microsoft Works 4 and ClarisWorks 2.1 – how do they shape up?

### 11th Hour preview

Will these be the best graphics ever in a Mac game? You be the judge!



### Astrology programs



The secrets are no longer in the stars, they're on your Mac!

**PLUS** How to connect your Mac to your music kit ■ Displaying data as you want it in your spreadsheet or database ■ Your Mac and Performa problems solved by our experts

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MACFORMAT  
ISSUE 15 ■ AUGUST 1994 ■ GRAPHIC DETAILS ■ 11TH HOUR PREVIEW ■ MICROSOFT WORKS 4 & CLARISWORKS 2.1 ■ ASTROLOGY PROGRAMS

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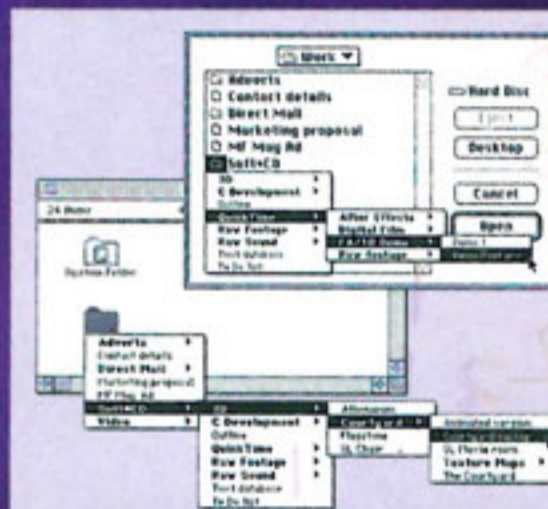


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Product range differs from store to store.  
Please check for availability.



**Prince of Persia 2.** The eagerly awaited sequel to the award winning Prince of Persia is finally here! This time there's more scenery, more scenarios, and more actions to perform —turn into a shadow, even shoot fireballs. The animation is outstanding and gameplay colossal. It's a must have even if you've never seen the original! SRP £34.03



### PopupFolder

**Popup Folder** is the ultimate Finder navigator. With it you gain instant access to popup menus from any folder or drive icon, even from open and save dialogs, up to 5 levels deep. You can simply drag-and-drop files into these menus. Navigating server volumes has never been so easy! Additionally, Popup Folder will add hierarchical menus to your Apple Menu. SRP £39.00



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**Complete Lemmings** is a special value bundle pack containing all the award winning Lemming games. For a limited time this includes the special edition Festive Lemmings too. Never heard of Lemmings before? Get this and you'll understand why it topped the charts worldwide! SRP £25.52



**Mac Best Sellers** is a collection of three best selling games in one value bundle box. It includes **Hellcats**, the flight simulator; **Super Tetris**, sequel to the world beating Tetris and finally the 3D Battle Tank game, **Spectre**. A great all round games bundle! SRP £39.00



All prices shown are Suggested Retail Prices exclusive of VAT.

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**Return to Zork.** An epic adventure, underground. Based on the infamous Zork series this outstanding adventure includes fully rendered 3D graphics, original music, over an hour of spoken dialogue and video starring known actors. By combining this with an innovative interface you have one of the most eagerly awaited Mac CD ROMs! SRP £42.54

## new mac summer releases from softline



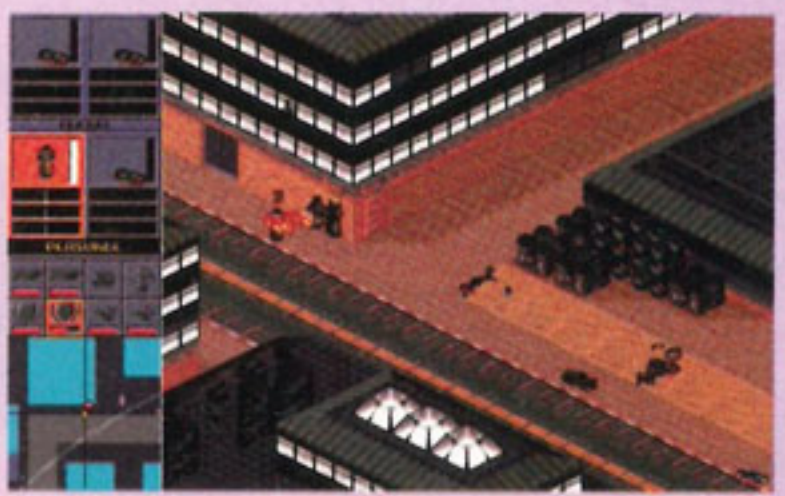
**SignPost** is the automatic route planner that will generate maps and instructions on how to get from A to B (via C, if necessary). You can purchase additional country modules to suit your travelling needs, both in Europe and the US. Even plan a route from country to country. SRP £99.00 (includes UK Map)



**Flying Nightmares** is a unique strategy orientated harrier jump jet simulator. Take control of an entire fleet or just pilot a single aircraft throughout the various missions. A realistic simulation as well as the first to be PowerPC native which ensures the flight of your life! SRP £25.52



**Syndicate.** The aim of the game is to spread the dark stain of your syndicate's colour across the surface of the entire globe. As a young executive you observe the world from a control platform in an airship while commanding your cyborgs via CHIP technology. View the scenes from above in 3D, construct up to 8 company cyborgs using futuristic parts and weaponry. It's strategic, it's unique, it's atmospheric and it's violent. SRP £38.29



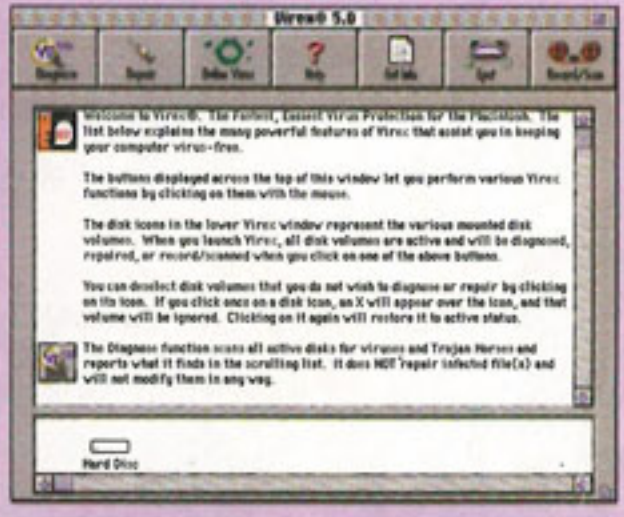
**Deliverance.** Finally a real 'no-holds barred' arcade action game for the Mac. Hack your way through the lands of Llyn Cerrig to defeat Tnarom who is threatening to destroy it. This can be played on a small or large screen in 16 or 256 colours—the action is relentless and non-stop, including tough end of level guardians. SRP £34.00



**WizTools** a collection of invaluable utilities which make using your Mac easier and more enjoyable. The set includes backup with synchronisation, key-stroke recorder, worldclock, launcher, finder tools, submenu and much more... SRP £69.00 **WizTools PB** is a collection for PowerBook users. This one includes Security, Battery management, Remote Access support, Synchronisation and PB Ease, which makes using your PowerBooks' trackball easier. SRP £69.00



**Virex** is the fastest and safest anti-virus software for the Macintosh. It can be set to scan your hard disc on start-up or shut-down and check floppy disks as they are inserted giving you complete security. For ultimate peace of mind you can subscribe to an automatic update service which ensures that you'll always have the latest version. SRP £69.99 With subscription SRP £149.00



**Dynamic Effects 1,** a unique collection of special effects filters for Adobe Premier (and compatible) programs. This set includes additional transitions, warps, zooms, film grain, time based distortion, channel ghosting, sepia toning and many more unique special effects. In fact 28 all-new additions. SRP £95.00



# summer releases

WARE SUPPORT

# The Finder

## MACFORMAT

**W**elcome to another issue of MACFORMAT, Britain's best-selling Macintosh monthly. Whatever you use your Mac for, whether you're a veteran or a novice, we'll bring you news, reviews, tips and techniques to help you get even more out of your Mac!

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Graphics of a different sort! This sequel to the adventure game 7th Guest promises some of the best graphics ever in a Mac game. Judge for yourself in our sneak preview



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COVER DISKS

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A fully-working image-editing program for greyscale PICT images, a demo of Vistapro, a complete mental game, handy utilities and even more, all crammed on to this month's MACFORMAT cover disk

**Your CD-ROM** 9

If you have the CD-ROM edition of this issue, you have everything on the disk plus a demo of the award winning Redshift and much more - too much even to list!





# Your cover disk and CD-ROM

Once again, **MACFORMAT** brings you the ultimate value in cover disks, with a choice of a packed HD floppy or a huge CD-ROM!

**S**tar of both the floppy disk and CD is *GrayStation* from LePixel. *GrayStation* is a greyscale image editing program, perfect for enhancing PICTs ready for inclusion in word processed or desktop published documents. Our cover disk program is

not a demo, all features including Save are enabled and there's no time restriction – the only limit is on image size, but this shouldn't affect most users.

Another fascinating fully working demo is *Vistapro* from Virtual Reality Labs. *Vistapro* is a three-dimensional fractal landscape generator. You take a map – either a pre-prepared or a randomly created one – and position yourself on it; *Vistapro* will then draw the view as you see it, complete with clouds, trees, rivers – the lot!

If you have the CD-ROM edition of this issue, you can see for yourself the fascinating *Redshift*, a multimedia astronomy program. If you're even vaguely interested in space, *Redshift* is an eye-opener. One national newspaper called it the best CD-ROM ever made!

PowerMac owners (lucky so-and-so's) will find a selection of shareware and program updaters on the CD – every program we could find from all over the US, in fact.

And of course, there is a tonne of shareware, both on the floppy disk and on the CD-ROM. In fact, the CD has something like 6,000 files on it! It should keep you quiet for a while!

## GrayStation 1



**Greyscale image editing program**

**For:** disk and CD-ROM

*GrayStation*™ 1 **Runs on:** any Mac

**Requires:** monitor displaying at least 16 greys or colours

**Memory needed:** 650K

*GrayStation* is a kind of mini-Photoshop for greyscale images. For the majority of us, greyscale images are what we use most, for inclusion in newsletters, reports or just the standard letters we print. *GrayStation* enables you to take the original image – provided it is in PICT format – and edit it, altering brightness and contrast and using the program's own unique HQP (High Quality Print) system to create images which print much better than ordinary scans – even on cheap printers. These HQP images can be saved out and used in other documents without loss of quality.

You can use *GrayStation* to tidy up PICTs by removing blemishes, increasing contrast for better printing, and so on. You can also use its powerful editing tools to manipulate images, or even to create new ones from scratch.

*GrayStation* is easy to use, but in case of any difficulty it has balloon help to show you what all the various controls do. We've provided an image to work on if you don't have one handy, so have fun!

The version of *GrayStation 1* on this disk is not a demo; all the features work including Save and there is no time limit on it. The sole

### START HERE

A high density floppy disk can contain about 1.4 megabytes of software, but we want to bring you as much as possible every month. Therefore, we use compression programs to reduce the files in size so we can fit more on – about 3 megabytes-worth, in fact. Unfortunately, that means you can't use the programs straight off the disk; you must install them on to your hard disk first.

Doing this is very simple. Just double click on the floppy disk icon, then double click on the MACFORMAT August icon. A copyright message appears – click **Continue**. A box appears which asks you where you want to save the contents of the disk. Choose the place on your hard disk where you want everything stored and click **Save**. After a minute or so, the files will be installed on your hard disk.

Some of the programs require further installation before they will work; check the ReadMe files for each program.

Before installing the cover disk we recommend that you back up your hard disk. This sensible precaution will avoid problems should any software not be compatible with your set-up. We make every effort to check our software for compatibility and viruses, but the info here is intended as a guide only and MACFORMAT cannot be held responsible for any damage to data or consequential losses. So please, back up first.

### BACK IT UP

Before you do anything else, you should make a backup of the MACFORMAT cover disk and work only with the backup, just in case anything goes wrong. Make sure the original cover disk is write-protected (move the tab so that you can see through the hole) – now nothing can be written to the disk. Then follow these simple steps:

1. Insert the MACFORMAT cover disk.
2. Highlight the disk icon (but don't double-click on it) and drag it over your hard disk's icon. The contents of the cover disk will be copied into a new folder on your hard disk called 'MACFORMAT August cover disk' (but not decompressed, so you

- still can't run anything directly).
3. When the copying finishes, drag the cover disk icon into the Wastebasket to eject it.
4. Insert a blank high-density disk. Check that it's not write-protected, and, if need be, format it, naming it 'MACFORMAT August backup'.
5. Drag the 'MACFORMAT August cover disk' folder from your hard disk on to the new floppy disk's icon. When it has finished copying, your backup is complete.
6. You can now delete the 'MACFORMAT August cover disk' folder from your hard disk by dragging it to the Wastebasket, and then selecting **Empty Wastebasket**.



GrayStation enables you to jazz up your scans to your heart's content – and offers quality printing on cheap printers.

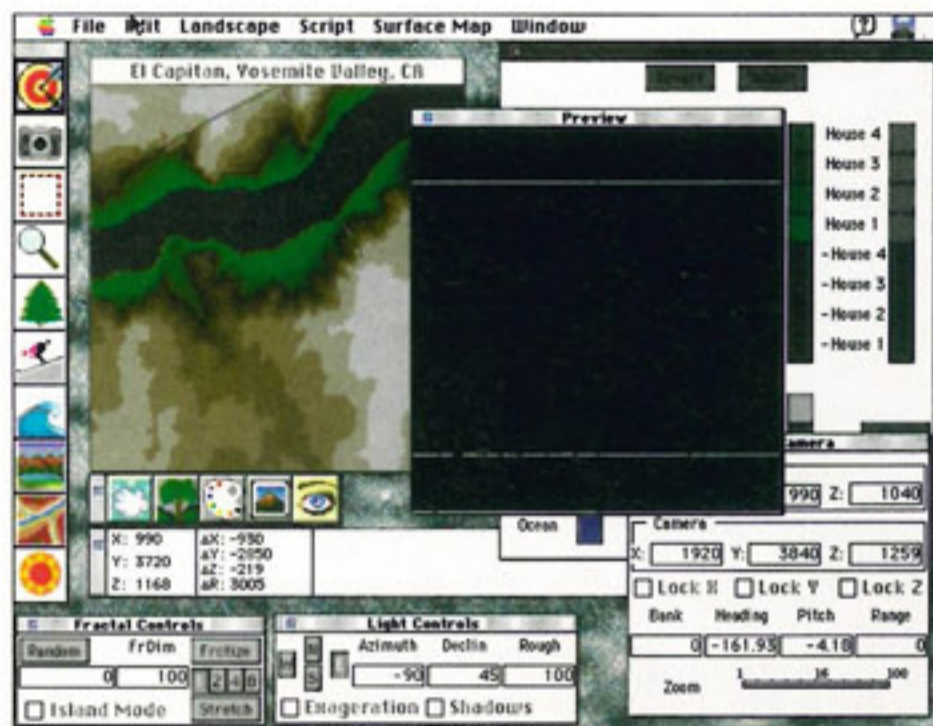
restrictions are that only PICT images (the most common type, supported by all scanners) can be imported, the HQP system only operates with non-PostScript printers such as the StyleWriter and DeskJet, and the maximum image size is 12cm by 12cm. Larger images will be resized, but 12cm by 12cm is perfectly adequate for most uses of greyscale images, being over half a page of A4 wide.

LePixel, the French maker of GrayStation, has produced an improved version, GrayStation 2, and if you like version one, MACFORMAT can offer you an upgrade to version two at an exclusive low price.

- Extra features in GrayStation 2 include:
- Opens a variety of formats including TIFF
  - Allows resizing
  - Full printer calibration
  - Special photocopyable output
  - PostScript compatibility

MACFORMAT is very happy to be able to offer you this powerful program for just £39.95 including VAT and delivery – a third off its normal retail price.

While we were talking to LePixel, securing this exclusive price for you, we were also able to negotiate a special deal on the full colour image editing program ColorStation 2. In June's MACFORMAT, Gordon Druce reviewed the original version, saying, 'It's hard to fault Color-



Vistapro offers an incredible variety of options – all of which work in this demo. We're too good to you, we really are.

Station' and rating it at 90%, based on its normal price of £67. We can only guess at what mark he would have given it if he'd known that we could offer it exclusively to MACFORMAT readers for just £49.95!

To get hold of a copy of either of these excellent image editing programs, ring our MACFORMAT promotions hotline on 0225 822511, or fill out the coupon below and return it to MACFORMAT promotions, Future Publishing, FREEPOST (BS4900), Somerton, Somerset TA11 6BR. These offers are open only while our stocks last, so if you want a full feature image editing program for less than what Arthur Daley would undoubtedly call a monkey, you had better move fast!

### Vistapro



**Fractal landscape generator demo**

**For:** disk and CD-ROM

**Runs on:** any Mac

**Requires:** monitor displaying at least 256 colours

**Memory needed:** 4,000K

Now, the potential uses of a three-dimensional fractal landscape generator may not occur to you all at once, but it's a hell of a lot of fun to play with! See our review on page 50 for more



And here's a mountain I prepared earlier! You'll have to be prepared to wait a while for detailed renders like this.

details on what the program can do, but above all just try it out – it's fascinating.

To get started, click on the rendering options icon and select **Excellent** from the **Quality** menu, then click on **Gouraud Shading**. Click **OK** to confirm this and select **Render** from the **Landscape** menu, then sit back and wait for a wonderful view across a valley.

The 'fractal' bit, by the way, refers to the method the program uses for including realistic random detail in the images, and comes from the once trendy chaos theories of mathematics. Just thought I'd clear that up for you.

If you decide that creating these virtual worlds is really rather good, you can upgrade to the complete version of Vistapro for £89.95. Either call our MACFORMAT promotions hotline or use the form.

### Redshift



**Multimedia astronomy demo**

**For:** CD-ROM only

**Runs on:** any Mac with CD drive

**Requires:** monitor displaying at least 256 colours

**Memory needed:** 1,025K

This demo runs through the critically acclaimed Redshift astronomy program, showing you its

## MACFORMAT DISK PROMOTIONS

Please send me:

- copies of GrayStation 2 at the MACFORMAT exclusive price of £39.95 (Code: MFGRAY)
- copies of ColorStation 2 at the MACFORMAT exclusive price of £49.95 (Code: MFCOLS)
- copies of Vistapro at our MACFORMAT price of £89.95 (Code: MFVIST)
- copies of Redshift at our MACFORMAT price of £59.95 (Code: MFREDS)

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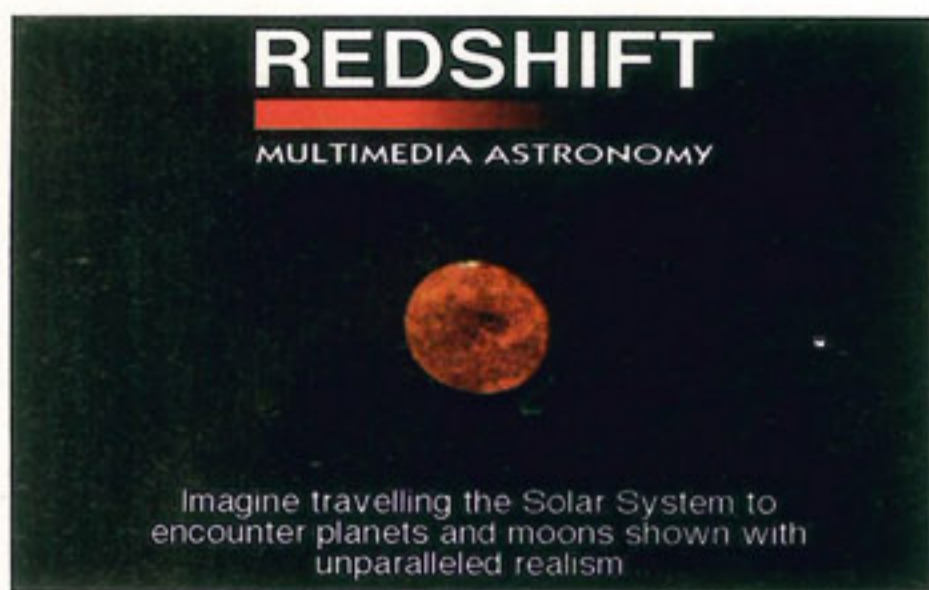
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## MACFORMAT COVER DISKS



The massive *Redshift* database contains surface maps of the Earth and other planets. It won't help you navigate the terrors of Spaghetti Junction, though.

depth of information and innovative interactive interface (try saying that when you've had one too many).

The demo program explains itself better than I can, so run it and see! Two versions are provided; the one recommended for Macs with single-speed CD drives lacks sound, but is otherwise the same.

If you like what you see in the demo and fancy buying yourself the full CD-ROM, you'll be pleased to learn that it costs just £59.95 if you buy it through MACFORMAT. Once again, you can obtain more details about the package and order your copy by calling the hotline (tel: 0225 822511) or by filling out the coupon on the previous page.



There are hundreds of NASA-supplied images included in the full version of *Redshift*. Here we have a view of our Ed's birth place - if you look carefully you can see his Mum's house.



One of the most famous shots of modern times: the great red spot of Jupiter. Rumour has it the next probe will contain a concentrated dose of Biactol and a bloody big Kleenex.



If the covermounted high density disk or CD-ROM you have is defective, return it to us and we will replace it. Please be sure that it is a physical problem with the disk, however, or the replacement will just be the same!

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Enclose a self addressed envelope with the disk or CD, and a description of the fault. Please do not return disks or CDs to the editorial office; we don't hold stocks of them and can only refer you to one of the addresses above.

## SHAREWARE ON THE HD DISK

### Quill

Text file reader  
For: disk and CD-ROM  
Freeware  
Runs on: any Mac  
Memory needed: 320K

*Quill* is an essential utility; it can read files created by virtually any Mac word processor. If you have ever been sent a disk with an unreadable document on it, you'll know how essential this is!

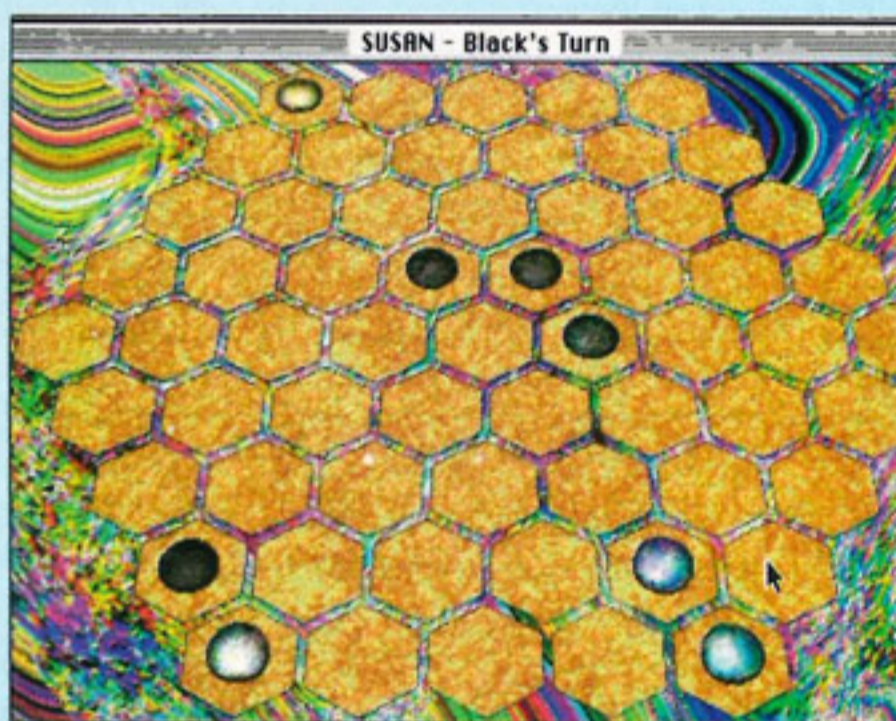


Now, thanks to MACFORMAT and *Quill*, you need never be stuck with an unreadable word processor file again.

### Susan

Mental game  
For: disk and CD-ROM  
Freeware  
Runs on: any Mac  
Memory needed: 640K

*Susan* is a strangely-named mental board game in the backgammon mould. It's pretty



Pit your wits against, erm, *Susan*. This mental board game will have you gnashing teeth with the best of 'em.

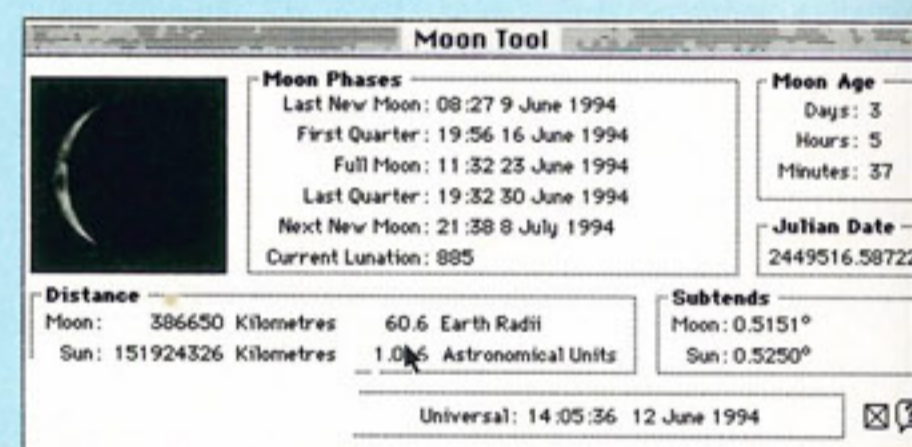
taxing on the brain cells, but each game lasts only a few minutes, so it's ideal for those coffee breaks!

### AliasZoo

Alias manager  
For: disk and CD-ROM  
Shareware, \$15  
Runs on: any Mac  
Requires: System 7  
Memory needed: 450K

If your aliases are running riot, losing their links to the original files or cluttering your desktop in their hundreds, *AliasZoo* will sort them out!

Also on the disk: *MoonTool*, a program that,



*MoonTool*: all you ever wanted to know about the Moon - except how to get there, that is.

among other things, can tell you how far away the moon is at any given time (ideal for all those unexpected Lunar excursions); *PhoneLogger*, a *HyperCard* stack which, funnily enough, enables you to log phone calls; *Fix-Icons*, a utility which makes your icons look the way they should; and *Escape Dammit*, another utility, which enables you to use standard keystroke shortcuts for things like 'cancel' dialogue boxes.

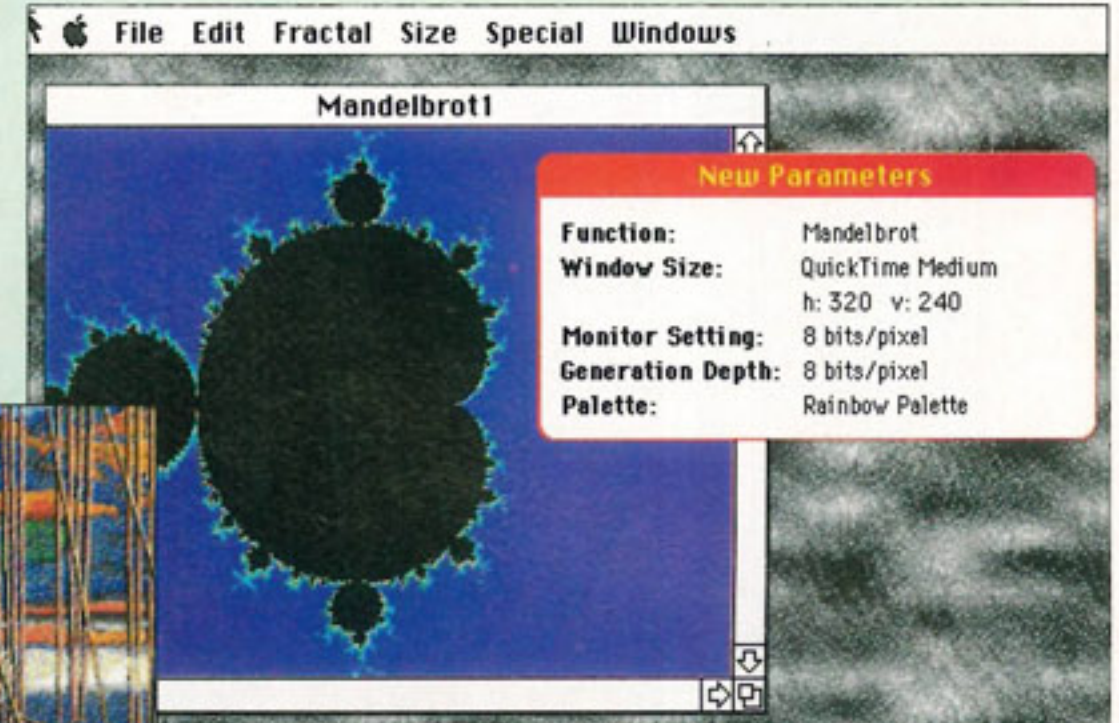


Take control of your aliases now! Although in my case, I think I may have left it just a little too late...

# CD-ROM HIGHLIGHTS

There's so much on the CD-ROM that we couldn't hope even to list everything. Here then are just a few of the highlights...

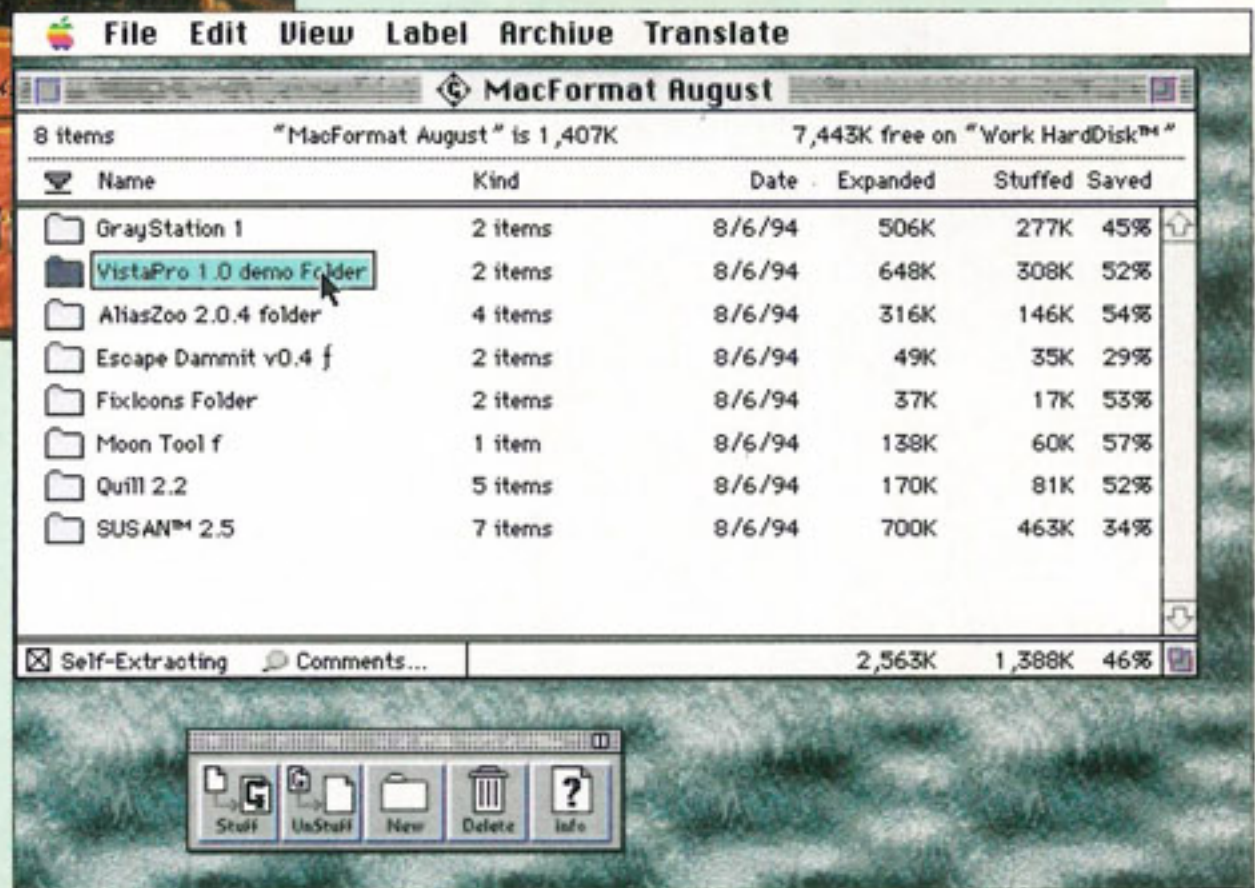
*Pirates Gold* demo: the old Sid Meier classic game of swashbuckling strategy has now been updated and coloured in! So, erm, heave-ho, me hearties!



Create gorgeous fractal graphics with *Colour Fractal Generator* – or a shapeless ink blot, if you're particularly crap...



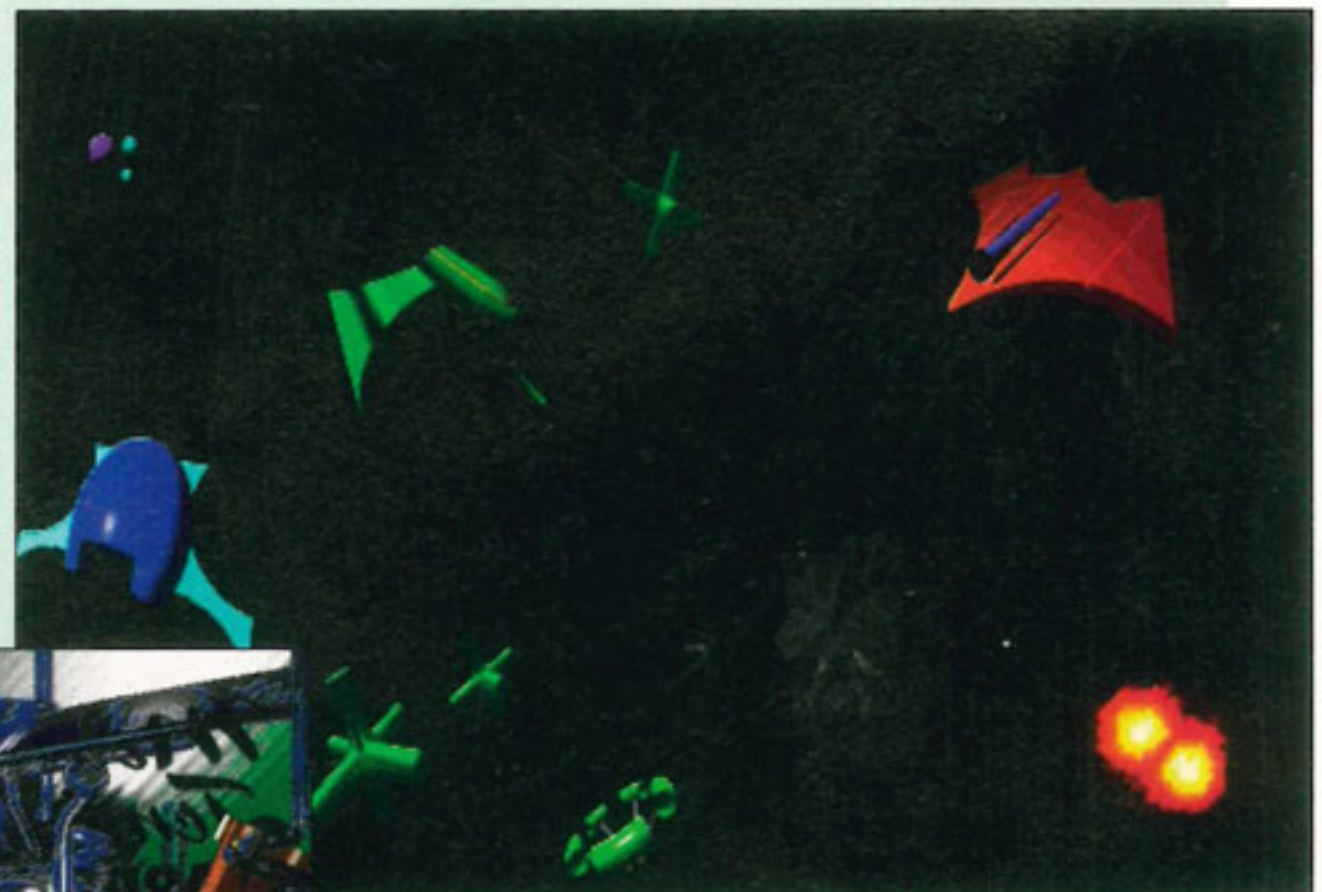
See and hear some common and not-so-common US birds with this unusual but fascinating program, *Bird Songs*. Dawn choruses will never be the same.



*Stuffit Lite*: simply the best program for compressing files to save space on your hard disk or fit more on a floppy.

*Pathways into Darkness* demo: the 3D rendered dungeon adventure is now PowerMac compatible and runs at a blistering speed!

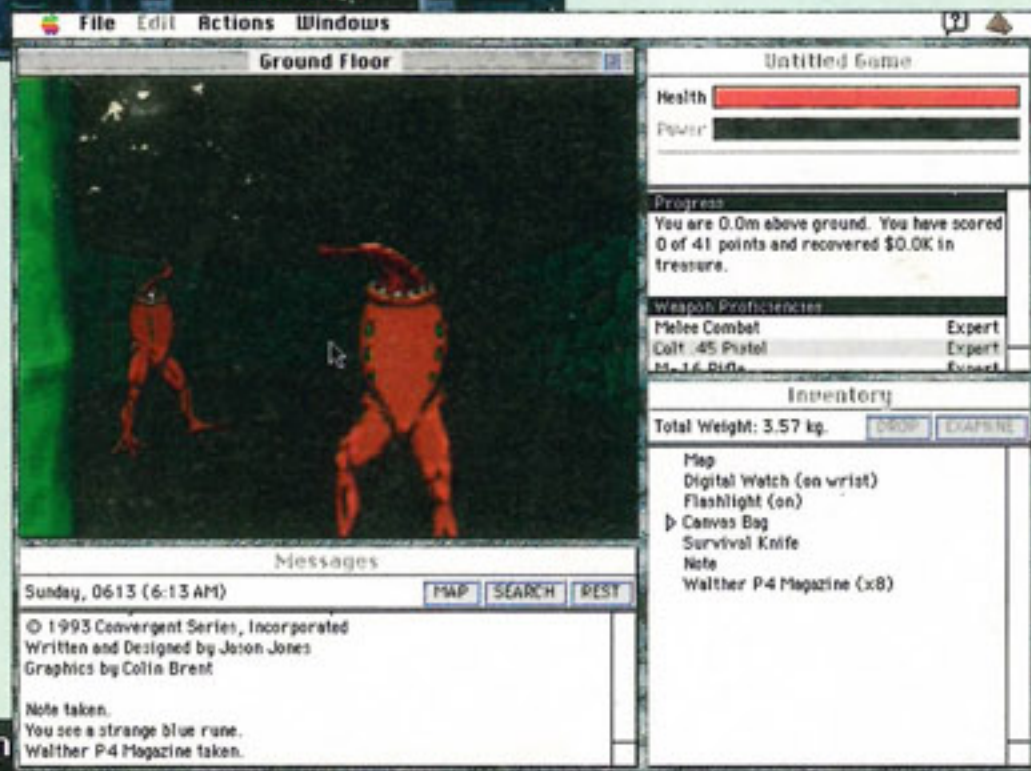
*Asterax*: a challenger to topple *Maelstrom* as the best shareware game ever? Play it and find out just what makes this game so darn good.



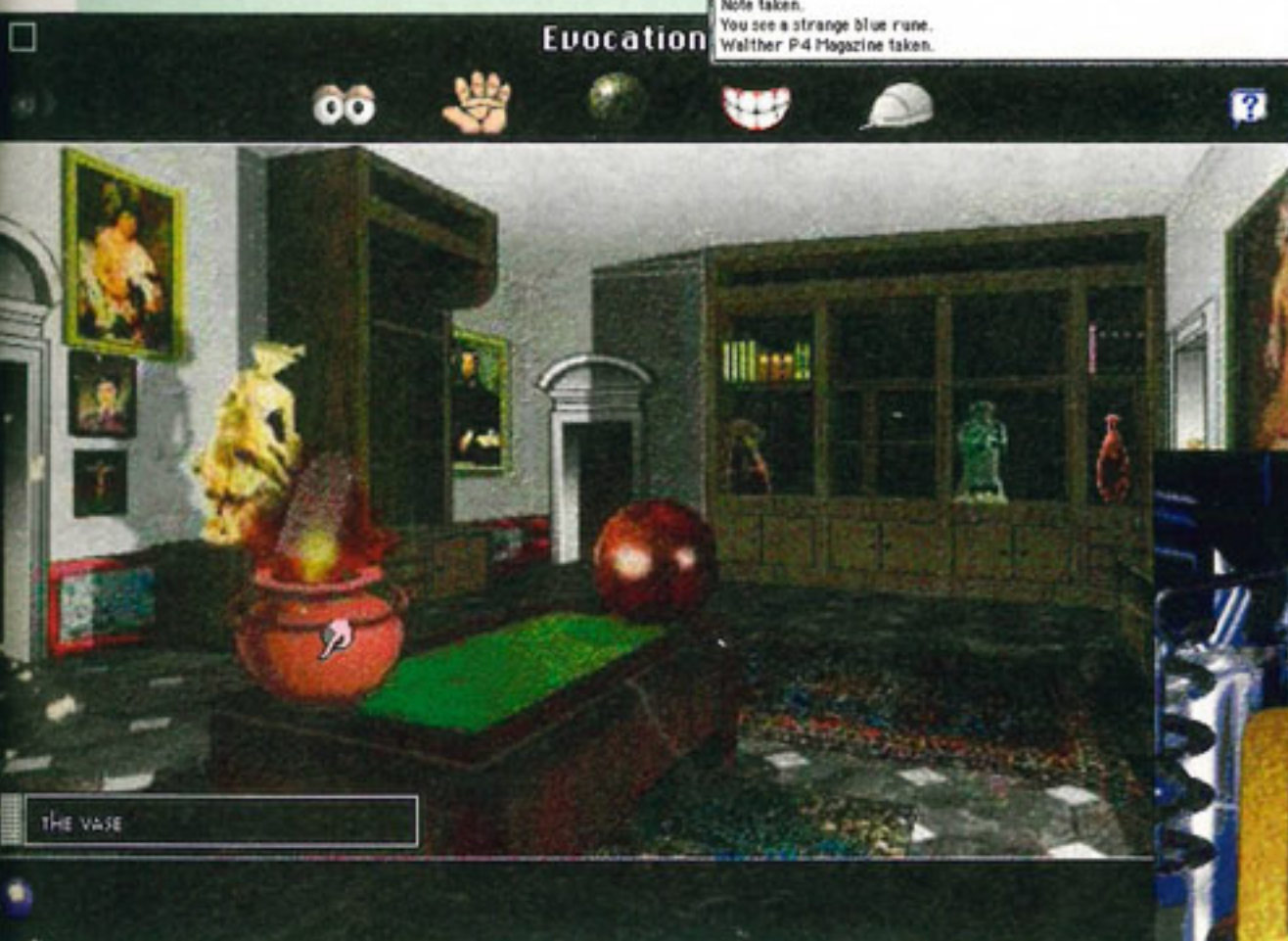
*Chiral*: a puzzle game based on fitting molecules together from the excellent Ambrosia.



*Flying Nightmares* demo: the latest flight simulator takes you on board a Harrier jump jet, and adds elements of strategy too.



*Evocation* demo: an Italian adventure set in a mysterious stately home, complete with an oracle of the gods...



**NEW for Windows™ & Macintosh®!**

**Learn to draw  
& paint**

**Step-by-step  
interactive  
tutorials**

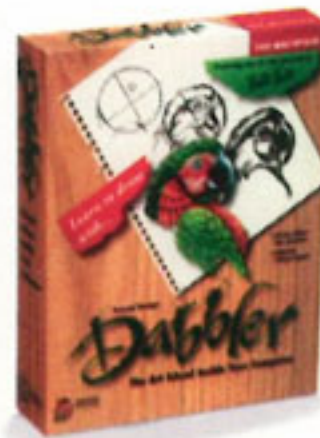
**Win free  
fonts!**

Fractal Design

# Dabbler

**D**ABBLER IS THE IDEAL SOFTWARE for aspiring artists of all ages. You can draw and paint realistically with a wide variety of tools on incredibly realistic papers in up to 16.7 million colours. If you get stuck, Dabbler will show you how to draw professionally using interactive pre-recorded sessions—then you can try it for yourself. Dabbler features capabilities similar to far more expensive paint programs yet is designed with a simple interface for the beginner.

Dabbler ships with a How-to-Draw manual from Walter Foster® which has been translated into interactive tutorials within the software—just like having your very own art teacher by your side!



Dabbler includes all your favourite artist's materials such as chalks, charcoals, water colours, oils, pens and even the brush strokes of Seurat and Van Gogh—you can even import a photograph and turn it into a beautiful portrait!

Dabbler runs on any 386, 486 or Pentium PC with Windows 3.1 or later and any Macintosh (except SE, Plus, Powerbook 100 or Classic) or Power Macintosh machine. It'll run with just 4Mbytes of RAM although we recommend 8Mbytes.

**WIN! FREE Fonts for first 100 replies**

For more information about Dabbler fill in the coupon and post it to **The Dabbler, Letraset Software Products, 195-203 Waterloo Road, London SE1 8XJ**. The first 100 names will win a set of Letraset Fontek fonts for your PC.

**Letraset®**

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Name  
Address  
Postcode  
Phone



## Details of new features in System 7.5 revealed



# QuickTime 2.0 too late for System 7.5

System 7.5 will be released in the late summer and will include a sweeping range of exciting new features but only the current version of *QuickTime* (v1.6.2), not the ground-breaking v2.0 as hoped. Ironically, *QuickTime 2.0* will probably be available separately at the release date, but was not completed in time to be included.

*QuickTime 2* promised full-screen video and support for MIDI music (see *MACFORMAT 12*) and was eagerly awaited. However, System 7.5 will still include the new QuickDraw GX graphics handling system (see 'Quicker on the Draw' box), the new *AppleGuide* help system, and *AppleScript*, Apple's macro language which enables you to automate many functions in any 'AppleScript-aware' program. The Finder itself will for the first time be fully scriptable.

Other new features in System 7.5:

- *PowerTalk*, an electronic mail extension that enables you to mail a document by simply dragging it on to an icon on your desktop representing the destination.
- Sub-menus in the **Apple** menu, including

automatically-created 'aliases' for launching recently-used documents and applications.

- A 'Window Shade' system that enables you to leave windows and applications open but 'roll up' the windows to leave just the title bar visible – one click and it opens again.

- *SimpleText*, a more advanced text editor that allows for much larger documents than *TeachText*, which it replaces.

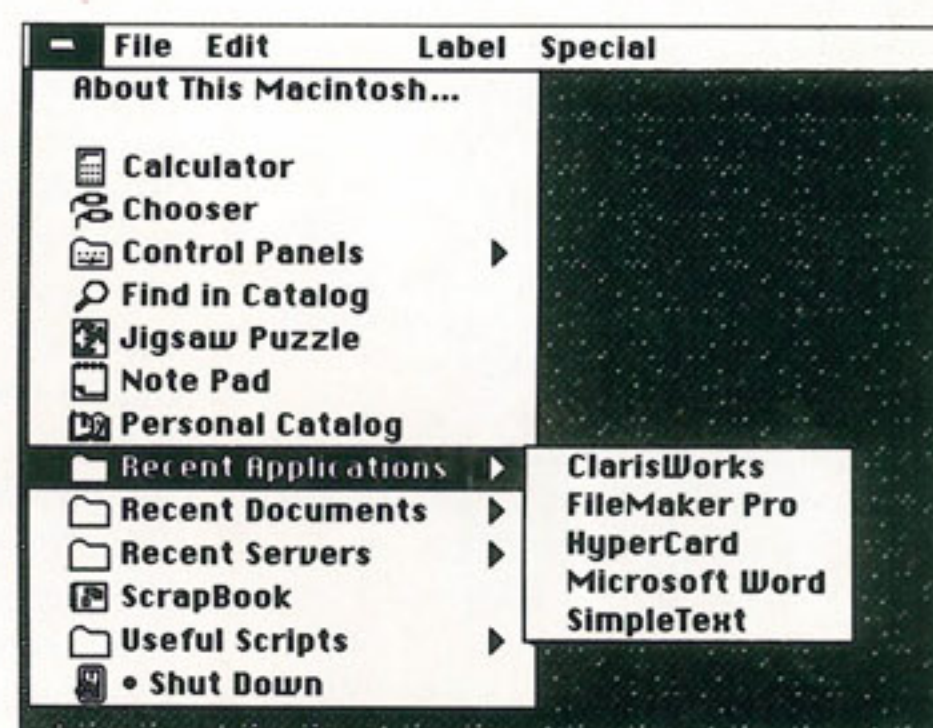
- Simplified printing. Selecting **Print** brings up a simpler dialogue box with a pop-up menu of all the printers available – no need to use the Chooser to change printers. There is also a series of icons representing your printers on the Desktop – to print a document, just drop it on to your chosen icon. Double-clicking a printer icon brings up its print queue – a more sophisticated version of *PrintMonitor*, where you can drag documents up or down the queue, on to another printer or into the Wastebasket.

- A Universal Enabler, making it easy to create an emergency System disk for different Macs.

- Also incorporated are several features previously available through shareware utilities, such as date and time display in the menu bar, 'sticky memos', and default saving to a 'Documents' folder on the Desktop, so you know where to look first if you've just hit **Save**. The *Find File* accessory from System 6 returns, replacing System 7's widely-derided **Find** function.

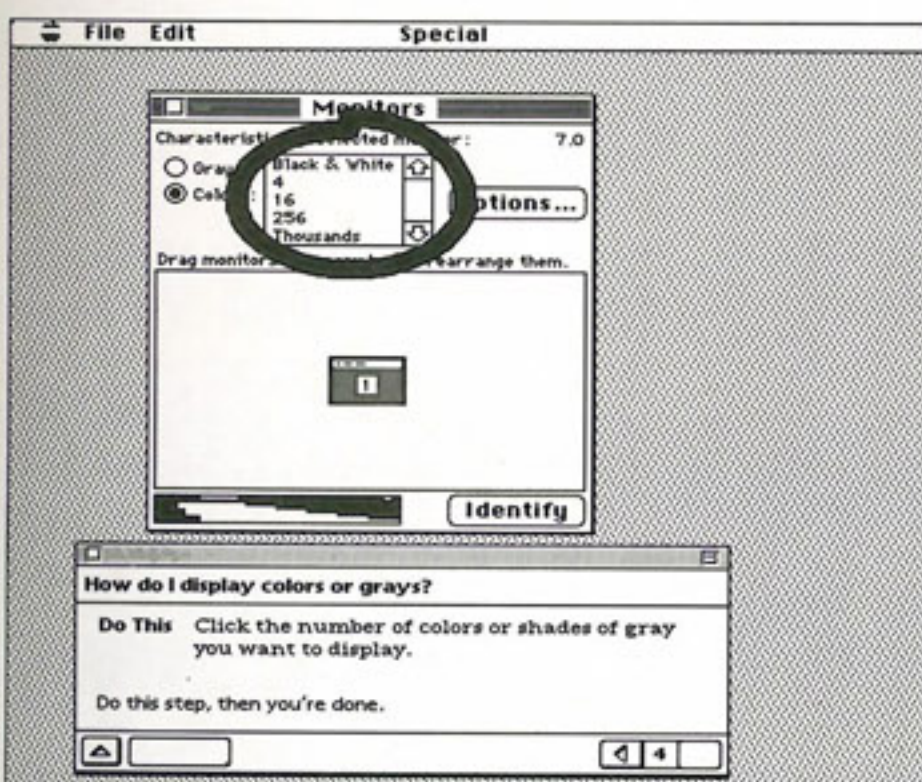
- You'll now be able to re-size the Scrapbook, change monitor resolution 'on the fly' and program your Mac to shut down automatically after a set time. Also included are a new improved CD-ROM player, System and application locking, and the *DigiSign* system, which enables you to 'sign' any data from a single cell in a spreadsheet to a complete document, as well as verify other signatures and determine if a document has been altered.

Apple says the new System 7.5 runs faster than previous versions, but you'll need at least a Mac Plus with 4Mb of RAM to use it, and 8Mb minimum on a PowerMac (though it will at



System 7.5 offers *Behierarchic*-style sub-menus in the **Apple** menu, including **Recent Applications** and **Recent Documents** – no more searching through level after level of folders to find that document you were working on yesterday!

least run 'native'). No price has been announced, but System 7.1 was under £50, and if you buy a new Mac from late summer 7.5 will be bundled free as normal. For more information contact Apple on 0800 127753.



Balloon Help has been burst – the much more friendly *AppleGuide* leads you by the hand, highlighting which menus and buttons you need to use. Developers will be able to use this to create interactive manuals for their own programs.

## Quicker on the Draw

QuickDraw GX is the new version of Apple's own system for handling both screen rendering and printing. Programs will need to be rewritten to fully utilise its features, but it will run alongside existing printing software and many of its more useful functions will be available immediately. These include drag-and-drop printing and Apple's ColorSync system, which promises to match screen and printout colours much more closely. A new GX version of *Adobe Type Manager* is included to optimise screen display. Many text functions will be handled at the System level, meaning that any program can have proper kerning and justification. There will be a new file format called Portable Digital Documents, which retains all the graphic and typographic information of the original document. Any Mac with QuickDraw GX will be able to open, view and print PDD documents, irrespective of whether it has the same application or fonts.

## DOS IS DEAD, SO HOUDINI FAILS TO ESCAPE THE AXE

System 7.5 includes *PC Exchange 2.0*, *Mac Easy Open* and *Mac TCP*, in line with Apple's policy of making it easier for Macs to connect to PCs. But at the same time, Apple has ended production of its 'DOS-compatible' Quadra, codenamed 'Houdini'. The machine contained a 25MHz Intel 486SX processor, so in effect it gave you two computers in one, a Mac and PC (both at once, if you wanted), though it lacked networking or advanced sound support. If you need to run PC software on a Mac, your only option now is an emulator program such as *SoftPC*.

- The PC operating system has, however, had a body blow. A judge in America has ordered Microsoft to withdraw the current version of MS-DOS. The decision comes after a four-week court battle by Stac Electronics, the company responsible for the disk space optimising program *Stacker*. The court upheld Stac's claim that its patents have been infringed by Microsoft's 'DoubleSpace' technology included with MS-DOS 6 and 6.2. The court issued a permanent injunction ordering Microsoft to cease making, using and selling these

versions of MS-DOS and any other product containing DoubleSpace, and recall or destroy all unsold copies.

- If you now want to get rid of your old PC, the good news is that Apple will take it in part exchange for a PowerMac – if you're an 'education user', that is. Apple is offering several discounts, depending on the age and condition of the personal computer you exchange and the Power Mac you buy: an unworking PC will save you £150 on a Power Mac 6100, and as much as £400 on an 8100. Call Apple on 0800 127753 for details.



## It's the return of SuperCard

A new version of HyperCard's rival SuperCard has just been released by Allegiant Technologies in the US.

SuperCard (originally from Aldus) offers an alternative, powerful multimedia authoring and application development environment for the Mac. The new version 1.7 includes built-in support for QuickTime, new sound and animation features, and support for Hypertext (the system that enables you to 'link' text in one place with related text elsewhere). Allegiant is also working on a native PowerMac version of SuperCard and a Windows player.

The upgrade is \$89 (plus shipping) to registered owners of any earlier version of SuperCard. The rest of us can buy SuperCard 1.7 for \$495 – or you can trade in your copy of HyperCard 2.x or Macromedia Director (any version) for \$99 before 31 July.

For more information, contact Allegiant direct in the US on 0101 619 587 0500 (or fax 587 1314).

## 'Screen' your eyes

It's official: health experts in the US and elsewhere say that working at a monitor for any length of time is bad for your eyes. What you need is some sort of eye protection, like the Computer Optics spectacles by Gepro. The lightweight, 23% blue-tinted, polarised spectacles offer protection against all ultra-violet and electromagnetic radiation from 20kHz to 200MHz at wavelengths of 200nm to 700nm (it says here), which means they absorb reflective glare, soften the light from the screen and help reduce eye-strain and drowsiness. They cost a mere £32.99 (not a lot to pay to save your eyesight, really), or there's a clip-on version for £29.99. Allow a further £1.99 for postage and packing in both cases. For more details contact Gepro on 0689 851 206.



## 'Power PowerBooks' delayed

Apple's plans for a new range of portable PowerMacs have been thwarted by problems with the PowerPC 603 chip which was destined to go inside them.

The existing range of Power Macintosh desktop machines uses the PowerPC 601 chip, which consumes too much power to be used in battery-based portable machines. Apple has dropped the more compact, less thirsty 603 chip altogether after very disappointing speed tests, and has asked its partners in the PowerPC project, IBM and Motorola, to come up with a faster chip.

The added development costs must mean that the new portable machines will be pricier, and will almost certainly delay them for at least six months until mid 1995. But Apple couldn't risk the embarrassment of producing a slower portable than PC-compatible notebooks using Intel's new portable Pentium chips.

## Aldus passes powerful program ports

Aldus has begun porting its range of software to the Power Macintosh, starting with versions of FreeHand 4 and PageMaker 5. FreeHand is claimed to run up to eight times faster than its equivalent running on the fastest Quadra, while PageMaker runs between two and four times faster.

Some publishers have seemed slow to support the PowerMac, so these

respected programs will be welcomed.

FreeHand 4 for Power Macintosh costs £528.75, or you can upgrade your Mac version 4 to PowerMac for £88.13; users of older versions can upgrade for £229.13. PageMaker 5 for Power Macintosh costs £816.63; upgrading from a Mac version 5 costs £146.88, or £229.13 to upgrade from earlier versions. Aldus is on 081 568 8868.

# Linotype fonts for new QuickDraw

Top font producer Linotype-Hell is releasing the 35 standard fonts included with Apple printers in QuickDraw GX format for £58.

Although existing fonts will work as normal with the new version of QuickDraw installed, fonts need to be converted to make full use of its advanced typographical features. These new 'super fonts' offer refined kerning and tracking, producing more easily readable text, and automatic ligatures (where character pairs such as *fi* and *fl* are replaced by a single character that blends the two together, making text more attractive). Existing fonts allow for a maximum of 224 characters, but QuickDraw GX fonts allow for 800 per font, making it possible for Linotype-Hell to include such characters as ornaments and small caps (like 'MACFORMAT'). QuickDraw GX also features optical alignment. This is where a round letter such as 'O' at the left margin of a line of text actually juts out a little further to the left, past the margin, by compari-

son with an 'M' or 'B' – which paradoxically makes the margin line seem straighter.

The major disadvantage will be speed. PostScript printers come with some fonts in their own memory, making them faster to print, but Apple has yet to announce a printer with QuickDraw fonts built in, so they will take longer to output.

The process of converting fonts from PostScript to QuickDraw is costly as it involves adding more data and characters, so font producers will look very carefully at how these first fonts sell. If font manufacturers do not support QuickDraw GX it will be a devastating blow for Apple and QuickDraw.

Apple will not be including any QuickDraw GX fonts with System 7.5, so if you want to benefit from these exciting new features, you'll need to buy the font pack from Linotype-Hell. It will cost £58 and will be launched at the same time as System 7.5.

Linotype-Hell can be contacted on 0242 222333.

## Upgrades for Norton Utilities and SAM

Following its purchase of rival Fifth Generation's *Public Utilities*, Symantec is releasing an upgrade to *Norton Utilities* that incorporates the best bits of its competitor. One improvement: *Norton* will be able to check your hard drive during idle time to find problems as soon as they occur, rather than waiting for symptoms to appear.

Symantec is also releasing *Norton DiskDoubler Pro*, which is a re-badged version of Fifth Generation's *SuperDoubler* bundle including *AutoDoubler*, *DiskDoubler* and *CopyDoubler*. To complement this, the new version of *Symantec's AntiVirus for Mac (SAM)* will have the new ability to detect viruses in compressed files.

We'll be reviewing *Norton Utilities 3.0* in MACFORMAT as soon as it is released; meanwhile Symantec UK can be contacted on 0628 776343.

## Xerox's dazzling colour laser

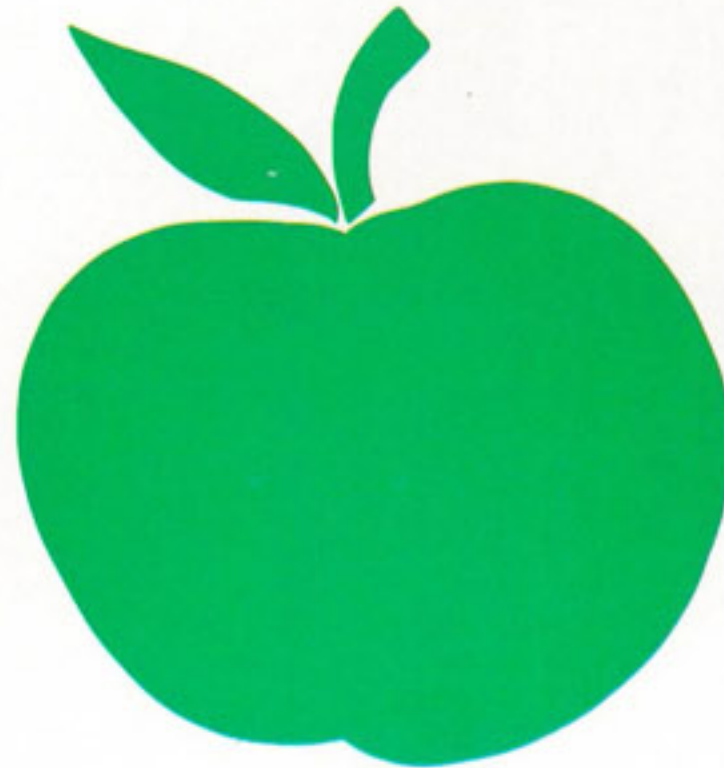
Rank Xerox has just released the 4900 colour laser printer, offering PostScript level 2 output of stun-



ning quality at 1,200 x 300 dpi. One of the main advantages of colour lasers over other printing

technologies is speed, and with performance of up to three pages per minute in full colour the 4900 will make colour inkjet users very jealous. And you don't even need your Mac: save your work to floppy disk, just pop the disk into the drive in the front of the printer, and it will print out directly! All this doesn't come cheap, though, at £10,500. Out of reach for most of us at the moment, maybe, but print bureaus are sure to snap them up – and in the longer term, prices for colour lasers will almost certainly begin to drop in the same way that black and white lasers did several years ago. For more information contact Rank Xerox on 0895 251133.

# GOD CREATED THE



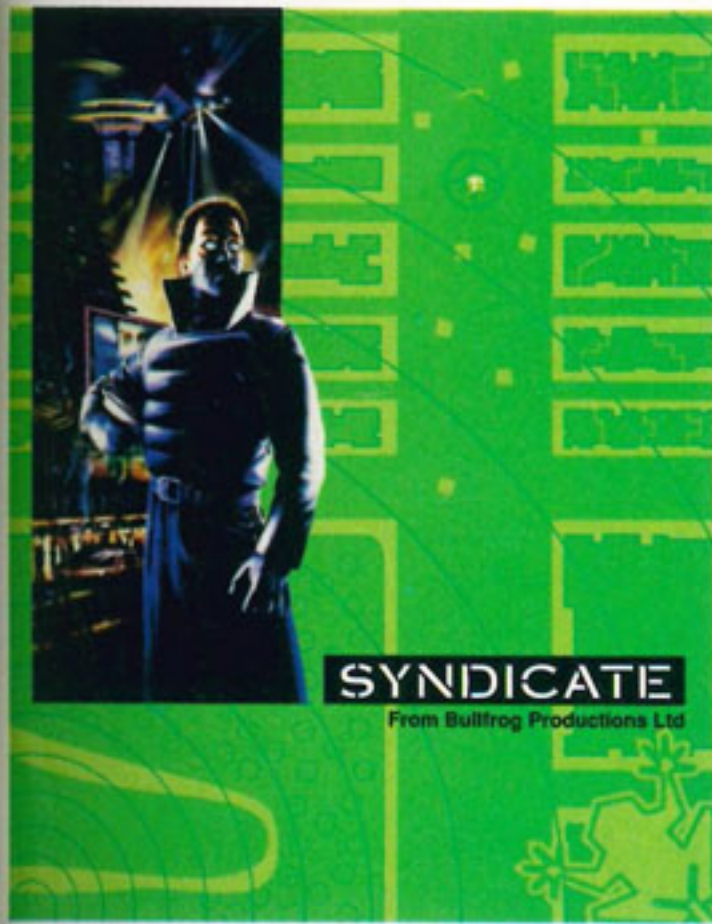
# BUT



# CREATED GOD.

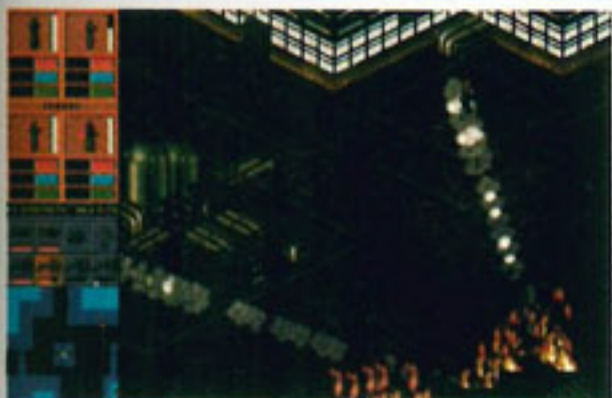
From Bullfrog, the originators of the God Sim, a range of titles designed to perfectly complement your AppleMac's abilities. Acknowledged as classics across multiple formats, now it's your turn to play God, dominate the world and shape the lives of multitudes.

**With games like these, you'll discover  
the true meaning of control.**



**SYNDICATE**

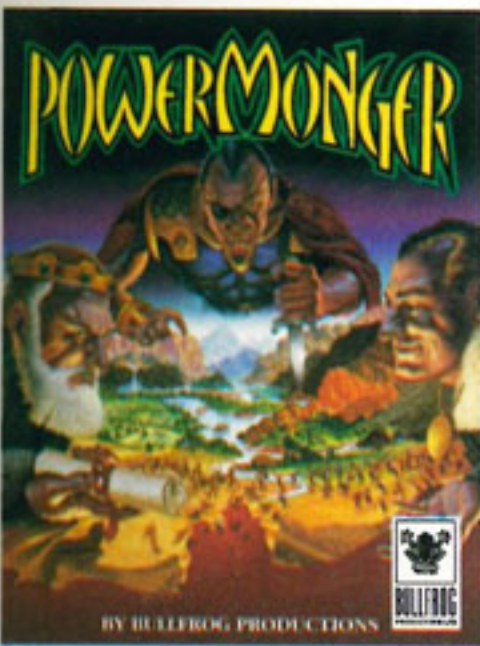
From Bullfrog Productions Ltd



## Syndicate™

Hi-tech cyberpunk action in Bullfrog's dark vision of a violent future. Global domination is the goal and the cities of tomorrow your battleground. Tool up your cyborg agents and spread the dark stain of your Syndicate from the barrel of a gun.

"Syndicate is a stonking game with a very tight plot, superb graphics and sound, and lashings of futuristic violence" **92%**, MacFormat, June 1994.



**POWERMONGER**

BY BULLFROG PRODUCTIONS



## PowerMonger™

Rampage through uncharted lands and swell your ranks with recruits from conquered villages. Only the PowerMonger decides when to make peace, and when to hack his enemies into pieces.



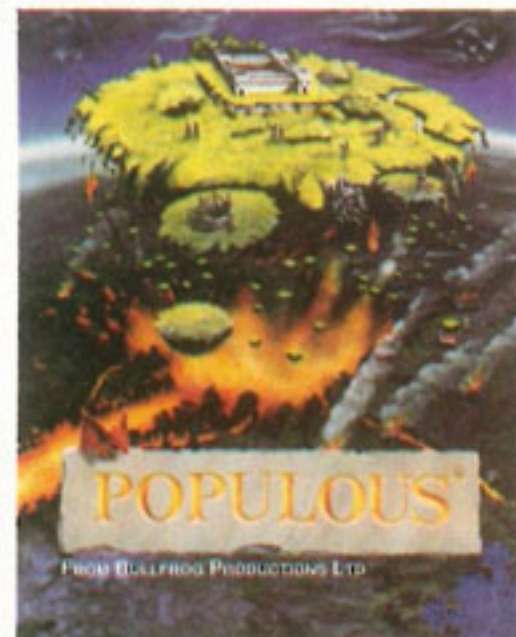
**themePARK**

DESIGNER SERIES BULLFROG™



## Theme Park™ Designer Series™

It's about thrills, spills and paying the bills as you design, build and run the world's ultimate tourist attraction. Construct rides, respond to the whims of your customers, and fend off unfriendly takeover bids as you fight for supremacy against 40 rival Theme Parks.



**POPULOUS**

FROM BULLFROG PRODUCTIONS LTD



## Populous®

The original God Sim pits good against evil, with you as Supreme Being raining disasters down upon your enemies. Once you've played God for a day, you won't want to stop.

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## A small, soft office

SoftKey is releasing six low-cost titles for the Mac, including a word processor retailing at £49.99. *WriteNow 4* is a modular-based word processor, incorporating style sheets and mail merge. It takes up relatively little disk space or RAM, and has been optimised for PowerBook usage.

The other five titles are all on CD-ROM. *PC Paintbrush ClipArt Library* contains 3,003 colour images and costs £39.99. *PC Paintbrush PhotoLibrary* is a double-CD collection of 2,500 photographic images in both TIFF and BMP formats, many of which are royalty-free and in 24-bit quality, and costs £39.99.

*American Heritage Talking Dictionary* contains meanings for more than 200,000 words and will pronounce 72,000 of them (in American?). It comes with *Roget's 2 Electronic Thesaurus*, containing 500,000 synonyms, and costs £39.99. If you're more interested in fonts, there's *Key Fonts Pro*, with 1,200 TrueType and PostScript scalable fonts, including legal and scientific symbols, display fonts and decorative dingbats. The collection costs £46.95.

Finally, there's *Key CAD Complete*, an entry-level Computer Aided Design package with a range of drawing tools including line, rectangle, circle, arc, arrow, polygon, Bezier curves and splines. Measurements can be specified in metric or imperial units. The package is just £46.95.

For more details, contact SoftKey on 081 789 2000.

## Comin' at ya!

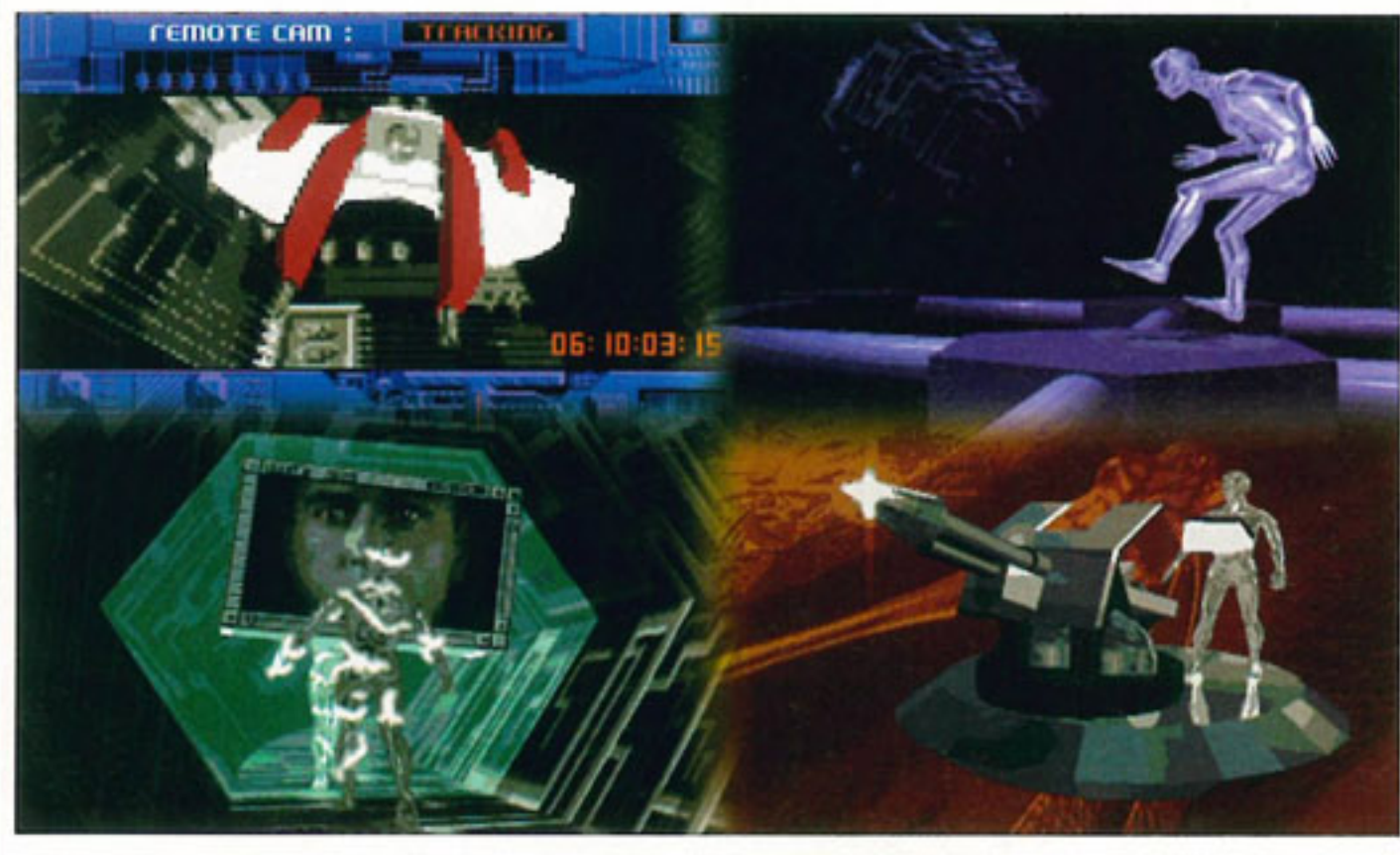
Remember the old text-based adventure games? Well, Activision is just about to release an updated version of one of the classics, *Zork*. Not impressed? You should be. *Return to Zork* (shown at right) comes on CD-ROM, and it's no longer text-based.

There's a wide range of digitised settings and characters whose facial expressions change in reaction to your input, which you generate by clicking on icons representing attitudes such as 'secretive', 'apologetic' and 'aggressive'. The plot is complicated, sudden death lurks around every corner, and the point-and-click adventure should be available any day now for about £50. Watch for the full review in *MACFORMAT* next month. For more details contact Activision on 081 742 9400.



■ Also due soon: *Wrath of the Gods* from Maxis, the people who brought you *SimCity 2000*, *Lost in Time* and

*Gobliins* plus *Gobliins 2* from Sierra; *Hell Cab* from Tengen; and *In Search of the Fabulous Funbox* from MacPlay. Watch for more details and full reviews in *MACFORMAT*. A little further down the track (scheduled for October) is the Mac CD-ROM version of *Lawnmower Man*, the 'virtual reality' film that showcased state-of-the-art graphics technology. (Check the game pics below.)



## It's a sim

The British Science Museum is playing host to a special version of Maxis' *SimCity 2000*. With the program, called *Scienceville*, museum visitors are able to take control of a city for seven minutes and see how their decisions affect the city's future. The program has had its toolbar enlarged and re-worked, and can be played via both the mouse and a touch-screen. It is on display as part of the Science Museum's *City Limits?* exhibition, which is running until September. The British Science Museum is on 071 938 8000; Maxis is on 071 490 2333.



# ClarisWorks for education

Educational templates for *ClarisWorks* have been released by Claris, Aztec Associates and CollinsEducational.

The templates can be used by secondary school teachers to provide computer-assisted learning with easy access to information and skeleton structures that can be adapted for specific teaching materials.

The templates from Aztec include: *MapMaker*, a 1:50,000 scale map drawing utility, including Ordnance Survey symbols; *Travaillons!*, for teaching French; and *Image Factory*, which provides shortcut tool palettes for graphics work. All three cost £29.95

for a single-user licence. Aztec also produces the *EasyWorks* template, which, for £24.95, provides a simple word processor as well as newspaper and database modules.

CollinsEducational's offering is *Science Activities*, which includes 15 science-related templates for teaching up to GCSE or Standard Grade level. It costs £35.24 for a single user.

Claris itself also produces templates for Secondary students at £35.19 each. (There are discounts on all these prices for multiple users.) All templates are available from TAG Developments on 0800 591262.

## APPLE BYTES

### Programmer's Apprentice

Fancy a CD-ROM with 450Mb of sample source code to help you with your Mac programming? Then you'll be interested in *Apprentice* from the Celestin Company. It contains source code (most in C, C++ and Pascal) from such diverse programs as applications, games, Control Panels, Extensions and utilities. In addition, programming utilities are also provided on the disc. *Apprentice* costs £25 and is available in the UK from Network Analysis on 0203 419996.

### Get moving!

Looking for a chance to show off your animations? The London Effects & Animation Festival is inviting entries for its annual competition. The entries will be judged by a panel from the media, professional animators and potential clients, with 'specially commissioned awards' being presented to the winners. The categories are: art, broadcast graphics, commercials, education and training, feature films, games/interactive entertainment, music videos, research, short films, simulation, and student work. Entry forms are available from Alison Nolan on 081 995 3632. The closing date for entries is Wednesday 7 September.

### Power CAD

*MiniCad 5*, an industry-standard Computer Aided Design application, has been released for both the Mac and PowerMac (which is at its best with precisely this sort of maths-intensive program). The new version features an Overlay Edit utility that enables tool palettes and menus to be completely customised, and different combinations can be saved to suit different tasks or people. The price for *MiniCad 5* is £700, or you can upgrade for £135. For more details contact Gomark on 071 7317930.

### Hellcat Victors

David Fairhead, a TV producer, came out victorious at the first Hellcats Championship, hosted by MacUniversity and sponsored by *Hellcats* maker Parsoft and *MACFORMAT*. Bob Hall won second place, with Joe Makkerh third. Everyone who attended agreed that the day was a great success - one dedicated *Hellcats* fan travelled all the way from Madrid!

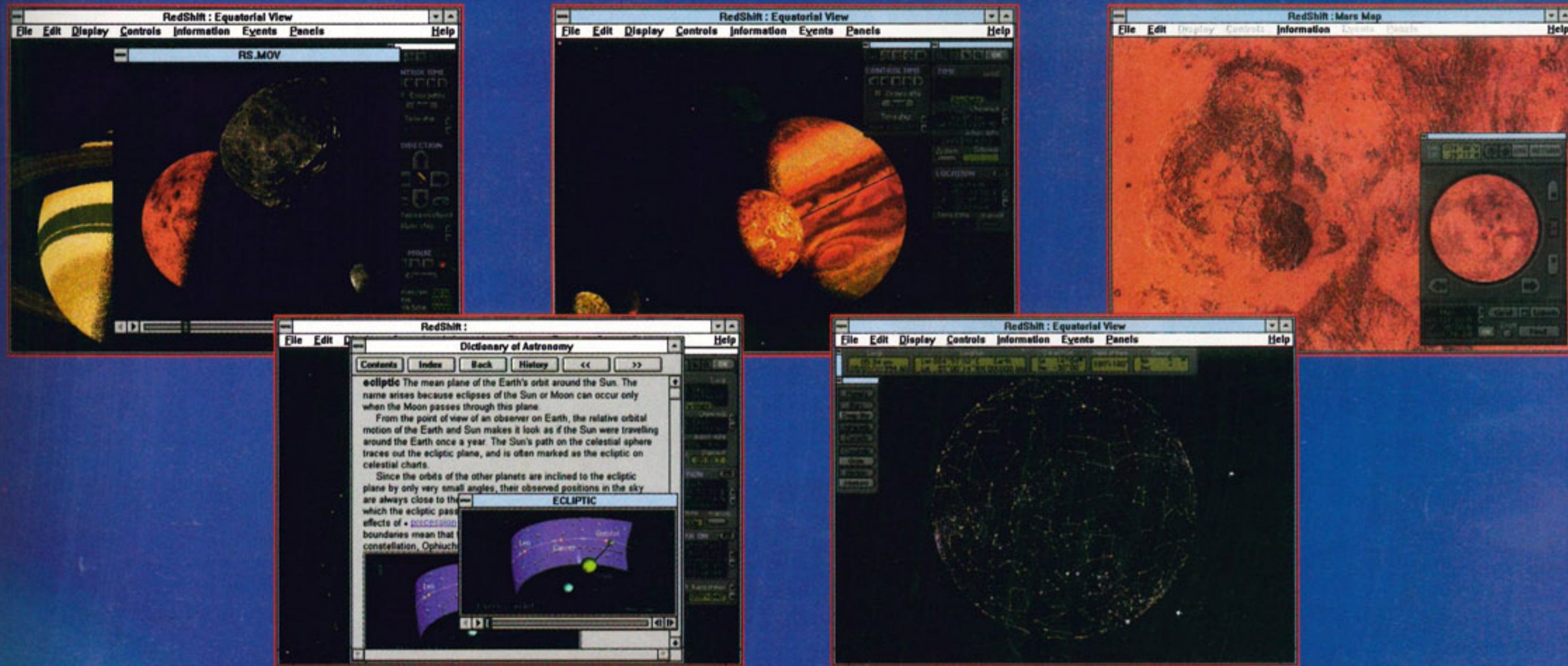
### Grey is great

If you only need a greyscale scanner then check out Microtek's new low-cost 8-bit scanner called *ScanMaker IIG*. It has a physical resolution of 300 x 600 dpi, which can be increased to 1,200 x 1,200 using software interpolation. It comes with Caere's *Omni-Scan* software, providing optical character recognition, image processing and fax software in one bundle. All this costs just £580. For more information contact Computers Unlimited on 081 2008282.

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# REDSHIFT

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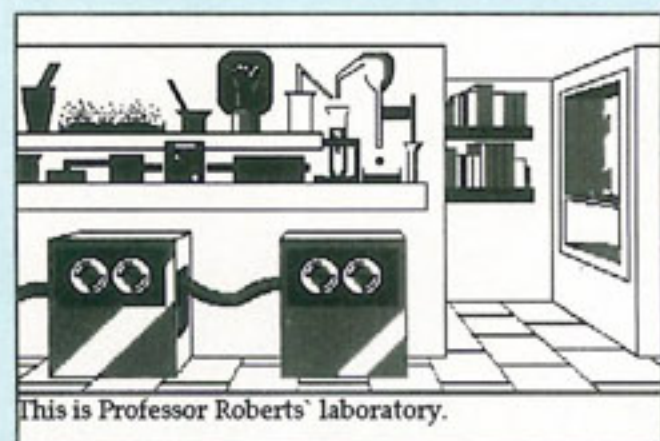


## Exploring the MacRainForest

Education software house Sherston, well known for its Acorn education programs, has released its first Mac titles. *Crystal Rain Forest* won the Gold British Educational Technology Award for the best piece of primary software. You travel to the planet Oglo, where the inhabitants have serious eco problems. I'm not sure why Sherston had to look so far afield, but children between the ages of 8 and 11 must save the rain forest by completing a number of LOGO related tasks – maths and a touch of green politics for the sum of £47.

*Animated Numbers* is aimed at the younger age range of 3 to 6 years and helps them with their first number work. After using this program, the child may begin to grasp the concept of £27, the cost of this program.

For more details contact Sherston Software on 0666 840433.



It seems that the solutions to the world's (or in this case, other planets') eco-crises could lie in labs like this... All a matter of solving some maths questions, apparently.

# The Future Entertainment Show

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26<sup>th</sup> – 30<sup>th</sup> October 1994

CD-Rom • Amiga • Mac • PC • CD-i • Consoles

**G**et out your diary and make sure you are free between Wednesday 26 and Sunday 30 October for the Future Entertainment Show '94 hosted by Future Publishing, the company behind MACFORMAT. Games and interactive entertainment for all platforms will be on show, with computer specific demonstrations and workshops hosted by some of Future's own editors. You can also enjoy the demonstrations for the home office and education sectors, along with a whole village dedicated to MIDI and desktop music. Once you have seen something that takes your fancy, there are plenty of opportunities to buy from eager dealers.

You can buy tickets on the door for £7, but if you book in advance you can get £1 off – and what's more, all visitors purchasing a ticket before Sunday 31 July via the Show Hotline will be eligible to enter the Silica Early Bird competition. Just answer a simple question, and the first five correct entries drawn on Monday 1 August will be sent a £100 voucher with their ticket! The question: 'In which city is this magazine written?'

To order your ticket and enter this free compo, phone the Future Entertainment Show Hotline on 0369 4235.

## National Games Championship

Future Zone, the specialist computer and video games store, is sponsoring the National Games Championship in association with the Future Entertainment Show '94. The Championship is open to all games players in Britain and will start on Monday 1 August, with the preliminary rounds being staged at Future Zone's national chain of high street stores.

The two games selected for the championship are *Virtua Racing* on the Sega Mega Drive and *Super Metroid* on the SNES (something to do with the wonderful Austin Metro?). Each player will pay a 50p entry fee, which will go to the charity Baby Life Support Systems. Future Zone will then hold a September Road Show to stage four regional semi-finals, consisting of the best six players from each region. Winners each receive a Philips CDi system, while the five runners-up will receive a £50 store voucher. All semi-finalists also receive a free annual subscription to their favourite Future Publishing magazine.

The final will be held on Saturday 29 October at the Future Entertainment Show, with the winner receiving a high-spec PC, five CD-ROMs and a trophy. The runner-up will receive lots of goodies from Future Zone Stores. To find out where your nearest store is, phone 0891 332288 (calls are charged at 39p a minute cheap rate, 49p all other times).

## The simple pleasures...

So you've customised your Mac and personalised your workspace, but is your mouse-mat letting you down? The Data Business, based in Oxford, has the solution with its range of fun mouse-mats.

The Mat Label range are made from top quality material and have a hard etched PVC top for good traction, with a variety of entertaining designs, from a pig, a frog or an owl to an apple (well, naturally), a spilled coffee cup, a female torso or (for the sake of equal opportunity) a male Chippen-dale torso.

Since no self-respecting, fun-loving mouse should be without one, MACFORMAT has no less than 20 Mat

Label mats to give away, generously donated by the nice people at The Data Business. To win one, just tell us how many

buttons a normal Mac mouse has. Send your answer, along with your name and address on a postcard or the outside of a stuck-down envelope to 'Mat Label', MACFORMAT, 30 Monmouth Street, Bath BA1 2BW. The first 20 cards pulled out of the box will each receive a mat, but if you don't win one you can buy Mat Label mouse-mats from retailers for £8.20. For more details contact The Data Business Limited on 0865 842224.



## APPLE BYTES

### Solomon mines for data

If your hard disk dies, you can usually kiss goodbye to your data. Or you can try Dr Solomon's Data Recovery Service, which aims to recover lost data from floppy, hard and optical disks as well as CD-ROMs within 48 hours. If it can't do the job within that time, it will reduce your fee by 20% – and if it fails to recover your data at all, there's no charge. Dr Solomon's is now on 0296 318700. In emergencies, you can call the free hotline number 0800 581263.

### Stop thieves

How can you keep your Mac safe from thieves? Well, you can always lock it in a big steel box – the Rolsafe from Security Window Shutters. By day the Rolsafe box will accommodate your computer and monitor while you work, just like a more conventional computer desk. However, it has a lockable shutter that can be rolled down when you've powered down. Prices vary depending on size, but start at £810.75. Contact Security Window Shutters on 0524 33986.

### Stronger Persuasion

Aldus is now shipping version 3 of *Persuasion*, the program for creating and managing slides, overheads and on-screen presentations. *Persuasion 3* has a new interface, with floating toolbox and palettes, and a new charting module which offers a selection of 84 chart types. There are also improved drawing tools in a floating palette, offering custom line weights, arrowheads and line endings. You can view and print greyscale representations of elements, and even edit the monochrome elements without disrupting their colour counterparts.

The package costs £411.25. Registered users can upgrade for £111.63. Aldus is on 081 568 8868.

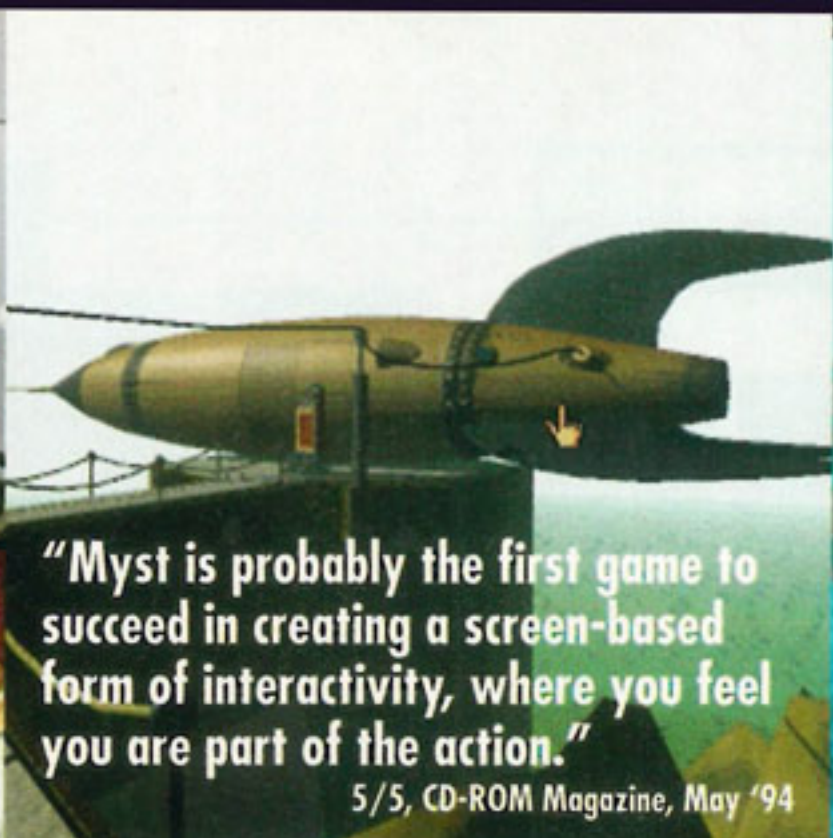
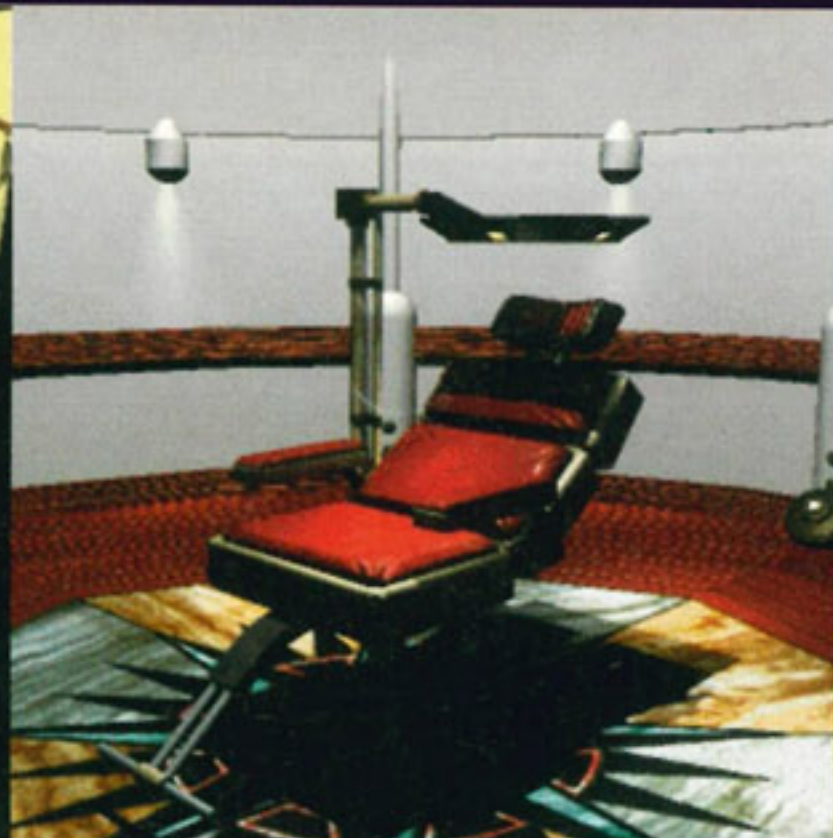
### Even better dye-sub colour

Fargo Electronics has announced the PrimeraPro, bigger brother to the Primera colour printer (rated 88% in MACFORMAT 13). The PrimeraPro will print in both dye-sublimation and wax thermal transfer modes, at a resolution of either 300 x 300 or 600 x 300 dots per inch. It can output full A4-size images in 24-bit colour.

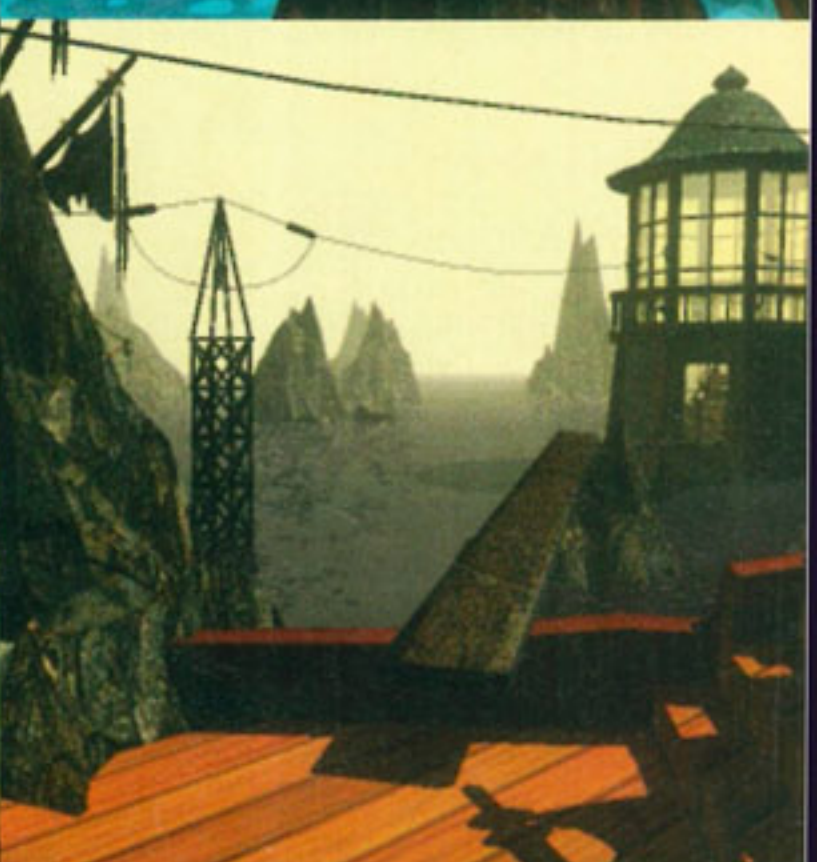
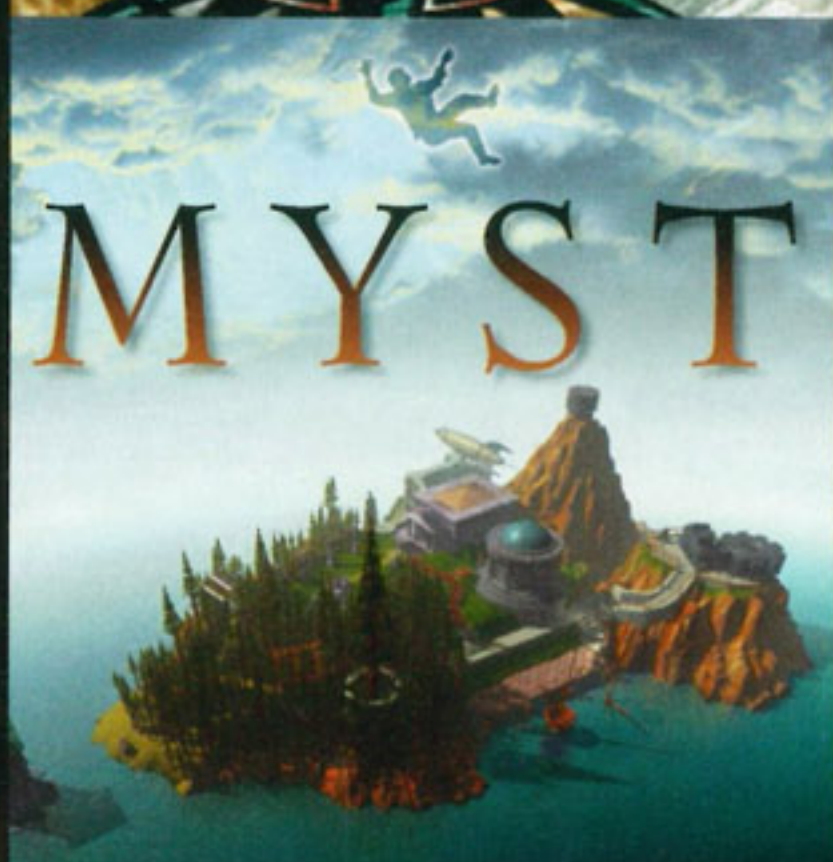
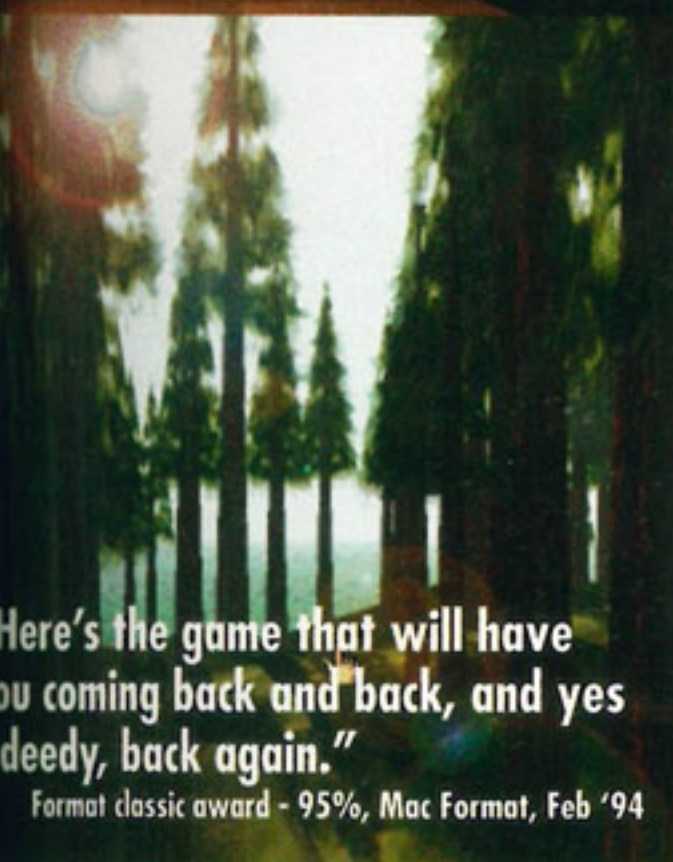
It connects to your Mac via LocalTalk, and is available with optional PostScript Level 2 support for an extra £264.38. The basic cost of the printer is £1,937.58. UK distributor Bannerbridge is on 0268 419101.

### Astronomy is better than sex

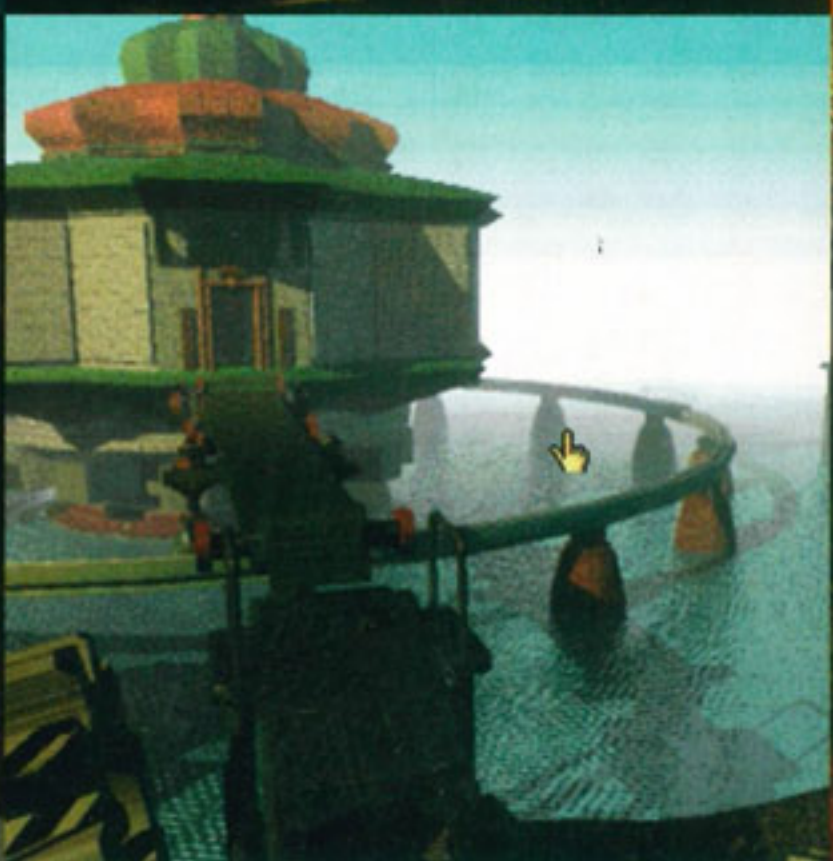
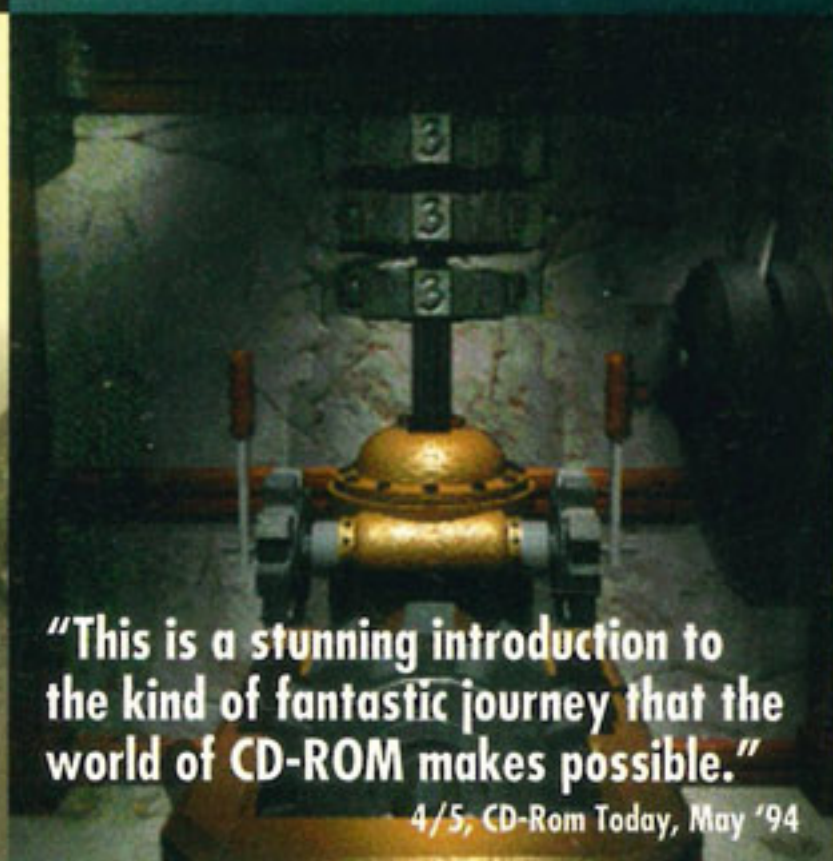
*Redshift Multimedia Astronomy* recently won the BIMA Gold Award in the Information category, beating *The Joy of Sex* into second place. Great news for people who prefer going out into the garden at night instead of staying inside... For more information, contact Maris Multimedia on 071 488 1566.



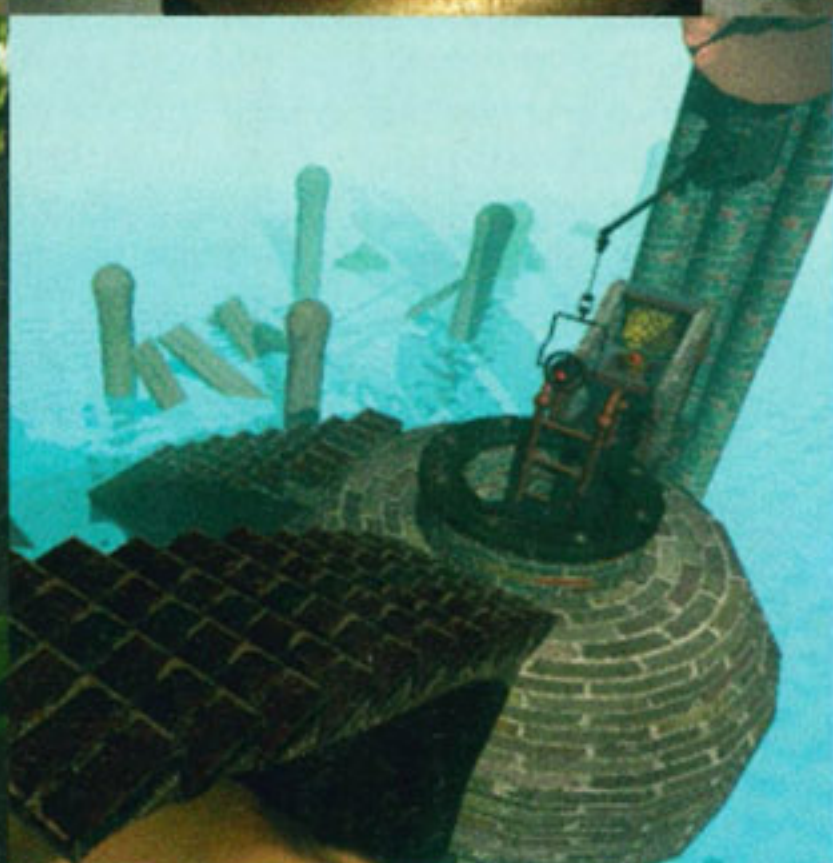
"Myst is probably the first game to succeed in creating a screen-based form of interactivity, where you feel you are part of the action."  
5/5, CD-ROM Magazine, May '94



Here's the game that will have you coming back and back, and yes indeed, back again."  
Format classic award - 95%, Mac Format, Feb '94



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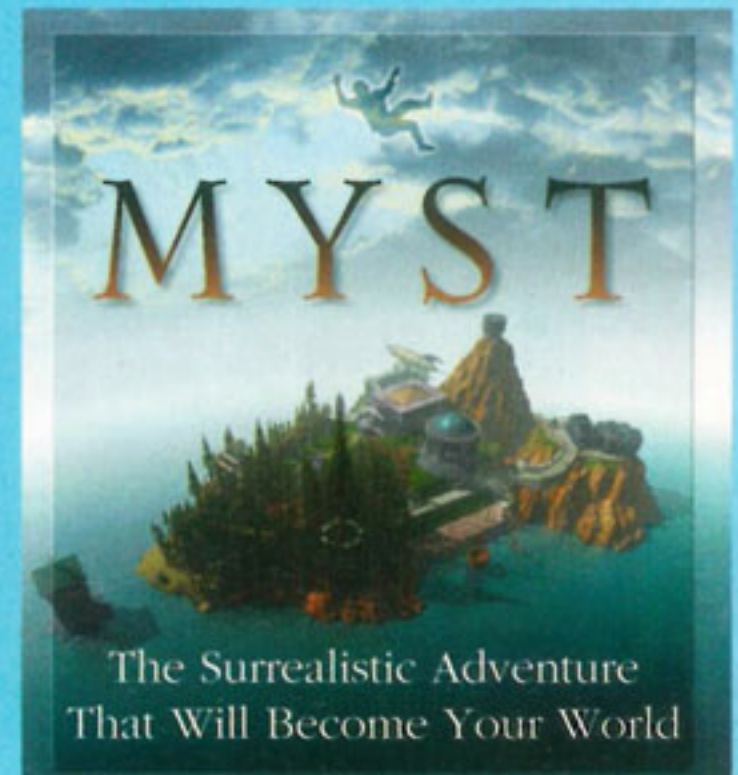
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# THE 11th Hour

**Haunted houses, malevolent ghouls and exploding heads. Andy Hutchinson has a sneaky peek at the follow-up to *7th Guest*.**

**T**rilobyte is a US software company with a knack for producing high profile, mass-consumer games. Its horror-adventure cum puzzle game, *7th Guest*, has just clocked up its millionth sale, and so it came as no surprise earlier this year.

The game is set in the same haunted house as the original. You play a reporter, called Carl Denning, who's searching for Robin, the producer of his TV show. Robin has disappeared inside a haunted house called the Stauff Mansion. The idea of the game is to outwit the

house's evil soul by beating all its puzzles and thereby freeing Robin.

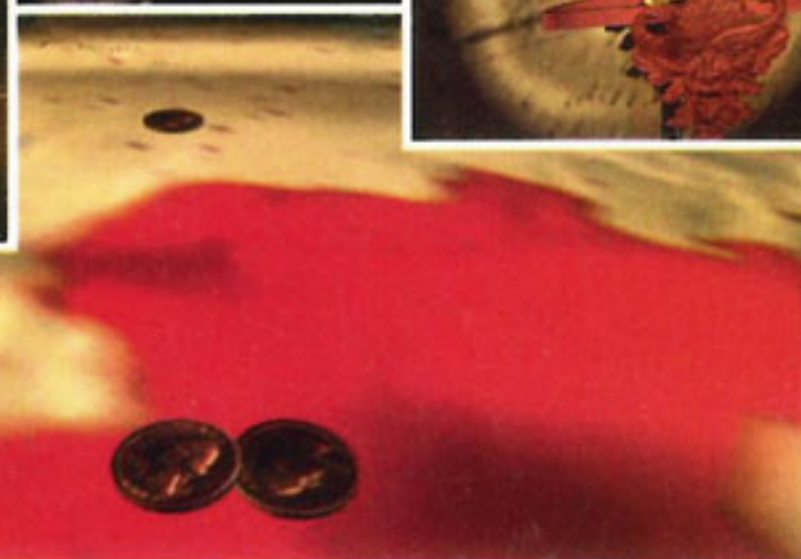
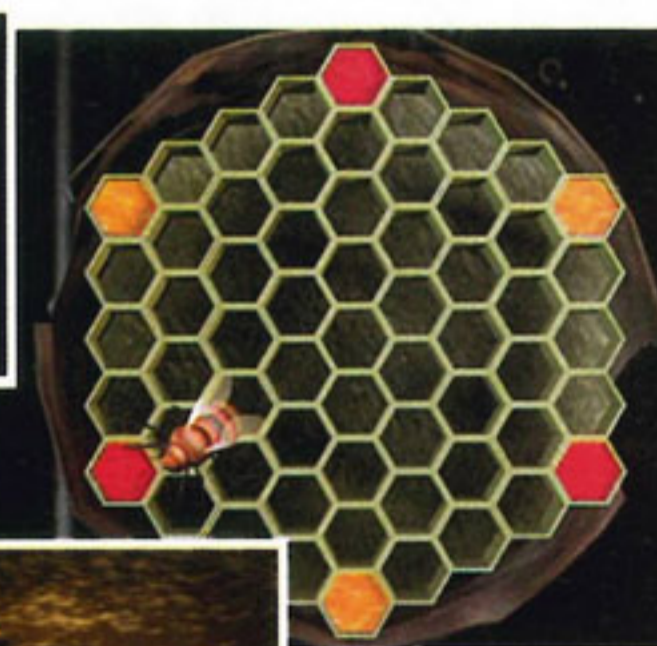
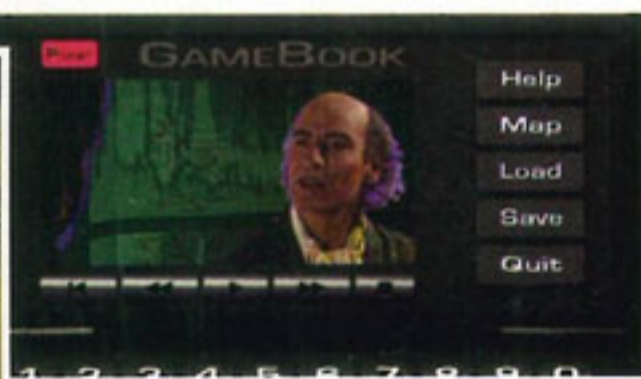
As with the original game, there's a considerable amount of full motion video in *The 11th Hour*; there is, in fact, 64 minutes of original footage. The screenshots on these pages are a taster of what you can expect. The footage was shot by a director called David Wheeler, the chap who was responsible for the *Hollywood Babylon* series. His film is a surreal cross between a celluloid creation by David



'*Twin Peaks*' Lynch and a *Hammer House of Horror* flick. Then there's the mansion's fully rendered rooms which contain all the puzzles.

So what can you expect from *The 11th Hour*? Well, for starters, there are puzzles – and lots of 'em. There are 40 treasure hunts, 13 ordinary puzzles and 6 artificially intelligent puzzles.

One of the puzzles involves a brooch. This consists of six jewel clusters. Each cluster possesses six facets and each facet is a different colour. The object of the puzzle is to swap and/or rotate these clusters so that wherever



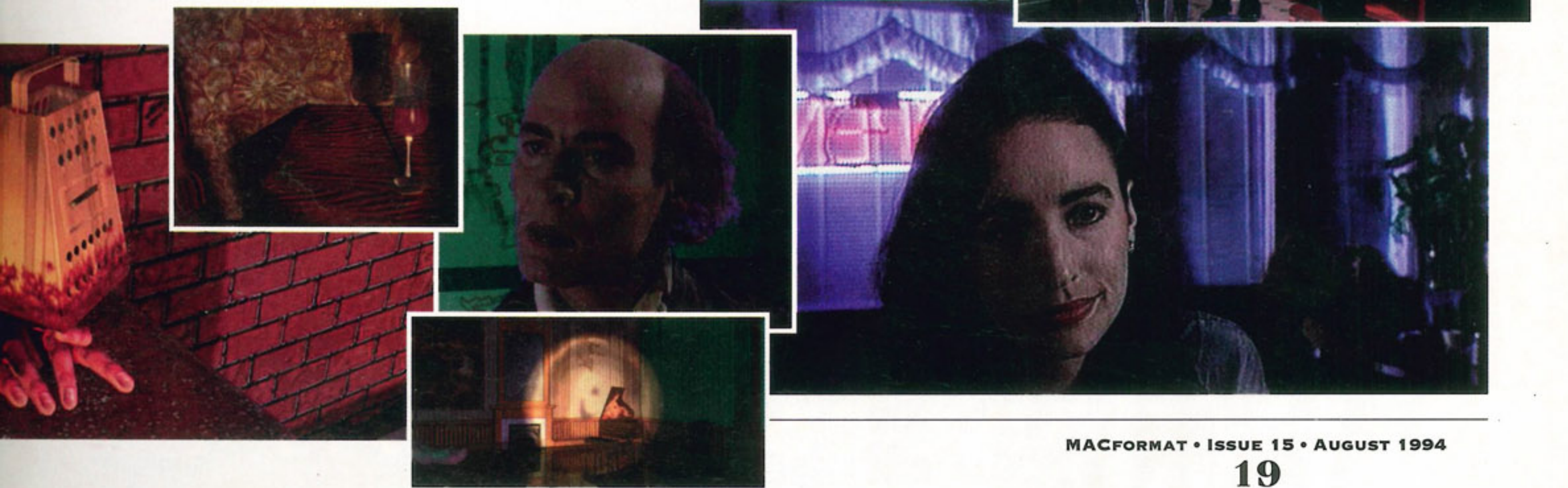


two colours touch, they match. The programmer of this particular mind-bender informs me that there are 44 million different permutations, but adds that there are at least two solutions. So that's all right then.

The game, complete with its schlocky video sequences (certificate 15), is designed for those who don't have the least desire to shoot any alien spacecraft out of the cosmos. Graham Devine, the founder of the company, feels that everyone should have the opportunity to play games. 'Those people,' he said, 'who want hard games should stick to them. We don't make

games for that small section of the market who love to whip themselves.' I don't think he means S & M fans, but rather the hardcore gamers who don't think a game's a game unless it's got platforms, aliens, plasma weapons and power-ups. The Trilobyte team reckon that *The 11th Hour* should be finished in time for the autumn. Crossword fans, lateral thinkers and demi-gods should love it. Personally, I'm going to wait until it's out on video.

*Andy Hutchinson*





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Duo 280c	12/320	66/33Mhz	32,768 Colours	Yes	(M2332)	£2,999



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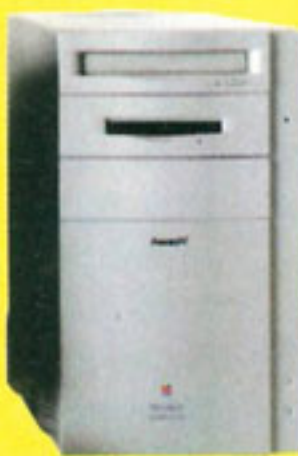
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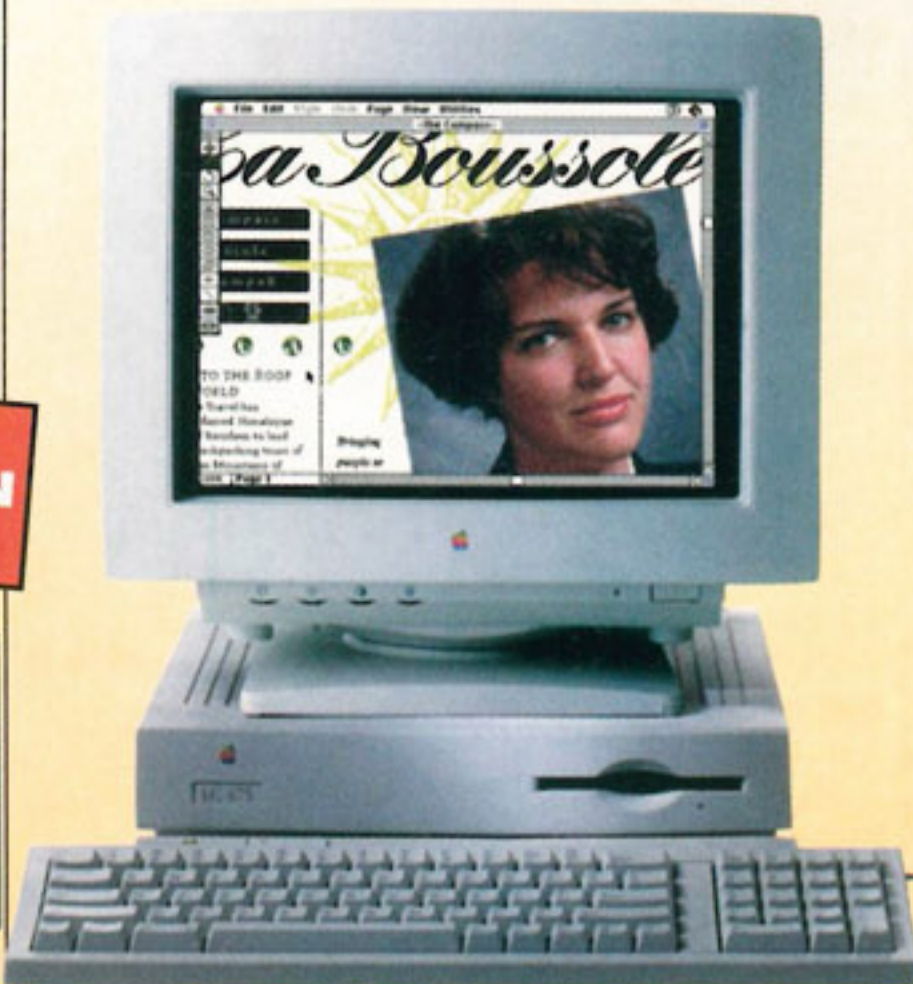
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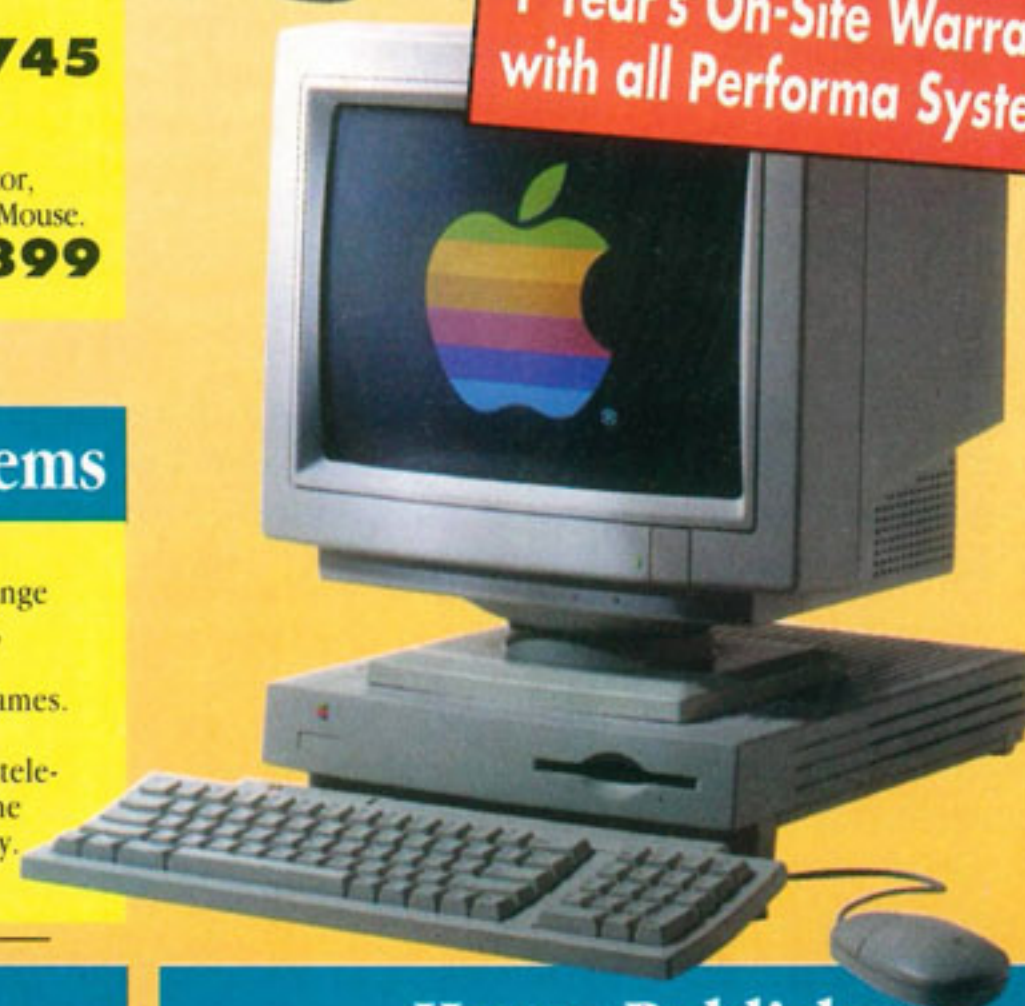
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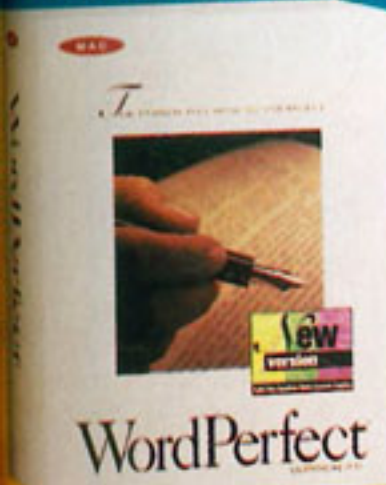


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**S**trange facts of our time, number 43: Stuart the Publisher, whose grip on the purse-strings used to be legendary, has once again allowed us to give away an exclusive MACFORMAT T-shirt for every letter published this month! How much longer can we keep him too busy to do his sums? Write right now!

### Second-rate?

Loved the article about the huge range of cheap software and shareware available [MACFORMAT issue 12]. But as you noted, although basic spreadsheets and databases are available, there is a real shortage of cheap word processors out there. So it seems a bit churlish to actually point this out, but, er, why bother with any of it? I mean, with *ClarisWorks* bundled free with a lot of new machines, or otherwise available at a street price of under 40 quid (if you know where to look), what's the point of flogging away with a 'text editor' package, or a spreadsheet which doesn't support multiple fonts or column widths? Sorry, folks, but the game's changed, and poverty alone is no longer a good enough excuse for using (or recommending) second-rate software.

**Paul Mason**  
London W10

*We're the first to acknowledge the merits of integrated 'Works' packages, but even they don't do everything. Shareware really comes into its own when you need a specialist application, or a utility to perform some specific function,*

*or even something with no frills that you can run without having to get a RAM upgrade first. Anybody else think shareware is just second-rate stuff?*

### Why not?

Why not have a section which would help people who are having trouble in computer games? Other readers could send in solutions. (I am stuck on level 10 of *Prince of Persia* – I don't know what to do after I have united with my mirror image. There is nowhere to go. Could you help me?)

Second, why not ask readers to send in the names of the best shareware they come across, apart from what is already in MACFORMAT, so that you can check them out and add them to the CD? Here's my list:

Games: *Quagmire, Frac, Kye, Cyclone,*

*Dreamlight Vertice 1.0, Silly Slithers, Click Here!, Space Junkie 1.1, Star-Runner 1.2.*

Graphics: *Studio Craft*  
Utilities: *Living Desktop, Audio Clock.*  
**Belal Ahmed**  
Newcastle-upon-Tyne

*We'll be happy to include a 'help needed' column in MACFORMAT's Gamebusters section (which will return as space permits, promise!) As for favourite shareware lists: yes please! But instead of just a list, how about sending us the programs themselves, so we can add them to our cover CDs?*

### 'Colourist' policy

Am I a second-class citizen? Am I the only person in the world with a black and white display who would like to be able to use the full contents of your cover disk but cannot because of your 'colourist' policy? I subscribed to MACFORMAT because it avoided cramming its pages with products too expensive for the majority of Mac owners, yet you persist in providing demo versions of games that run in colour only. I appreciate that most of the new games available do only run on 256-colour monitors, but please do not make life any more miserable for those of us who were only able to afford a PowerBook 145b.

**Elizabeth Kane**  
Leeds

*Anybody else?*

### Wrong!

In MACFORMAT in April you wrote that the demo of *Firefall Arcade* on the cover disk needed System 7, 2.8Mb RAM free, and a 256-colour display. Excellent, I said to myself, my trusty old LC has all the necessary requirements. Wrong! Please, please could you state in all re-



*FA/18 was another covermounted colour-only demo, but are we neglecting mono Macs?*

views etc not only required pixel depth (for example 256-colours) but also the required pixel resolution (in this case 640 x 480). The LC is one of the biggest selling Macs ever, so I assume that there must also be many 12-inch monitors around.

**Derek Anderson**  
St Andrews, Fife

*Sorry I asked. But your point is well taken. Programmers and software houses naturally tend to want to exploit state-of-the-art systems, but inevitably many people will have more modest set-ups. We'll keep your needs in mind.*

### Less than optimal

So 'at last *HyperCard* was going to get colour..., *AppleScript*..., and at long, long last the ability to turn stacks into stand-alone applications.' Rather than calling this 'unique piece of software' *HyperCard 2.2* we could call it *SuperCard*. But hang on a minute, that would mean people would confuse it with *THE SuperCard*. You know – the *HyperCard*-like application with full colour support, stand-alone application creation, *AppleScript*, etc, and the ability to convert *HyperCard* stacks.

I moved to *SuperCard* in 1989. At that time v1.0 had variable window sizes, full Mac interface support, draw tools and, of course,

## WISH LIST

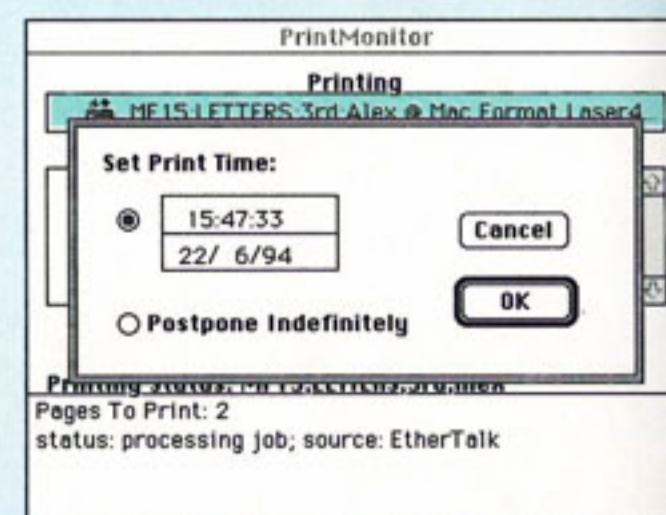
This issue's News pages bring you some early details of what System 8 is likely to include. But what exactly would you like to see featured in it, when it finally arrives? Regular MACFORMAT correspondent **ST Dobbs** of Market Harborough in Leicestershire suggests:

- Lockable files and/or documents with password protection written into the System (similar to protection over a network).
- The ability to set the print time of a document before the

Print Monitor is launched – at present you have to 'catch' the Print Monitor before it prints a document in order to set the print time.

■ System Extensions converted into System-Mini-Applications which can be switched on or off without restarting (a big wish for most people, I would have thought, but hard to implement).

Anyone else got any views about what they'd like to see in System 8 when it appears? Write to 'Wish List' at the above address.



*Wouldn't it be nice to be able to set the print time when you choose Print to begin with? (Or how about an option that really does set the printing time – as in, 'Look, if this is going to take longer than half an hour, just don't bother.')*

## CRUISING THE KEYS

This month's selection of keystroke shortcuts, tips and discoveries...

■ Rich Green of Birkenhead has discovered that there is more to the **Clean Up Window** option in System 7's **Special** menu than he thought. If you select a view for a window from the **View** menu, such as **View by Date**, then select **View by Icon** again, and then hold down the [option] key and go to the **Special** menu, **Clean Up Window** has changed to **Clean Up by Date**. This enables you to keep windows tidy by sorting them not only by Name but also by Date, Label, Kind or Size! Rich says that like most things on his Mac, he discovered this totally by accident. I know the feeling well...

■ Guy Sansom asked in April's **MACFORMAT** if there was any

program that could decompact the **MACFORMAT** cover disk programs singly, because he didn't have enough hard disk space to dearchive them all in one go. David Everitt of Melton Mowbray was the first to reply that **StuffIt Lite** will open the self-extracting archives on **MACFORMAT** cover disks. But, he adds, you'll have to clear enough space on your hard disk to install it. Anyway, really full hard disks run slower. Thanks heaps, David.

■ Ruud Boer of Leiden in Holland has a solution to 'the flashing question-mark disaster' (when you start up and your Mac displays a picture of a disk with a question-mark, instead of the familiar 'smiley' Mac). What you need to do is reset your PRAM (parameter RAM - it keeps track of the time, various

Control Panel settings and what's connected to the printer and modem ports). You do this by restarting while holding down [command] [option] PR all at the same time. Most of the time, Ruud says, this solves the problem. (In Systems before System 7, you zap the PRAM by going to the **Apple** menu and selecting **Control Panel** while holding down [command] [shift] [option].)

■ Ruud also asks: 'What is the [full stop] button that I read about in your magazine?' Small problem of translation, I'm afraid, Ruud. You might refer to it as a 'period' or 'point' or maybe 'full point'. It's the key next to the comma, anyway. It's just that it might be even more confusing if we simply put [.] (See what I mean?)

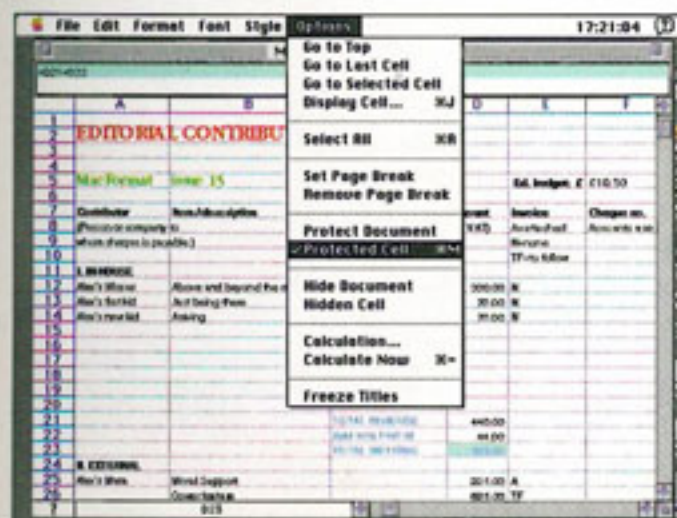
colour. It has taken **HyperCard** a long time to catch up.

I could understand the Mac press pushing **HyperCard** when it was bundled free with Macs, but this hasn't been the case for some time. A more balanced reviewing policy is called for - you wouldn't review **QuarkXPress** without referring to **PageMaker**, for example. The **HyperCard** tutorials could refer to **SuperCard** from time to time (the languages are virtually the same anyway).

Finally, the solution to the **HyperCard** timer-updating problem in issue 11 is to look at a watch or clock if you want to know the time. This saves you having to use **HyperCard** at all. Anything else is less than optimal.

**Peter Baker**  
Whitehaven, Cumbria

*HyperCard is inevitably much more widely used, but now that it's no longer bundled free and there's a new improved version of SuperCard (see News pages this issue) this could start to change. We're happy to cover SuperCard if there's a demand (and we can*



*Biplane may be lovely 'n' cheap, but how can you ensure the copy you download is 'clean'?*

*find an expert to write about it).*

## Paranoid?

After reading your shareware feature in **MACFORMAT** 12, I am convinced that **Biplane** is the spreadsheet of my dreams. But where can I get hold of it safely? If you think for one second I'm plugging into any network, you're out of your mind. And how can I trust the disks from magazines? Mine is a working machine, not a toy. I feel comparatively safe loading the expensive software from big name companies, but I don't want my Mac to get even a slight snuffle, let alone a full-blown virus. I could try 'safer loading', but I don't think the disks would work too well if they're wrapped in a condom.

OK, there's **Disinfectant** and other such programs, but... sorry to get paranoid, what if that is the virus carrier? It's hardly going to point an accusing pixel at itself, is it?

**Martyn King**  
Reading

*Viruses are nowhere near as common on the Mac as some people fear, but it is wise not to be complacent. The major virus-killing programs are updated regularly to cope with new viruses as they appear, and you really can't do better than make sure you're running an up-to-date version of one of them - obtained from a reputable source, of course. MACFORMAT brings you new versions of Disinfectant as they are released, and we download them direct from the respected University of Michigan archive site. Our cover disks are*

*subjected to rigorous virus-checking, by ourselves and our disk duplicators, and are guaranteed virus-free.*

*(A few readers have complained that there was a virus on MACFORMAT's February cover disk, but there wasn't. The problem was actually a batch of defective disks which caused Macs to crash. If you were running the SAM virus in-*



*Two more MACFORMAT T-shirt winners: B Snaith of Wakefield, West Yorks (above), and James Turnbull of Edinburgh. Remember, you could win a T-shirt if your postcard catches our eye. So whenever you write or enter a competition, think eye-catching!*



*ceptor at that moment, the crash caused the program to generate a false report of a 'Trojan Horse' virus. So our virus-checking was OK, but our disk duplicators' quality control wasn't. Apologies for any problems caused.)*

## SuperDoubler

**From: Alan Coul,**  
Amtech International,  
Christchurch, Dorset

The article entitled 'Memory Magic' in the June edition of **MACFORMAT** caught my eye and I would like to make a couple of observations about **SuperDoubler**:

1. With the advent of **SuperDoubler**, **AutoDoubler** and **CopyDoubler** are no longer available as stand-alone products.

2. **DiskDoubler** (not **AutoDoubler**) is available as a stand-alone product.

In addition, your reviewer omitted to cover the safety aspects of file compression. In this respect the **Doubler** products are second to none. **DiskDoubler** and **AutoDoubler** write a temporary file to disk, verify the data's integrity and then conclude the compression operation. Any marginal speed degradation is more than compensated for by the built-in safety features of the software.

*We're happy to set the record straight.*

## How about...

You asked for Mac-related 'typing exercises' to replace 'the quick brown fox'. How about these? **Macintosh quiz proved ex-wife Eve big killjoy.**

Or even:

**Very few judged pizza box Macintosh quickly.**

**Philip Noble**  
Prestwick, Ayrshire

*Not bad. A few too many Es though. Any other suggestions out there?*

*Got something to say? Write to MACFORMAT at the address on the opposite page.*

# What's New?

Andy Storer reflects on multimedia's mainstream status, discovers an amazing CD-ROM title and ponders on the benefits of hindsight...

Let's hope there's some enterprising young shareware author out there reading this, because I've just thought of a neat commission he might like to undertake. Let's give the little Apple Menu utility I have in mind a name – let's call it *Benefit of Hindsight*. It's simple really: all it asks is for you to input the cost of a Mac model you wish to buy; then it tells you just how long you'll have to wait to buy it at less than half that amount. *Benefit of Hindsight* would be easy to program because there'd only be one result. Six months. Ask any Centris 610, LC III or LC 475 owner. Then ask someone who's bought a 660AV a year ago what they think of prices now as low as £899 for their prime purchase.

You see, there's an old adage in computing which goes something along the lines of 'don't put off buying tomorrow what you can make money from today'. It gets dressed up a little with references to words like 'depreciation', 'return' and 'investment', but basically the message is the same: buy the best you can afford right now, because there will always be a

better one just around the corner.

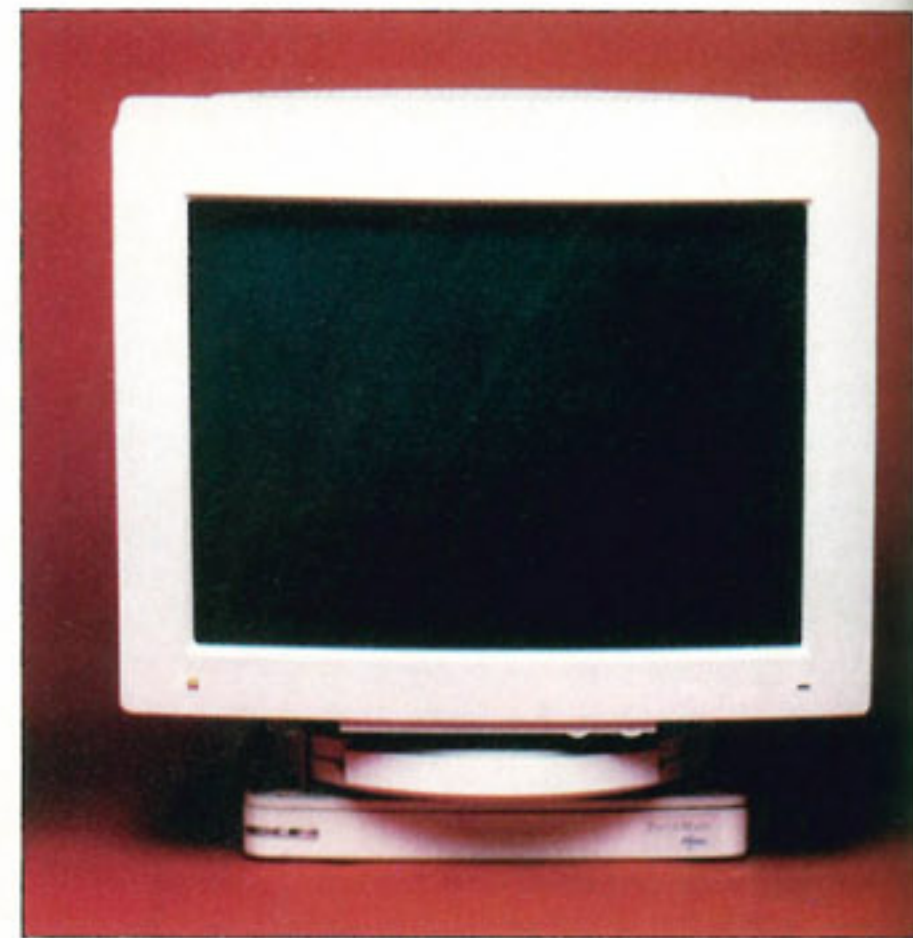
Luckily, these days it's not that cut and dried any more. There's always the upgrade path to fall back on; and in most cases this works fine since the biggest investment anyone's likely to make is in software – and if you add the costs of that to those of a monitor, keyboard, mouse and printer that'll all work with any Mac, you're just left with replacing your logic board or adding an upgrade card.

Still, when I see Quadra 660AVs on sale for £899, I begin to wonder why on earth I ever bothered buying an LC 475 for £799 in March. It's as if I already need to upgrade to *Benefit of Hindsight v2.0* – Result: 3 months, with optional day-by-day depreciation countdown on my plummeting investment. Yep, one can only be philosophical in these matters and conclude it's just as well that Apple doesn't manufacture cars, hi-fi and houses.

Anyway, this is all a round about way of saying I'm selling the 475 and looking into leasing an 840AV in the next couple of months. This machine just has to be a bargain, because it's going to be ditched soon, when the Power-Mac AVs come on line. As such, it'll be discounted to around £2,000 or less, which over three years works out at around £70 a month. Now, I've just got to be able to make £70 a month back from it – and even if I don't, it's fully tax deductible, so what's the difference?

OK, so it'll be worth sod-all in three years, but by then *Benefit of Hindsight v3.0* will include 'Smug mode' with 'Told you so' overlays and 'Jeez, Just Look At How You ReDeployed That Capital Outlay, Andy' templates for export to *Excel*. And I'll have bought a 150MHz PowerPC 620 logic board upgrade by then, anyhow. *Benefit of Foresight*, more like.

Which was something distinctly lacking from this year's Multimedia Show at Earls



Fancy ditching your mouse and using your fingers instead? Or how about drawing directly on to your Mac's screen? Well, now it's possible with TouchMate – an ingenious little unit which sits under your monitor and turns it into a touch sensitive display without the need for an overlay. But how does it work? Well now, that'd be telling, wouldn't it?

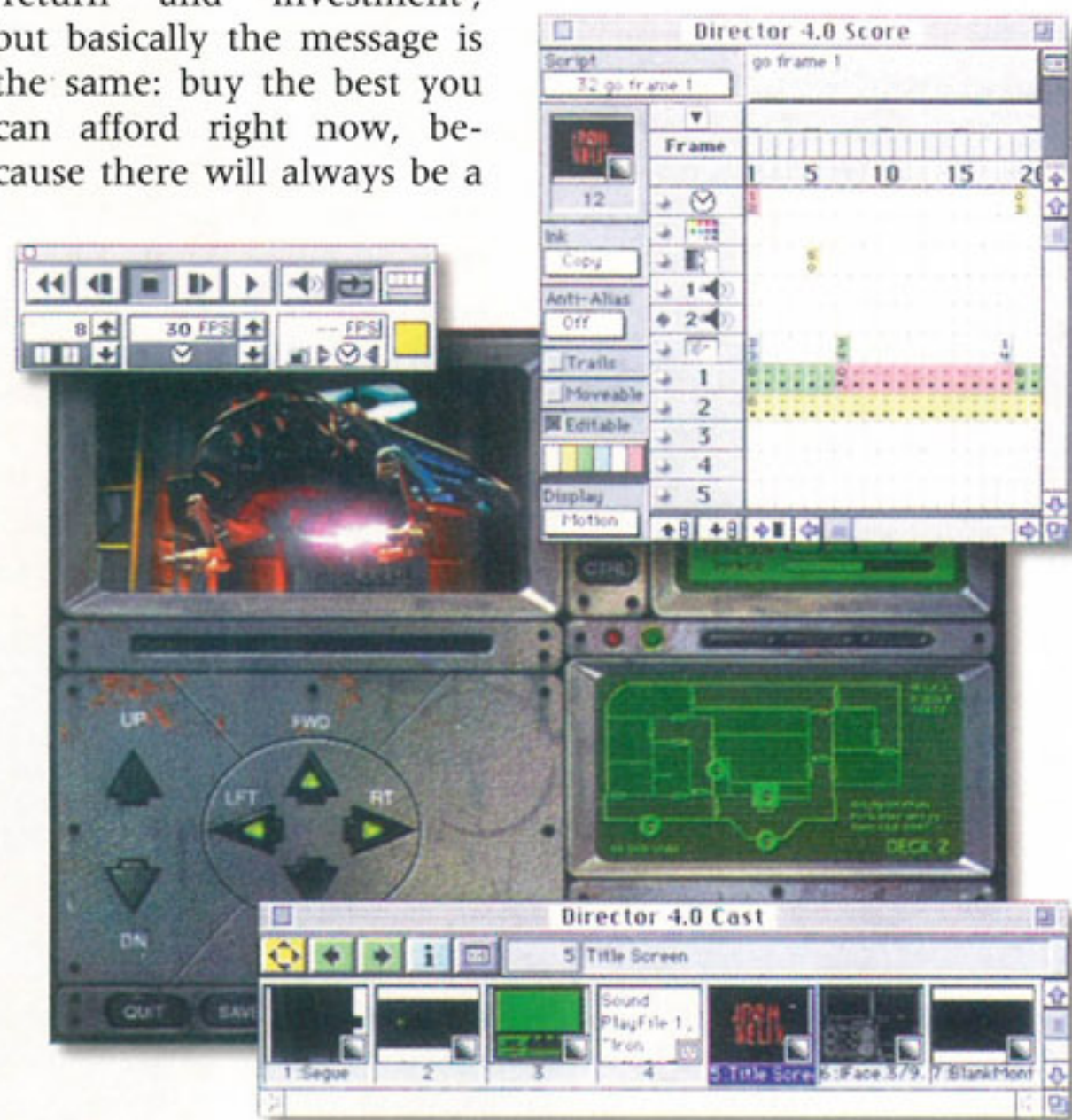
Court, which came too late to get a mention in last month's multimedia special issue. I've been going to this event since 1989, when Multimedia was the big M-word which no one would use for fear of being laughed at. Now, it's as if everyone really always believed in it all along and 'Told You So' overlays colour every pub conversation about computing everywhere.

## Mainstream multimedia

It's ironic, then, that this whole multimedia thing seems to have passed right by the UK's premiere dedicated event. That's because the M thing is fully mainstream now – every market research company worldwide is producing figures to show that by the end of '95, 80% of all PCs shipping will include CD-ROMs and AV capabilities.

So that's why there were only 70 exhibitor stands at the show, and a glaring absence of anyone actually pushing the frontiers in this area. No sign of Apple, IBM, Microsoft or Philips. Multimedia simply doesn't need its own show, and especially not at £10 a throw. Nuff said.

But tucked away from the main event was, for me at any rate, the star of the show, Macromedia's *Director 4.0 for Windows*. Now before you start thinking 'Why is he going to talk about the dreaded W word in MACFORMAT?', let me explain that this is good news for Mac owners. Up to a point. The reason being that the



Here's Macromedia's *Director 4.0* in action as part of the score for the 3D action adventure game *Iron Helix*. Now that *Director* is available for Windows, surely we can expect more and more multimedia games for the Mac – after all, now that it's binary compatible, conversion to Mac format is only a mouse click away.

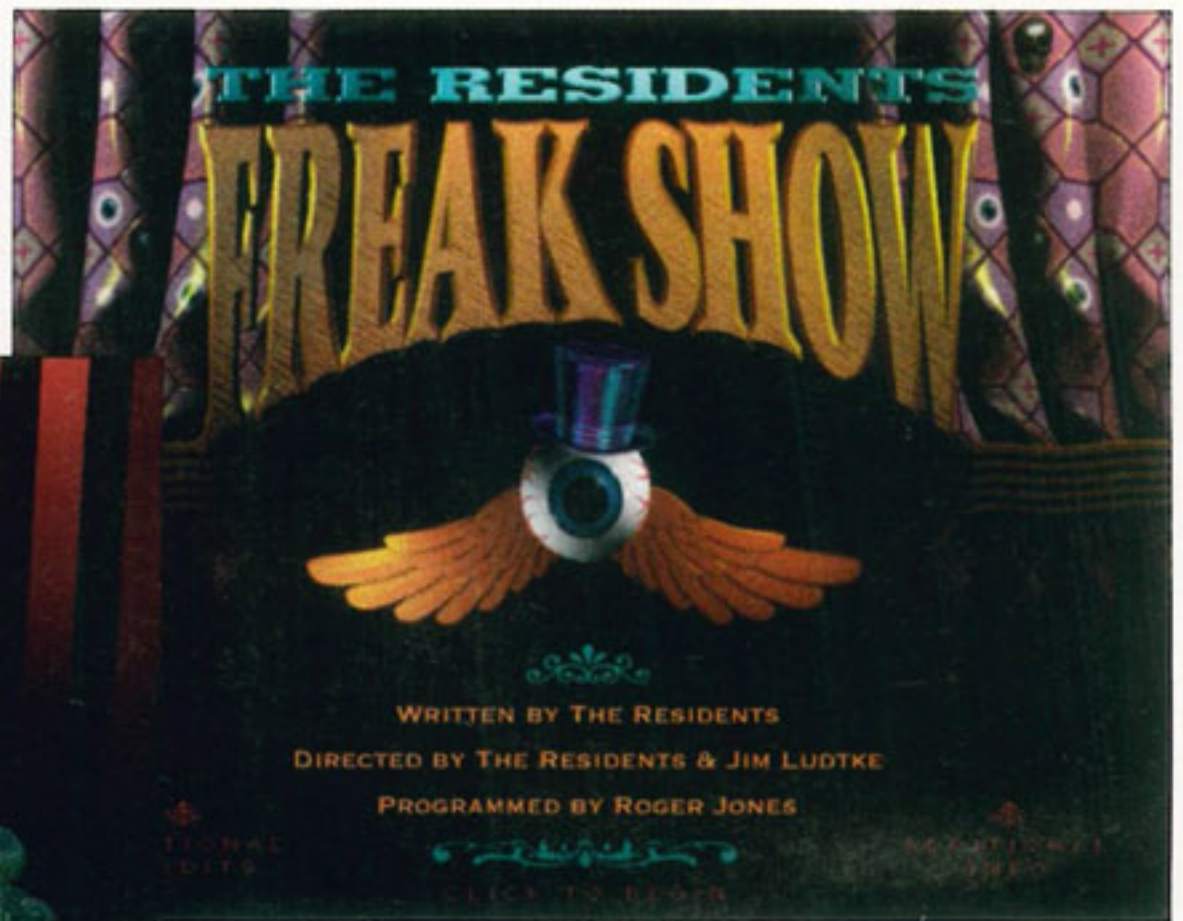
launch of *Director for Windows* means that on the one hand the leading multimedia authoring application is now fully cross-platform, which means that applications and games designed on a PC using *Director* are now binary compatible. So multimedia titles developed on a PC can be easily ported to the Mac without much more effort than it takes to click a button.

On the other hand, there's a certain double-edge to this convergence. The launch of *D4W* also heralds the last of the great Mac applications to migrate to Windows – all, that is, except for *HyperCard*. And while there'll always be a number of reasons why the Mac will remain the best, state of the art software will no longer be one of them. Funny really, how Apple has always been at the forefront of multimedia, yet has failed to capitalise on it. Maybe it should have licensed System 7 to the Taiwanese clone manufacturers years ago. Maybe it should have licensed Intel chips for use in Macintoshes. Maybe it should have dumped its NuBus architecture and switched to a PC standard bus. Benefit of hindsight again, because at this year's Multimedia show there was hardly a Mac in evidence.

What was in abundance, though, were hordes of MPEG cards for PCs. MPEG, a digital video compression standard agreed by the multinational, multicorporate Motion Picture Experts Group, is the key to the kind of real multimedia we all want on our machines. In a nutshell, something approaching interactive television. What MPEG brings is the technology to squeeze full motion, full video sequences down to as much as a 120th of their original storage requirement. Then decompress it, and pump it back to your Mac's screen in real time. I'm sure you don't need me to tell you what this implies; suffice to say, I'm looking forward to *Terminator 3 Interactive* on my Mac in the next couple of years.

One company making serious inroads into this territory is FAST, purveyor of the Movie Machine board, a video digitiser and TV tuner. FAST, on 071 221 8024, is now offering its M-JPEG option add-on board which enables users to capture full screen full motion video at 25

It may have arrived too late to make it into last month's round-up of top ten multimedia titles, but *The Residents Freak Show* would probably have made number one. It's a seriously strange trip into the darker corners of post-acid psychedelia, but should nevertheless be heralded as the best Mac CD-ROM to date.



shopping mall in Christendom.

Finally, this month I've just returned from the weird and wacky world of *The Residents Freak Show*. This new CD-ROM, available from Softline on 081 401 1234 for £69, would have easily made it into last month's top ten multimedia titles. As with so many good releases, it's a Macromedia *Director* production and I guess it's probably the most accomplished multimedia title I've yet to see.

This has nothing to do with *The Residents'* peculiarly unique music – perhaps best consigned to the asylum of experimental acid casualties – but has everything to do with the seamless integration of 3D graphics and atmosphere. For the first time ever, I can admit to actually being scared while using my Mac.

### Interactive horror

This occurred while I was exploring the dark recesses of Herman the Human Mole's trailer caravan, expecting to have a hideously deformed full-screen face pushed into mine. It never happened, but it might have done, and that was sufficient. In fact, it might still happen, because I got the sneaking feeling there's whole bunches of code in this creepy CD just waiting to leap out at you. As it is, there are areas in the fairground freak show which you're not meant to explore, but can, given perseverance.

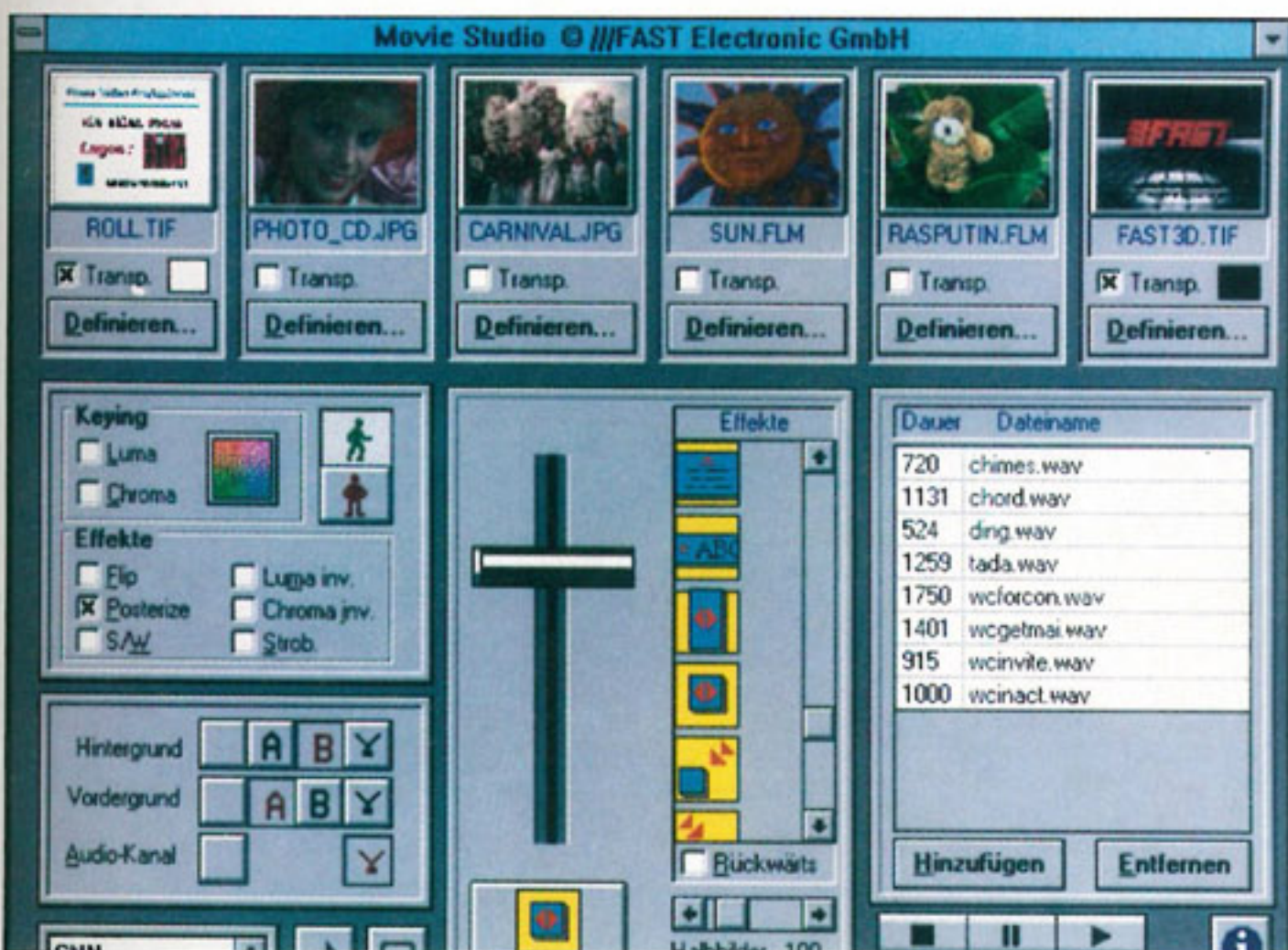
It all adds up to something fast approaching interactive horror – a kind of *Texas Chain Saw Massacre Meets Myst* directed by David Lynch, with the added bonus of true weirdness, only to be found among the more psychotic elements of US culture. And since I've already touched on interactive TV, may I just add that in this respect *Twin Peaks* has all the constituent elements to make a perfect Mac conversion.

Seriously, though, *Freak Show* is brilliant – heaven only knows the number of man hours that went into its production. It has photos, comics, videos and animations in abundance, and is probably the best showcase of where this medium is heading. Sure, it's wacko – Wanda the Worm Woman, Harry the Head and Jelly Jack aren't exactly the kind of people you'd expect to be among the first colonists of the new media frontier – but then, by implication, artistic advance usually is unconventional. So check it out – it's well worth the admission and is a great way to impress your friends with your benefit of foresight.

Andy Storer

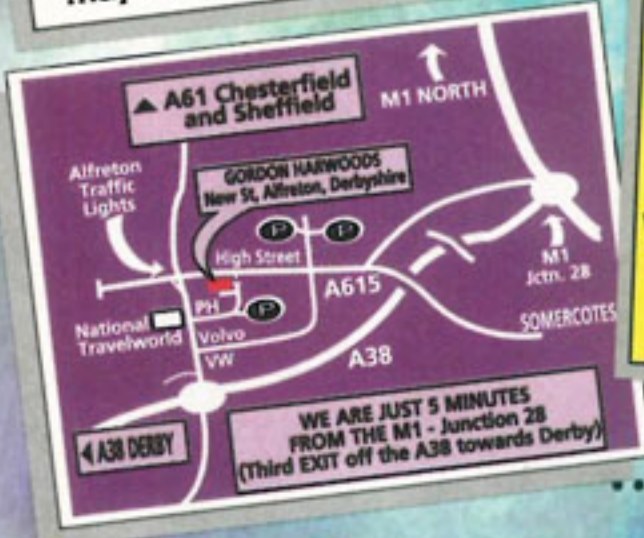
frames a second direct to hard disk. Sequences are displayed in real time, and in true colour, in scalable windows. The price? – a mere £399, and that includes Adobe *Premiere!* Only one problem though: no Mac version is planned – the equivalent on our platform would knock you back £4,500. In this area at least, all those 'Maybes' above about Apple are beginning to sound like 'If Onlys'. At least there will be MPEG boards for Macs later this year, though – Radius is readying one – but you can bet they won't come in at under £400.

Still, I don't want to give you the impression that the Mac's being dumped – far from it. One of the best items I came across at the show was TouchMate from Ellinor on 0734 311066 – a product that's hitherto only been available on PC. This is a force sensing platform which sits under any Mac monitor up to 21 inches in size, and enables you to drive applications simply by touching the screen with your finger. Ingeniously, you don't need any screen overlay to achieve this, so how on earth does it work? Well, magic may be the best explanation, but Ellinor's engineers assure me that the unit can detect extremely minor variations in the pitch, yaw and roll movements of the monitor positioned above, so it can work out precisely where you're applying pressure. If this weren't enough, it can even be set up to emulate a Wacom-style pressure-sensitive tablet, meaning you should be able to draw directly on screen. Whether this means there'll be a whole new market for monitor stands which flip your screen over on its back remains to be seen, but meanwhile I can see TouchMate opening up Mac-based point of sale and information kiosks in every



OK, OK, I admit it's in German and it's a Windows screenshot, but the point I'm trying to make is that the Mac should have stuff like this available for it at lower prices. FAST's *Movie Studio*, which is now available with direct-to-disk MPEG compression of full screen, full motion video, costs only £400... on the PC. There is no Mac version. Ah well, I can still dream...

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LC475	040/25	4/80	36	X	X	<b>JUNE PROMO £599</b>	<b>JUNE PROMO £799</b>	<b>JUNE PROMO £899</b>	✓	✓	✓				
475PP	040/25	4/160	36	X	X	£690 (£811)	£869 (£1022)	£979 (£1151)	✓	✓	✓				
LC475	040/25	8/160	36	X	X	£819 (£963)	£999 (£1174)	£1119 (£1315)	✓	✓	✓				
Quadra 610	040/25	4/160	68	✓	X	£943 (£1109)	£1249 (£1468)	£1354 (£1591)	✓	✓	✓				
Quadra 610	040/25	4/160CD	68	✓	✓	£1144 (£1345)	£1469 (£1726)	£1559 (£1832)	✓	✓	✓				
Quadra 610	040/25	8/230CD	68	✓	✓	£1416 (£1664)	£1749 (£2055)	£1829 (£2150)	✓	✓	✓				
Quadra 650	040/33	4/160	136	✓	X	£1259 (£1480)	£1549 (£1820)	£1639 (£1925)	✓	✓	✓				
Quadra 650	040/33	4/160CD	136	✓	✓	£1374 (£1615)	£1669 (£1961)	£1749 (£2055)	✓	✓	✓				
Quadra 650	040/33	8/230CD	136	✓	✓	£1649 (£1938)	£1949 (£2290)	£2029 (£2384)	✓	✓	✓				
6100/60	601/60	8/160	72	✓	X	£1298 (£1525)	£1589 (£1867)	£1675 (£1969)	✓	✓	✓				
6100/60	601/60	8/250CD	72	✓	✓	£1545 (£1816)	£1839 (£2161)	£1925 (£2262)	✓	✓	✓				
7100/66	601/66	8/250	136	✓	X	£2049 (£2408)	£2339 (£2749)	£2426 (£2851)	✓	✓	✓				
7100/66	601/66	8/250CD	136	✓	✓	£2228 (£2618)	£2519 (£2960)	£2599 (£3054)	✓	✓	✓				
7100/66-AV	601/66	8/500CD	136	✓	✓	£2829 (£3325)	£3119 (£3665)	£3199 (£3759)	✓	✓	✓				
8100/80	601/80	16/500CD	264	✓	✓	£3875 (£4554)	£4166 (£4896)	£4249 (£4993)	✓	✓	✓				
8100/80-AV	601/80	16/500CD	264	✓	✓	£3944 (£4635)	£4236 (£4978)	£4322 (£5079)	✓	✓	✓				
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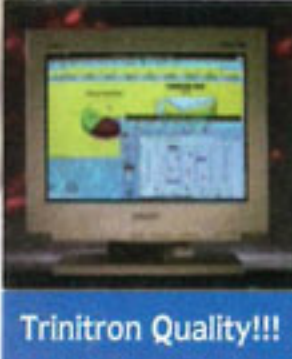
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# State of the Arts

Join us as **MACFORMAT** brushes up on the **Chip Art** movement... Art doesn't come much finer!

**P**aint is passé, canvas is for kids and (um...) berets are old hat. The state-of-the-art artist uses a Macintosh and has a dazzling range of powerful graphics software to choose from. Whether you want to create a watercolour on-screen or make a scanned image look like it's underwater, the Mac's your machine. In this massive 19-page **MACFORMAT** special feature we'll show you some of the work being done by artists using Macs, including some young members of the British Computer Arts Association (page 30); we'll explain how to achieve a realistic watercolour effect, no matter which art program you've got (page 32); we'll survey the whole range of graphics programs for your machine (page 36); we'll introduce you to the top graphics tablets, those ingenious devices that make creating art on your Mac as natural as drawing on a piece of paper (page 40); and we'll explore some of the very latest art software, including Fractal Design's *Dabbler* (page 46), Microsoft's versatile *Fine Artist* (page 48)

and the remarkable landscape generator *VistaPro* (page 50 – and you can try it for yourself with our cover disk demo). Then we'll even give you the chance to win your own A4 DrawingSlate graphics tablet from CalComp, worth £580 (page 52)! So what are you waiting for? The art starts over the page...



All of the pieces here were produced with Fractal Design's *Painter*. This one, untitled, is by John Taylor Dismukes.



This is 'One Rare Fat Finny Specimen' by Gary F Clark – this 'water-colour' craze is really taking off.



This untitled montage piece was produced by the talented and widely respected illustrator Glenn Mitsui.



Gary Clark, the Professor of Computer Graphics at Bloomsbury University in Pennsylvania, was the force behind this piece: 'What A Day For A Daydream'.



Mitsui, the creator of the 'face' image opposite, is clearly a master of the mixed-media collage. This is 'Chinatown'.



'Ice King', by Chet Phillips, clearly demonstrates the versatility of *Painter* with its woodcut and airbrush effects. All of the images on this page are reproduced with the kind permission of Letraset Software.



This *Painter*-produced image (which, like all the four art pieces shown in this top strip, is reproduced here courtesy of Letraset) was created by Chelsea Sammel and is entitled 'Poppy'.



Daniel Clark created this striking untitled piece. He specialises in Mac-based high-end design and illustration, and has developed his own techniques for advanced finished production.

## The Art of the Matter

**M**ention computer art and most people think of computer-game backgrounds or animations. The British Computer Arts Association, however, is a group of young artists who use

computers – almost exclusively Macs, of course – to create art you can hang on your wall. This involves prints, usually colour thermal images or large bubblejet printouts from bureaus, yet their techniques are as varied as their styles...

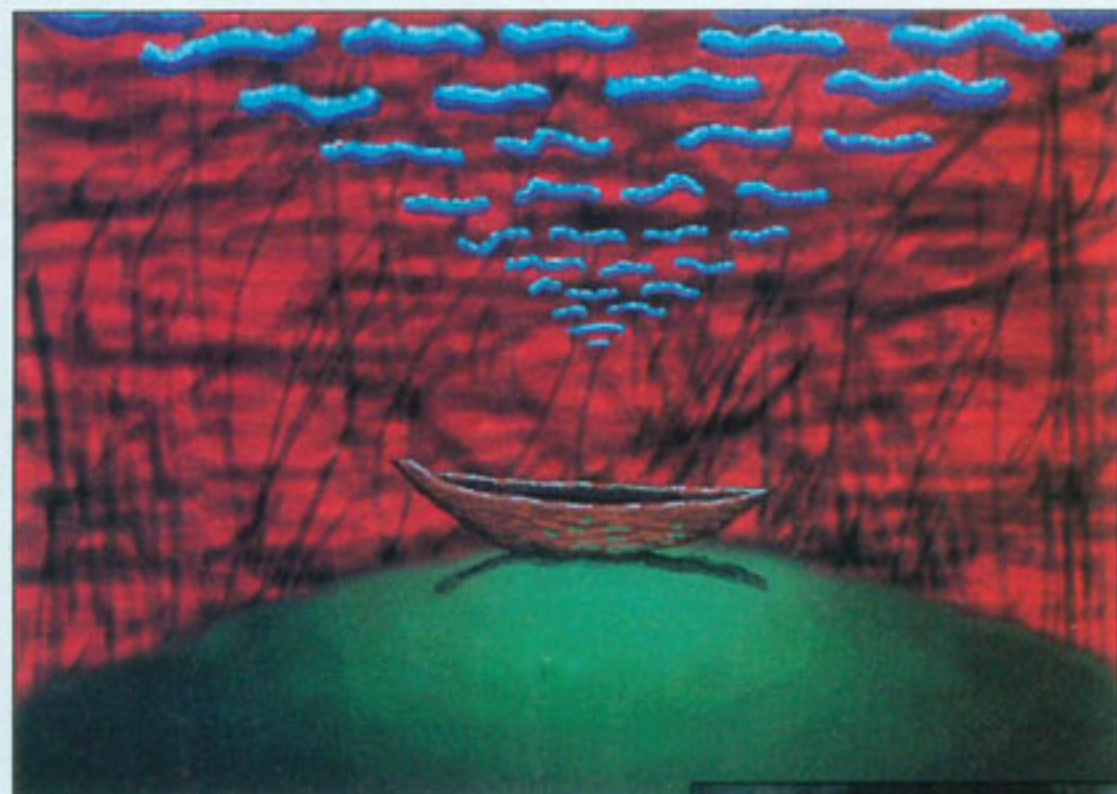
### 'INSIDE OUT' BY SARAH HAUGHTY

**S**arah's background is in fine art – she has a BA in Fine Art from Nottingham Poly and an MA in printmaking from the Royal College of Art. Being new to the Mac, she feared at first that she'd be 'inhibited' but, she says, 'I've actually been really really liberated. It's like sitting in front of your TV looking into a little 3D world that you can just create, with unlimited colours

creativity right from the start.'

She selected a normal paper background and used a large felt pen brush in broad, gestural strokes, covering the whole screen. No 3D program was used – she got the effect of depth in the picture simply by repeated strokes with the felt pen: the more you go over it, the darker it gets. Because the colour is a very bright red, Sarah says, 'it gives the impression that there's light in there, even on paper.' The green hillock in the foreground was then added with *Painter's* air-brush, and the midground and other elements with the program's chalk effect. She used the 'water brush' effect over chalk to create the very credible shadow.

'The problem I've had,' Sarah says, 'is when you go to have things printed out. Some people in bureaus say that the programmers are stupid putting all these Pantone colours in, which can never be reproduced...' However, this print was done using a simple colour bubblejet, and Sarah says she's quite pleased with the result, even though it's perhaps not as accurate as she would have liked. In the future, she says, she'd like to try working with colour transparencies on a lightbox to reproduce for the viewer the effect of looking at the image as you would on-screen.



Sarah achieved the effects she wanted for 'Inside Out' through experimentation.

and textures.' Sarah used Fractal Design's *Painter* to create 'Inside Out' and got the desired effects by experimenting. 'I found my own way around,' she says. 'I didn't have anybody breathing over my shoulder, baffling me with possibilities that I think would've killed



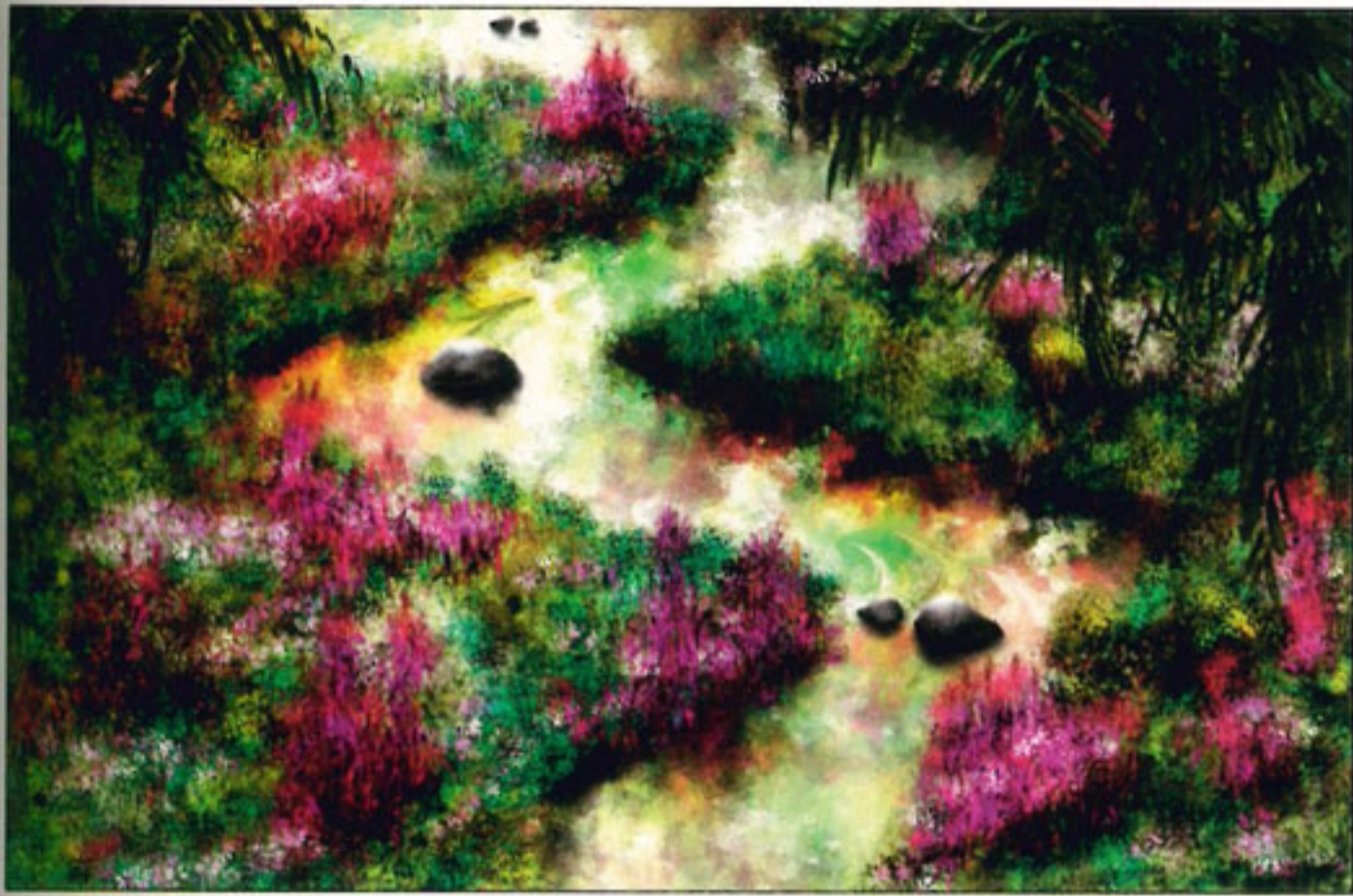
### 'PLATE 6' BY

**M**artin also has a fine arts background, with a BA(Hons) from Manchester, and his 'Plate 6' actually started life as a painting. The texture and relief effects were created by different layers of paint – acrylic, oil and other traditional media. Then the painting was brought on to a Mac using a 300dpi Mitsubishi flatbed scanner.

Martin uses a range of software – *Photoshop*, *Painter*, 'even *CorelDraw* on a bad day' – to manipulate the scanned image, for example to alter colours and adjust brightness, tone and hue. The finished print is as much a computer-generated image as a reproduc-



'Plate 6' started life as a traditional-media painting, before being scanned into the Mac for further work.



'Lush Stream II' is by John Derry, the vice president of Creative Design at Fractal and co-author of *Painter*, *PainterX2* and *Trees & Leaves Brush Looks*, which he used in this painting.



This is Fred Gillaspay's 'Recuerdos de Santa Fe'. His recent excursions into computer-based art nicely complements his knowledge of traditional photo lithographs and serigraphs.

## MARTIN GARNETT



tion of something done outside, Martin says, and he spends at least as much time in using the computer as in 'playing around with different media to start with', if not more. In the case of 'Plate 6', he has taken a lot of the

colour out. 'The green hue and the overall tone give it a sense of something organic,' he says, 'rather than something created inside a cold computer environment.' Martin used *Photoshop's* 'Emboss' effect to heighten the texture, and then added some extra effects, such as scanning in his own signature and using that as part of the main motif in the work. However, he is reluctant to reveal more for fear of getting into talk of 'parody and signs and what things connote.' Martin sees computer art as being the *real* modern art, as opposed to art that concerns itself purely with ideas, concepts and semiotics.

The print was done on a Mitsubishi thermal printer, because, as Martin says: 'I like the fact that it leaves the pixellation in the work because then it's clear to the viewer that it's a computer print – but at the same time, it's not. It's blurring the boundary between using traditional media and using computers, looking to the future and the past at the same time.'

The British Computer Arts Association exists to 'promote the creative use of small computers'. For more information on the association, send an SAE to BCCA, College Manor, Farquhar Road, London SE19 1SS. The BCCA would like to thank Canon UK, Genix Imaging Ltd, Hitachi UK, Digital Print Technologies, Covent Garden Laminates and ISO Developments, and the many others who have lent help and support.

## 'COLLECTING STONES AT ASKRIGG' BY CARINNA PARRAMAN

Carinna, who is studying at the London Institute, goes even further in combining computer art with traditional printmaking media. 'Collecting Stones at Askrigg' began with her drawings of some small pieces of rock from nature, which she scanned in. She then took the scans and manipulated them on the Mac, adding elements drawn freehand with the mouse and enlarging some parts to achieve the pixelated effect that is associated with computer-generated art.

The enlarged images become more like abstract shapes and have a mechanised look, but they're still related to the original organic forms. 'I was very interested in the idea of chaos and the reproducibility of standard-

ised shapes in nature,' Carinna explains, 'and how a very small piece of stone could actually mimic its larger counterpart.'

The next stage was to print out the image on a StyleWriter. This produced 'quite a nice sharp image', Carinna says, which could be used to produce a photo-stencil for silk-screen printing in several colours. Then

on top of the silk-screen print came a lithograph, done the traditional way (the image is drawn with greasy crayon on a piece of flat stone – when you print the lithograph, the ink won't 'take' on the greasy bits).

The finished print reflects this unique mix of media. The foreground area is a computer-enhanced image, and so is the area at the top – though you can't really see unless you look very closely, Carinna tells us,

because there are parts of drawn images over the top and even torn-up paper that she used to get broad areas of flat colour. The image is landscape-based, but the lithograph's chalky, 'organic' effect contrasts with the 'mechanised' look introduced by the computer. There is also a hint of the linear quality of maps. The print is done on hand-made Indian paper, not computer paper, the idea being to combine the hand-made, the mechanised and the hand-drawn – 'a sort of juxtaposition of lots of contrasting factors,' says Carinna.



The microcosm of pebbles and the macrocosm of boulders are juxtaposed, as are a variety of media.

## Over to you

Think you could do as well? MACFORMAT would like to see your Mac-generated artwork for future features. Include full details of what software you used and what you did, with plenty of screenshots of the inter-

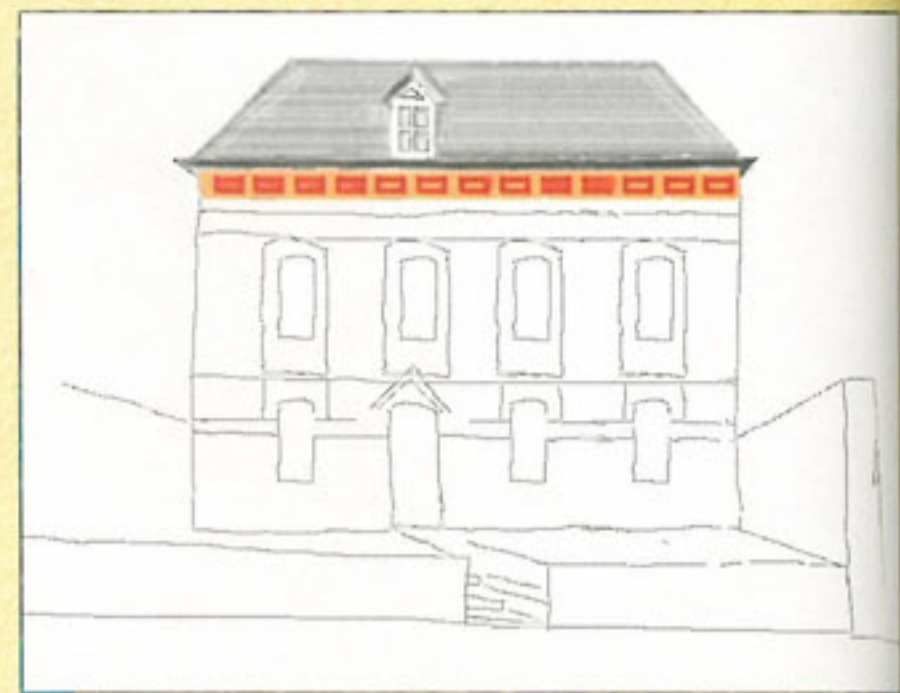
mediate steps and, of course, the final file. Send your masterpieces (on disk) to: Art Attack, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW. Note that we can't be responsible for anything lost or damaged in the post, and we can't return any submissions unless you include an SAE with adequate postage.

# Getting your feet wet

Just to demonstrate that watercolour-like effects can be achieved in any paint program, one of the least well endowed – *Studio/8* – was chosen for this tutorial. From its name, you can tell that it's 8-bit, so only 256 colours are available. Nevertheless, soft edged marks can be made easily, if you stick with the default palette.



**1** The painting can be started either as a quick rough of the main bodies of colour into which you can then work detail, or as a rough, mid-tone sketch which you can then paint over (and under) with the main washes of colour and details. The latter method was chosen here. The sketch can either be created freehand or by using a felt pen to trace an original photograph on to transparent film.



**2** The roof area is washed over or filled with grey, then the tile pattern is added using **Tint** and **Restrain** to get the parallel lines. Windows can be drawn and painted, then duplicated, although the effect is better if each one is done in a slightly different way. The facade detail is drawn with opaque red using **Restrain**, and then overpainted with a paler red with a soft-edged or watercolour brush.

# Dipping into watercolour

**L**ook beyond its twee reputation, and you'll find that watercolour is actually the most spontaneous, expressive medium available to artists, capable of delicate shades and translucent nuances as well as broad and atmospheric sweeping strokes. The range of marks that can be made with watercolour extends far beyond those of most other media. This is because in addition to the variable qualities of brush and paint tools, the

**In this, the second instalment of our series on Natural Media paint effects, Brian Larkman dons his wetsuit and dives into watercolour.**

wetness of the paper is also an important medium. Painting wet-on-wet, working from dry to wet areas of the paper across the boundary, and timing your work to suit the degree of wetness achieved by the drying

paper all help provide a variety of textures quickly and easily. You would be looking at a lot of work if you wanted to recreate the effect with most other media.

To judge how good digital paint programs

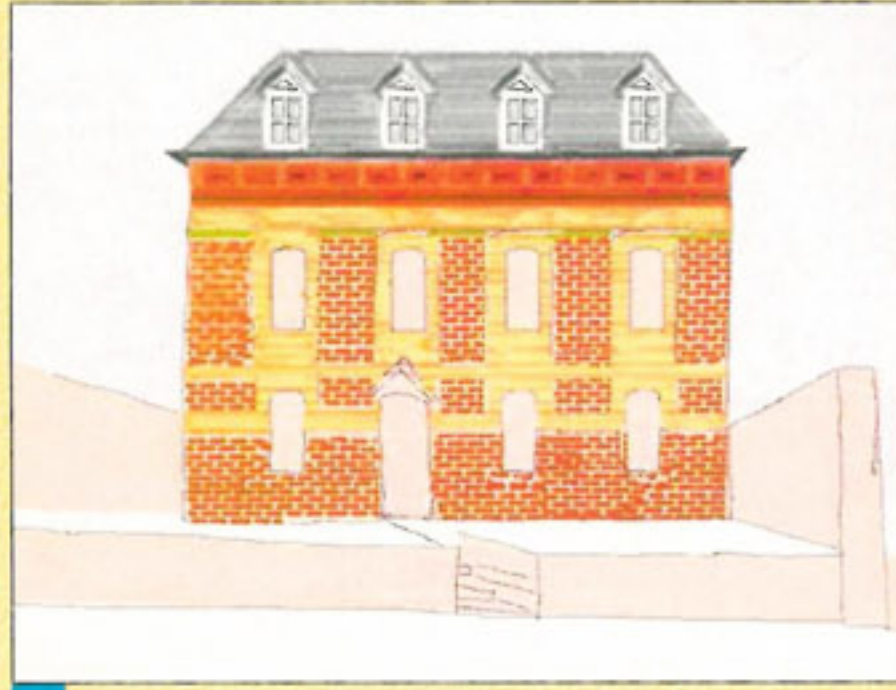


*Painter 2.0* (here with the X2 extensions) is almost the ideal program for Natural Media watercolour effects. The test areas shown here represent just a small selection of the effects available: working wet-on-wet, edge darkening (pooling), painting over a dried area with transparency, and with diffusion.

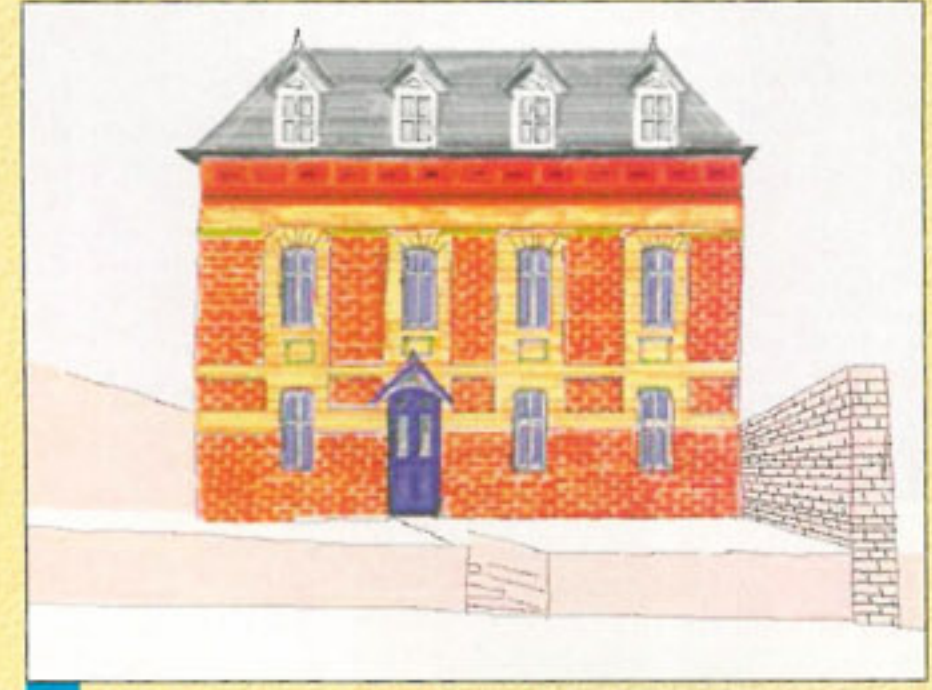
This image was painted directly from a photograph. The outline was sketched in black first on a dry page, then the areas of colour were washed in using various wet and dry effects. If you use a small screen, *Painter's* interface icons tend to clutter your screen, but a simple key press will clear your desktop, leaving only the individual 'tear off' brush icons.



**3** All brick areas are washed over with a tint. A largish watercolour brush would be best to give some texture, but this can be 'sticky' on slower machines so a plain brush set to a tint of the right colour is sufficient. Change the colour slightly (with the left or right cursor) to introduce variety while painting large areas. The secondary brick colour is added after.



**4** The brick pattern is overpainted with an opaque colour using **Restrain**. For speed, a small area can be defined as a pattern and filled into the brick wash, giving a regular effect, but overpainting with a watercolour brush will break this up. This 'post production' overpainting is essential in non-Natural-Media programs. With a decent wet paint brush effect, however, the bricks could be painted in one stage.



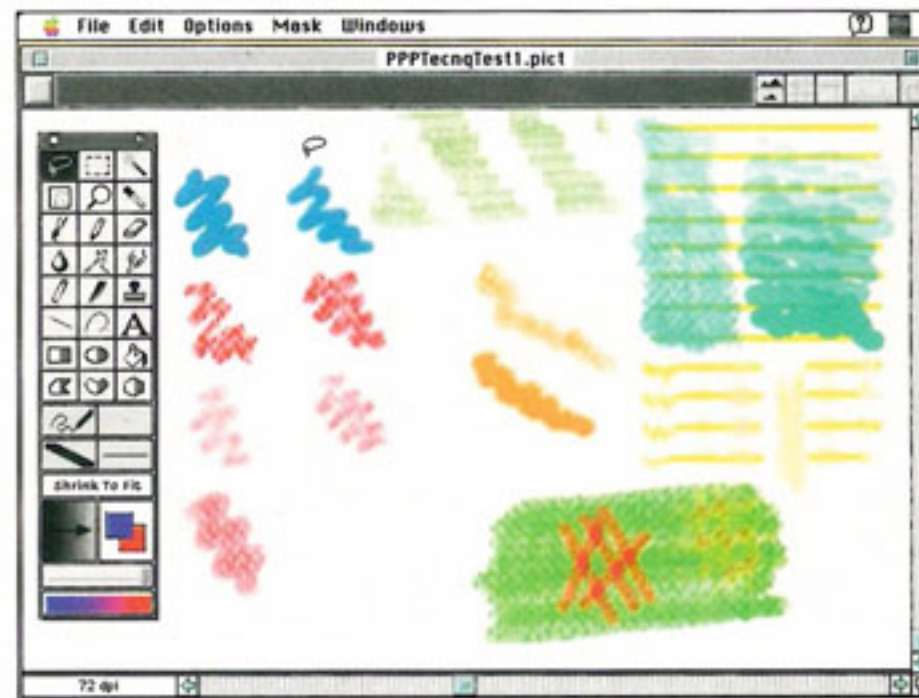
**5** Overall, the brick effect should look quite good by this stage. Details of the porch, door and windows can now be added over the wash. The dark lines which are needed to define the edges have to be produced in this program with a plain, non-anti-aliased, single pixel pencil. A fine, anti-aliased 'pen' would, however, be much better!  
Turn the page for steps 6, 7 and 8.

are at simulating natural watercolour painting, you need to understand exactly what sort of marks the real thing can produce. (See the 'Watercolour - the real thing' box below.) Summing it up simply, though, watercolour technique involves spontaneity, accident and control to create an almost infinite range of interesting textures, plus transparent washes of tint to establish harmonies of tone. The question is, can any computer paint program come close to emulating this variety of effect?

It is control of wetness that really distinguishes the marks made with watercolour. Ideally then, to simulate it properly, the software must provide a 'wet' effect which operates over a wide area, but which can be given limited boundaries - a bit like a mask. You must be able to control the degree of wetness, and preferably be able to vary it over the 'wet' area. The 'paper' should be textured to some degree - and once again, you should be able to control the amount and type of texture used. The paint should flow and spread with some level of randomness, simulating 'spidering' on wet areas and 'edge darkening' at dry boundaries.

Of course, there's no software on any ma-

chine which can provide all of these features, but the established Natural Media (NM) packages do come quite close - especially Fractal Design's *Painter 2.0*. Most of the other programs detailed here can be made to recreate water-



*PixelPaintPro* provides several Natural Media tools and effects, such as *PixelPaper* to give a true textured drawing feel, and a soft-edged brush which interacts with the underlying paint. Overall, the program used here (version 2.0) is rather old fashioned; it's more of a traditional bitmap paint package. A new version (3.0) is now available in the USA. Let's hope it's released here soon!

colour-style results, but only at the 'post-production' stage - that is, by using the available editing tools to process the image so that it looks as though it were painted with watercolour brushes.

Only *Painter*, *Sketcher*, *PixelPaintPro*, *Studio 32* and *Studio 8* - in descending order of effectiveness - provide tools designed to make watercolour-like marks from the start. Surprisingly, Fractal Design's new junior *Painter*, *Dabbler*, has no true watercolour effect. Instead it relies on adding water to marks made with pencil, crayon, chalk, and so on, to achieve a watercolour effect. A more transparent version of one of the oil painting brushes would have been very useful, even if a true 'wet surface' effect could not be included in this cut-down version. Aldus' *Gallery Effects* and Xaos Tools' *Paint Alchemy* both enable you to apply excellent 'post-production' watercolour effects to selected areas with controllable parameters. With some work, *Photoshop's* built-in filters and *Kai's Power Tools* also make a reasonable job.

Let's have a look at what you can do what in more detail. At the moment, the ultimate watercolourist is *Painter 2.0*. What makes it

## WATERCOLOUR - THE REAL THING!

If you paint directly on to a dry surface with a fully loaded brush, you will flood the paper with paint, filling the surface texture and soaking the grain along the edge of the mark. As the paint dries, more pigment is left at these edges, so a characteristic reverse gradient or 'pooling' mark which has more saturated colour at its boundary than its centre is made.

If the brush is less loaded, making quick sweeping marks across dry paper can leave 'skips' where the paint hasn't filled the texture of the paper, especially at both the edge and end of the stroke. This skip effect can bring areas of glistening white into the painting, or can shine through as spots of strong colour when another translucent hue is washed over it. Partially 'filled' brushes tend to fade out at the end of their stroke;

the paint becomes thinner and more transparent, while the strokes become narrower or more 'skippy'.

Varying the speed of stroke can have similar results. Once the paint and paper have dried, it's possible to paint quickly over parts of the image with a thin transparent wash. This helps to establish harmonies of tone and create a balanced overall effect.

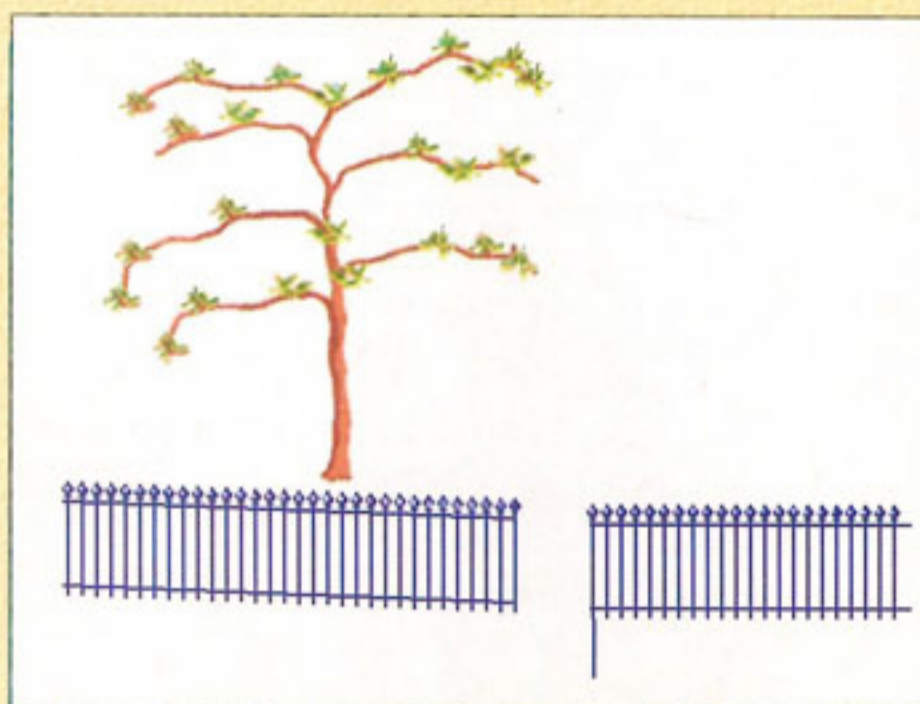
Painting on to a wet surface creates another set of marks. Damp areas blend new marks smoothly with the paint already on the surface in a number of ways. Colours can be mixed on the paper and smooth gradients can be created between new and old paint. At certain levels of dampness, marks from a full brush tend to spread at the edges, leaving tiny, spidery or tree-like 'diffusion' patterns. The edges of a mark which has been

painted from a dry to a wet area can change from hard to very diffused and then back again - a trick often used by non-computer-using watercolourists. Often, pure water (without colour) is painted on to the paper in certain areas just to get this diffused effect. Pure water can also be used to lighten or erase colour - a dry brush or sponge can help to soak up the excess fluid.

Textures can build up inside the painted area, especially when several colours are partially mixed on the same brush. Some pigments behave slightly differently from others: certain colours migrate to wetter or drier areas, making the troughs and peaks of the paper surface vary in hue or tone, highlighting the texture. Watercolour, in general, tends to emphasise surface details. All this is a lot to ask of a computer program!



**6** Walls are roughed in as areas of texture with the blurry watercolour brush here. Detail can be worked in later, then softened again lightly with the watercolour brush or 'blend'/'finger' tool (especially visible on the right wall here). Practice with this sort of 'texturing' technique is useful, whatever the program. Good watercolours have character by virtue of the subtlety of their textures.



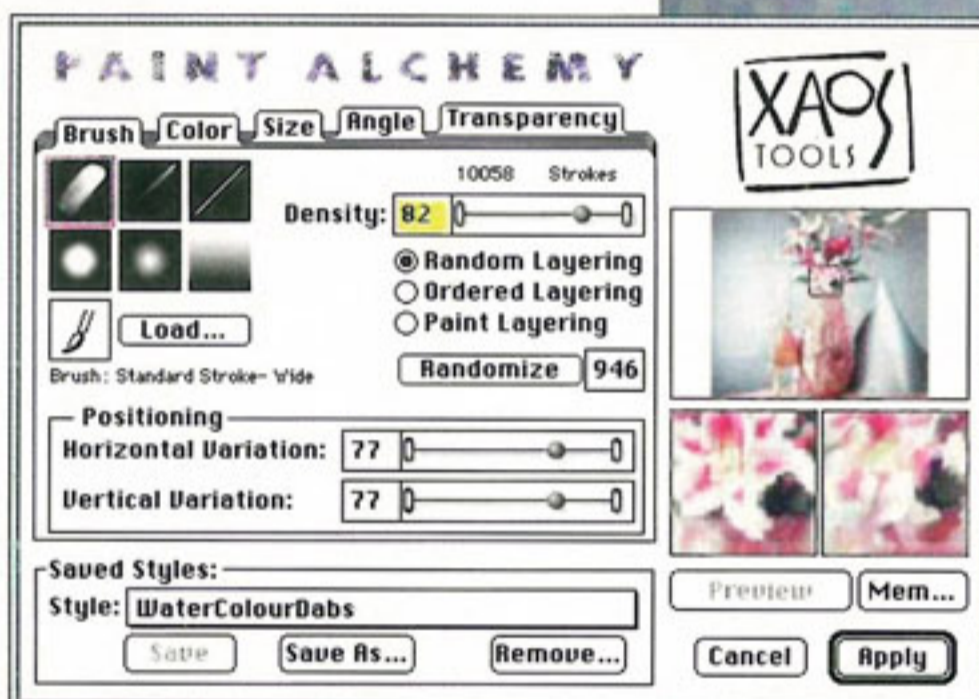
**7** The tree and railings could be painted direct on to the picture, but the advantage of computer watercolouring is that they can be prepared elsewhere and added over when perfected. These railings were produced by drawing one 'spear', selecting it as a brush and then reproducing it with Grid turned on at a suitable spacing. The highlights were added after to give variability.



**8** The final image is finished off with a gradient in the sky (in a real watercolour, this would have to be done much earlier) and a few more details in the facade and brickwork. It would be easy to continue tidying up the picture at this stage, but the whole point of watercolour is its spontaneity – the imperfections add to the character, says he, hopefully.

stand out is its ability to 'wet' and 'dry' the paper. Ideally, however, this wet effect could be painted on like clear water, so that a brush of paint would react differently as it applied paint to wet or dry areas. In effect, the same result can be achieved using *Painter's* friskets, but marks need to be made twice with these, once for the wet effect and once for the dry, thereby destroying spontaneity – still, at least it's possible. Nevertheless, *Painter's* wet effect and hugely customisable brushes do enable you to create an amazingly convincing range of effects.

The most spectacular of these is probably the Diffusion brush. This not only spreads the paint just like the real thing, it even creates spidery 'tree' shapes along the edges. More functional are the Water Brushes, which apply paint and blend it to some degree with the wet paint which is already there – mixing the colours on the paper, so to speak. Some brushes create a very realistic-looking 'pooling' effect, especially the Spatter and Water Brushes. Drying the surface using the **Dry** option in the **Options** menu makes most of the brushes work differently: leaving hard edges to the marks, and creating transparent tinting rather than colour



*Paint Alchemy* uses an intuitive 'index card' analogy for its interface (and for its manual). As in *Gallery Effects*, the styles can be applied to a whole image or just a selected area.

mixing with the painted surface. All these effects are provided with the default brushes – and very realistic they are too – but not all watercolour effects are so readily available. To

achieve drier brush marks which create 'skipping' both at the marks' edges and when applied to textured surfaces, you have to design your own custom brushes. Nevertheless, *Painter 2.0* provides you with a fantastic range of parameters which will enable you to create these specialised brushes with ease.

As far as we're aware, no other program currently available has a wet layer, but several have tools which, while painting a new colour, blend or interact with the colours already applied, just as if they were wet – a basic requirement of a watercolour tool. Although it works in greyscale, Fractal's *Sketcher* does a good job of its water-

Compared with Aldus *Gallery Effects*, *Xaos Tools's Paint Alchemy* Plug-in for *Photoshop*, *Painter*, and so on, gives you a lot more room in which to experiment, although there's no built-in watercolour effect. This watercolour example was produced by modifying the parameters of the *WaterMarker* effect.

colour effect, blending tones subtly whilst interacting with the paper's surface. A sort of diffusion is also possible, but without the 'spidery penetration' effect of *Painter 2.0*.

*PixelPaintPro* can also manage a diffusion-type result – again, without the spreading effect – and its soft-edged paint brushes blend with the surface to show the *PixelPaper* textures. The overall effect is not as subtle as with *Painter* and *Sketcher*, though. Fractal's *Dabbler* has sev-

## JARGON BUSTERS

**Anti-aliasing brush:** anti-aliasing is the process whereby the stepped, pixelated effect which is created when two colours meet at an edge, is replaced with a smooth, mid-tone line.

An anti-aliasing brush 'blends' the two colours at the edge, thus creating a much smoother line.

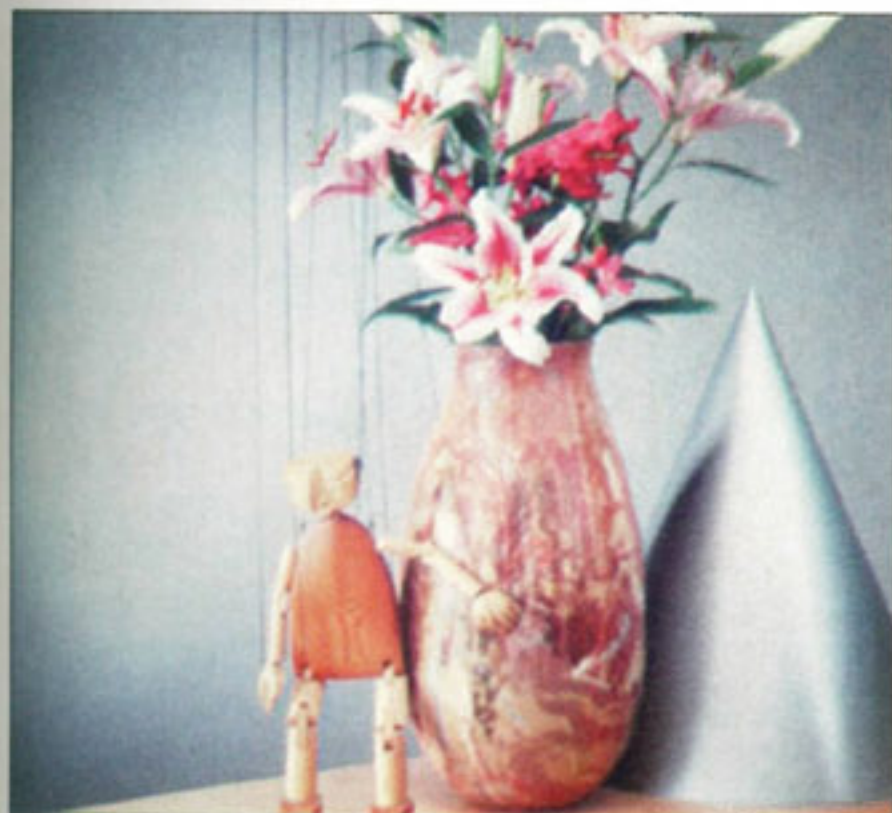


*Studio 32* is now well out of its depth in the Natural Media stakes, but some reasonable images can be produced with its watercolour brush. The image here was roughed out very quickly with large areas of flat colour, and then worked with the watercolour effect brush to achieve the textured areas.

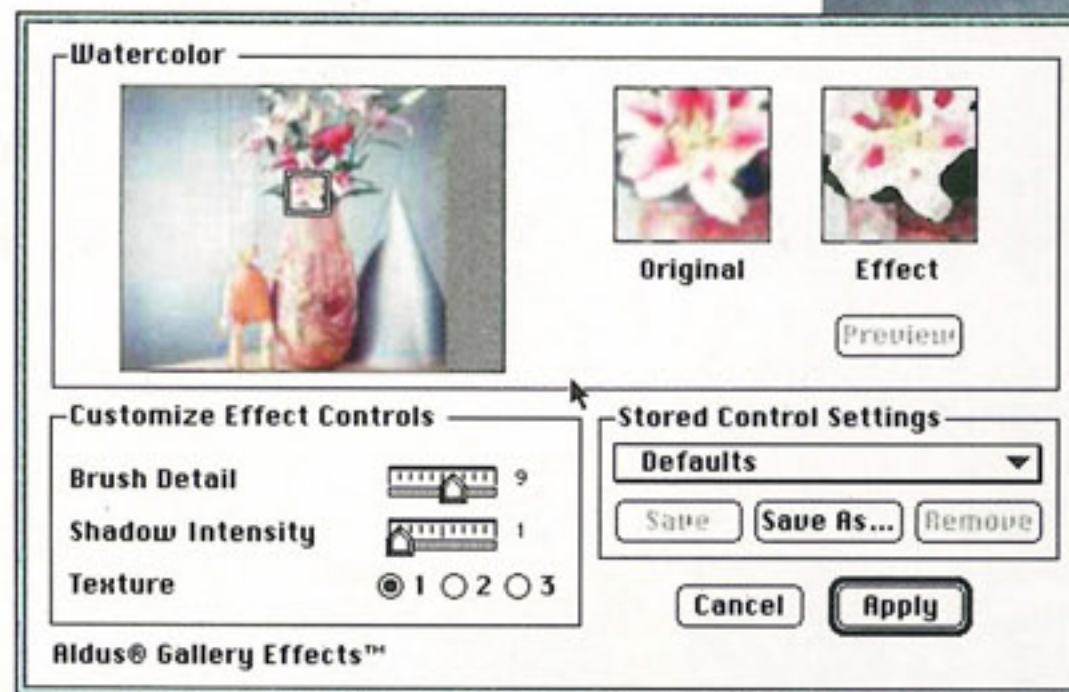
eral transparent tools which interact with the surface, but they are designed for different effects, such as picking up colour to dirty the felt pen. Unfortunately, none of the *Dabblers* brushes are suitable for direct watercolour painting, though 'post-production' work with water effects gives an excellent result in the end. You can only get a true 'pooling' effect with a wet surface, though, and only the *Painter* brushes show any build-up of colour at the edges. Modifying the brush shape to a hollow ring can produce a poor approximation, but it's hardly worth the effort.

All of the Natural Media programs, along with *PixelPaintPro*, provide true paper textures, and their tools will build up textured effects depending on how hard you apply the paint. All of them – and virtually all the other programs examined – will enable you to make hard-edged marks and transparent washes as though you were painting on dry paper using straightforward translucent or tinted brushes.

Of the more conventional programs, *Studio 32* and *Studio 8* are the only two with dedicated watercolour brush effects, which work well within limits, as you can see from the Hill Top illustration (page 34) and the 'Getting your feet wet' tutorial box (starting on page 32). In *Studio 8*, the usefulness of this effect really depends on the shades you have available in the 256-colour palette. The program also offers little control over the degree of transparency,



This is the original Puppet image which was used (courtesy of Rakusen Photographic in Leeds) for both the *Gallery Effects* and the *Paint Alchemy* trials.



*Gallery Effects* enables you to vary the level of the brush detail and depth of shading, which produces some dramatic variations in the image. The Preview window enables you to carry out any number of tests before applying the full effect. (In operation, this can take ten minutes or more, depending on the image size.)

with just low, medium and high tint settings.

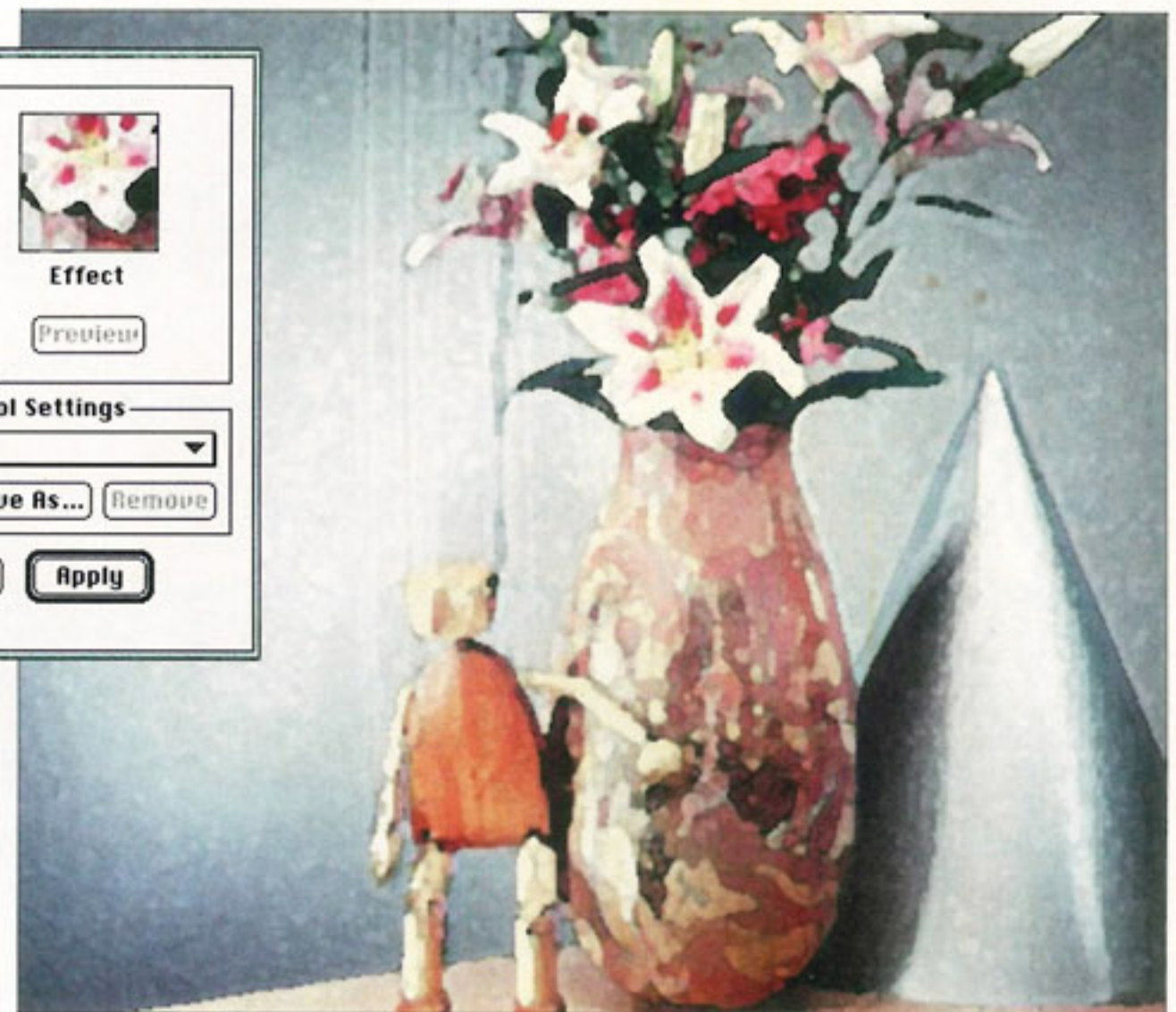
In *Studio 32*, however, the Tint Level palette affects the Watercolour brush, giving you quite a lot of control over the look of the marks. Without a wet layer there can be no real diffusion, but the soft edge of both the watercolour effect and anti-aliased brush means that some wet-on-wet effects can be painted directly.

*Photoshop* and *ColorIt* are perhaps the next best options, because they both have a Finger Painting function as part of the Smudge (Finger) tool. This isn't particularly close to true watercolour, though, mainly because the surface gets moved around so much – it's more like oil painting, really. Both of these programs also have soft-edged or anti-aliased paint brushes and variable transparency, so some sort of wet-paper-like blending can be achieved, although it's not very convincing.

*BrushStrokes* can just about manage a soft-edged brush mark and transparent painting, and it also has a so-called artist's brush, but to be honest the tools aren't very effective for 'wet' watercolour simulation.

*SuperPaint* has no soft-edged brushes at all. All of the programs with transparency and either anti-aliased or soft-edge brushes can use white as a colour, and this offers a degree of pure water erasing. Their relative effectiveness is similar to that of the other effects.

When it comes to surface textures, however,



Aldus's *Gallery Effects* Plug-in for *Photoshop* (and for other programs which support the plug-in format) includes a good Watercolour Effect. In this case, the whole image is affected by the filter, though you can work on small selections if you prefer.

the situation reverses a little. *Photoshop* and *ColorIt* both have an 8-bit mask layer which enables you to use very convincing textures. *Studio 8*, *Studio 32* and all of the other non-Natural Media programs, on the other hand, only have a 1-bit mask, so although a textured mask can be used, the surface texture is limited to a sort of textured pattern which is painted on in place of a colour. It's a poor substitute for the real thing.

Finally, perhaps we should ask the question: why use a computer to produce watercolour effects? Isn't this aspect of the artistic repertoire the last refuge from technology and automation? Maybe so, but the visual appeal of watercolour is not just the province of fine art. Many designers employ the transparency and spontaneity of the medium to convey their creative ideas. Architects, in particular, work on a large scale within the landscape. So, as well as representing the setting, they need to use the subtle nuances of watercolour to reproduce the type of effects that light, shade, ageing and weather have on both man-made and natural materials alike. If we assume that designers are increasingly using an electronic medium – which is certainly a fair assumption – they will need to employ the techniques of watercolour in their work.

Brian Larkman

## WHERE CAN YOU GET THEM?

■ Claris' *BrushStrokes 1.0* costs £52.88. Contact Claris on 081 756 0101.

■ Fractal Design's *Sketcher 1.0* costs £81.08. Contact Letraset on 071 928 3411.

■ Fractal Design's *Dabblers* costs £88.13. Contact Letraset on 071 928 3411.

■ Xaos's *Paint Alchemy* costs £92.83. Contact Principal Distribution on 0706 831831.

■ Fractal Design's *Painter X2* costs £116.33. Contact Letraset on 071 928 3411.

■ MicroFrontier's *ColorIt! 2.0.1* costs £116.33. Contact Softline on 081 401 1234.

■ Kai's *Power Tools 2.0* costs £175.08. Contact Principal Distribution on 0706 831831.

■ Aldus' *Gallery Effects 1, 2, & 3* cost £176.25 each. Contact Aldus on 031 220 4747.

■ Aldus' *SuperPaint 3.5* costs £229.13. Contact Aldus on 031 220 4747.

■ *Studio 8* costs £233.83. Contact Electronic Arts on 0753 549442.

■ Fractal Design's *Painter 2.0* costs £381.88. Contact Letraset on 071 928 3411.

■ *Studio 32* costs £587.50. Contact Electronic Arts on 0753 549442.

■ Adobe's *Photoshop 2.5* costs £851.88. Contact Principal Distribution on 0706 831831.

■ *PixelPaintPro* is currently unavailable. However, a new version is on its way. For details on its price and release date, contact Pixel Resources (US) on 0101 404 449 4947.

# Graphic details

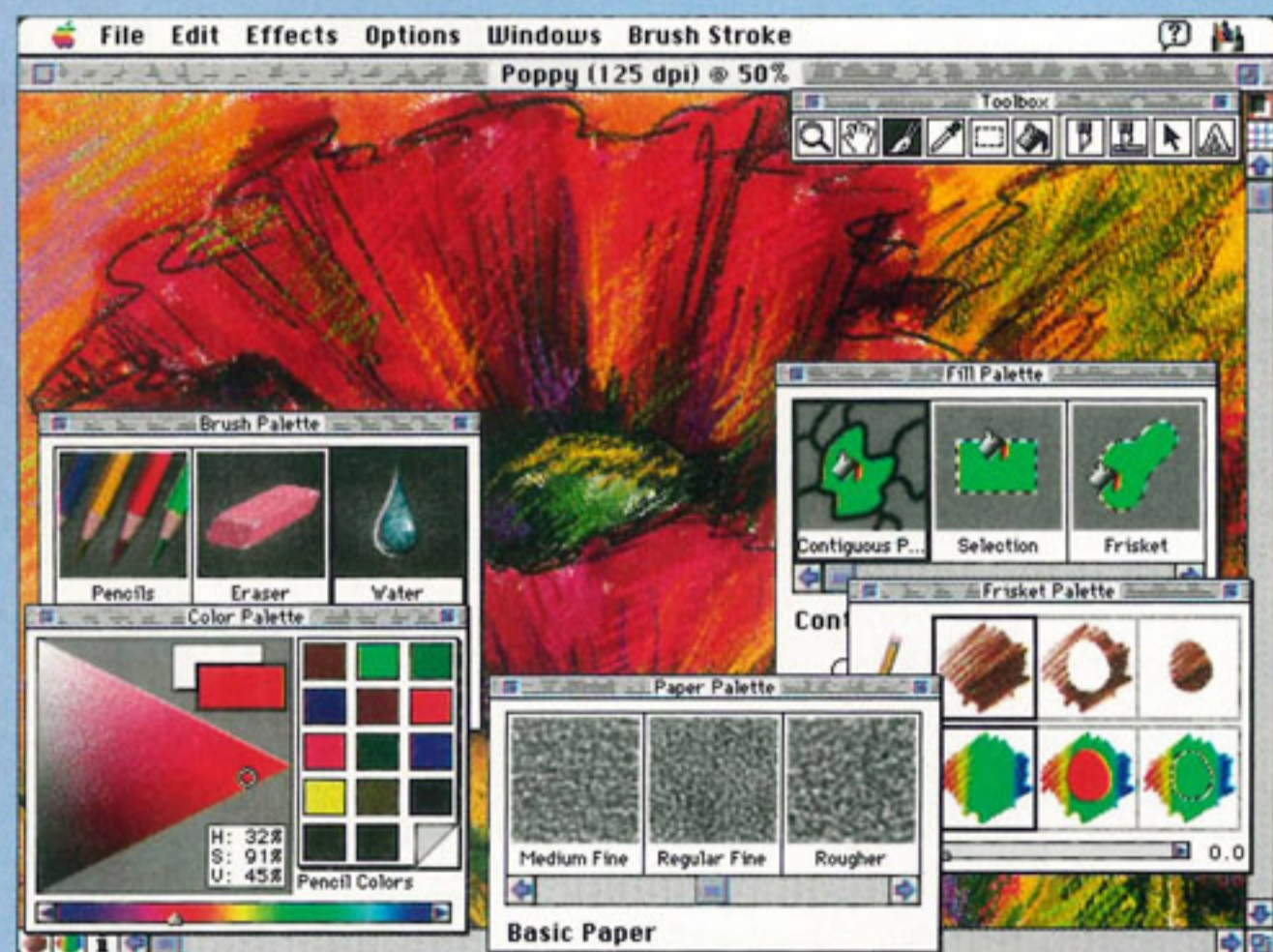
Baffled by the range of graphics software available? Let MACFORMAT's Gordon Druce and Alex Summersby be your guides through the maze...

## PAINT PROGRAMS

Paint programs are those that create bitmap or pixel-based graphics – that is, they define an image in terms of areas of colour. Basic paint programs start at around £100 plus, for say *ColorIt* or *BrushStrokes*, two serious entry-level programs. The excellent new *Dabbl*er is under £100 (see the review on page 46), and Fractal's *Sketcher* at £69 is ideal if you only need to work in greyscales. More advanced paint packages swing in over £400 for *Studio 32* and almost £600 for *PixelPaintPro*, but these are beginning to show their age (though *PixelPaintPro* is about to be re-vamped). Pick of the bunch for 'natural media' work has to be Fractal Design's *Painter 2*. Its 'naturalistic' painting tools are a joy to use and its support for pressure-sensitive graphics tablets is second to none – all at a price of just £325. The only down side is that it can be a bit memory-hungry and some of the tools are a little on the slow side. But if you want more effects and features, you can add on a nifty extension in the form of *Painter X2*.

What about budget options? If you fancy the shareware route, track down *ColourPaint*, *MattColour* or *Lightning Paint* – these offer a good start, for around \$10 or \$12. Cheap commercial programs include *Expert Colour Paint*, *PaintIt* and *Colour MacCheese*. One of these will set you back between £35 and £60 or so, and all will give you hours of fun... while you save up for *Painter 2*!

- *BrushStrokes v1.0* £105 from Frontline
- *ColorIt v2.0.1* £195 from Softline
- *Colour MacCheese Ev2.0.9* £66 from Softline
- *Dabbl*er v1.0 £88 from Letraset
- *Expert Colour Paint v1.0* £50 from Expert
- *KidPix 2* and *KidPix Fun Pack* £TBA from Electronic Arts
- *MacPaint v2.0* £95 from Claris
- *Painter 2* £325 from Letraset
- *Painter X2* £99 from Letraset
- *PaintIt* £46 from Softline
- *PixelPaintPro v2.0* £595 from Principal or Frontline
- *Sketcher* £69 from Letraset
- *Studio 32 v1.2* £426 from Principal

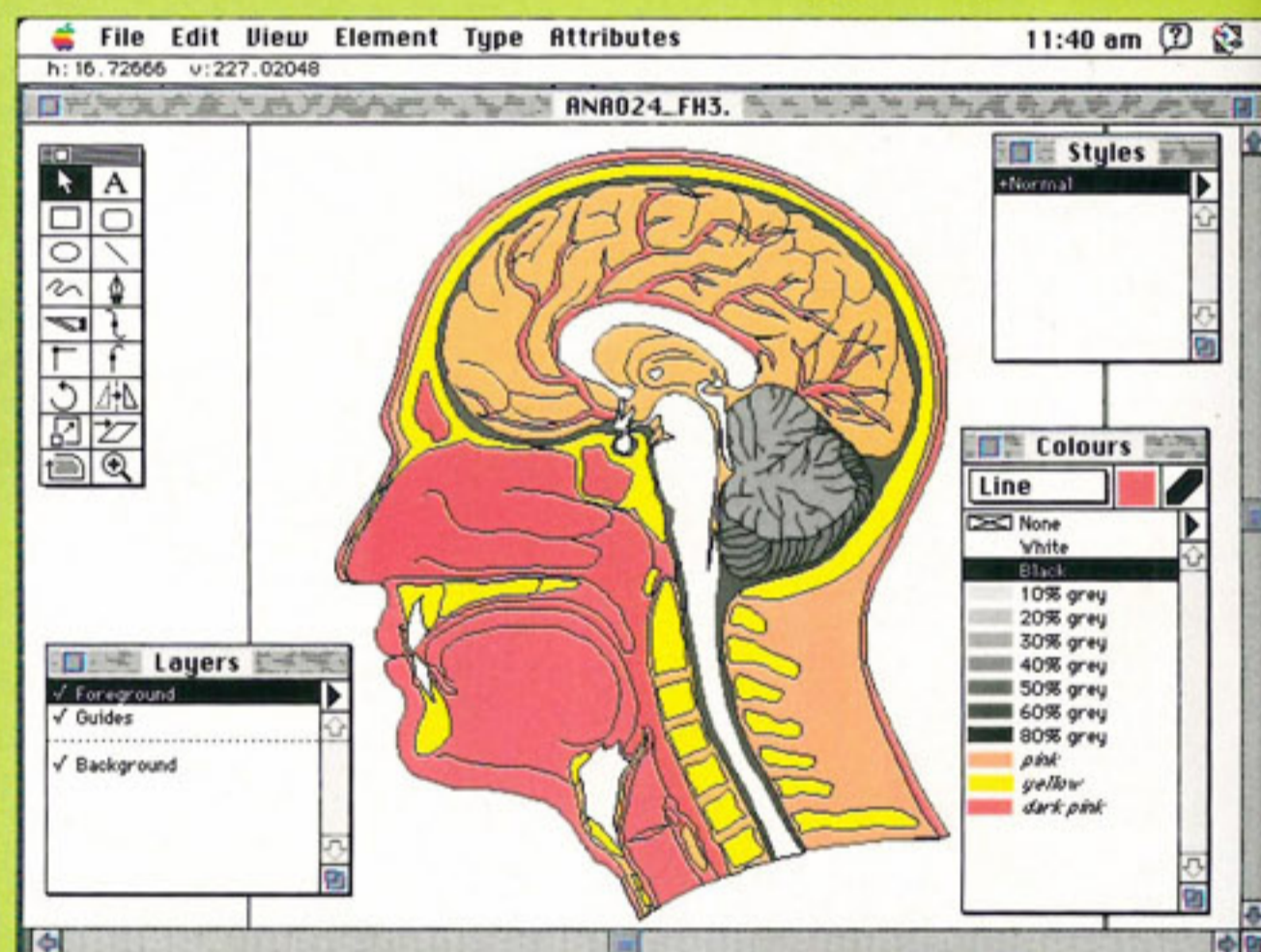


Fractal's *Painter* has a wonderful variety of tools to produce natural effects and designs.

## DRAWING PROGRAMS

Drawing programs are those which are 'object-orientated'. That is, they do not define a line (say) pixel-by-pixel but instead save the instructions for drawing it. This means better output on PostScript printers, and the drawing can be re-sized with no loss of detail. Aldus *FreeHand* and Adobe *Illustrator* have become the de-facto standards in this field. There was a time when *Illustrator* was considered the friendlier of the two, but these days they're much of a much-

for the well-heeled enthusiast or a professional Mac artist or designer. There are many good alternatives like *IntelliDraw* from Aldus at around £149 and the slightly more expensive *CA-CricketDraw* at £225. Of the two, *IntelliDraw* probably has the edge – an ideal choice for a first-time user. *MacDraw Pro* is a bit more pricey at £325. The original *MacDraw* was the first object-oriented drawing program, and its latest incarnation is still a solid and dependable drawing package. It includes



*FreeHand* provides advanced drawing and text tools to produce graphics and posters.

ness and each has its champions. Take a good look at the features they offer, then try going down to your local computer store and getting them to demo both programs – or better still, spend a little time working at a machine with both programs. Now that Adobe and Aldus have announced that they are merging (see News, MACFORMAT 12), it's anyone's guess how long both programs will remain available, but support for both is sure to continue for a long time.

At around the £500 mark, these programs are really only

many neat colour features and can also double-up as a presentation tool.

At the shareware end of things a program called *AppleDraw* is great and will get you off to a flying start.

- *Adobe Illustrator v5.5* £564 from Adobe
- *Aldus FreeHand* £450 from Principal and others
- *Aldus IntelliDraw* £149 from Aldus
- *CA-CricketDraw v3.0* £225 from Frontline
- *MacDraw Pro v1.5* £325 from Claris

## HYBRID PAINT/DRAW PROGRAMS

Part paint package, part drawing program, these 'hybrid' programs are the convertibles of the graphics world. They enable you to switch simply from object-orientated graphics to bitmap art or vice versa – and they're cheaper than buying two specialist programs. At the high-end you have *Canvas 3.5* (about £295). This can be tricky to learn, but it creates excellent paint, draw and PostScript graphics and includes a few neat features to boot.

At the budget end, you've got *Aldus SuperPaint 3.5* (£195), which is 8-bit ('full-colour' is 24-bit) and needs some work in the type-handling department, but is still good value. *UltraPaint* is a good alternative at £149. Even better value is

*Master Colour*, with 24-bit colour paint and draw facilities for only £130; if mono is all you need, check out its little brother *Master Paint* – a snip at just £65.

If you already have separate paint and drawing packages, you could try *Streamline v3.0* (£185). It's a great little program specially for converting bitmap images to PostScript!

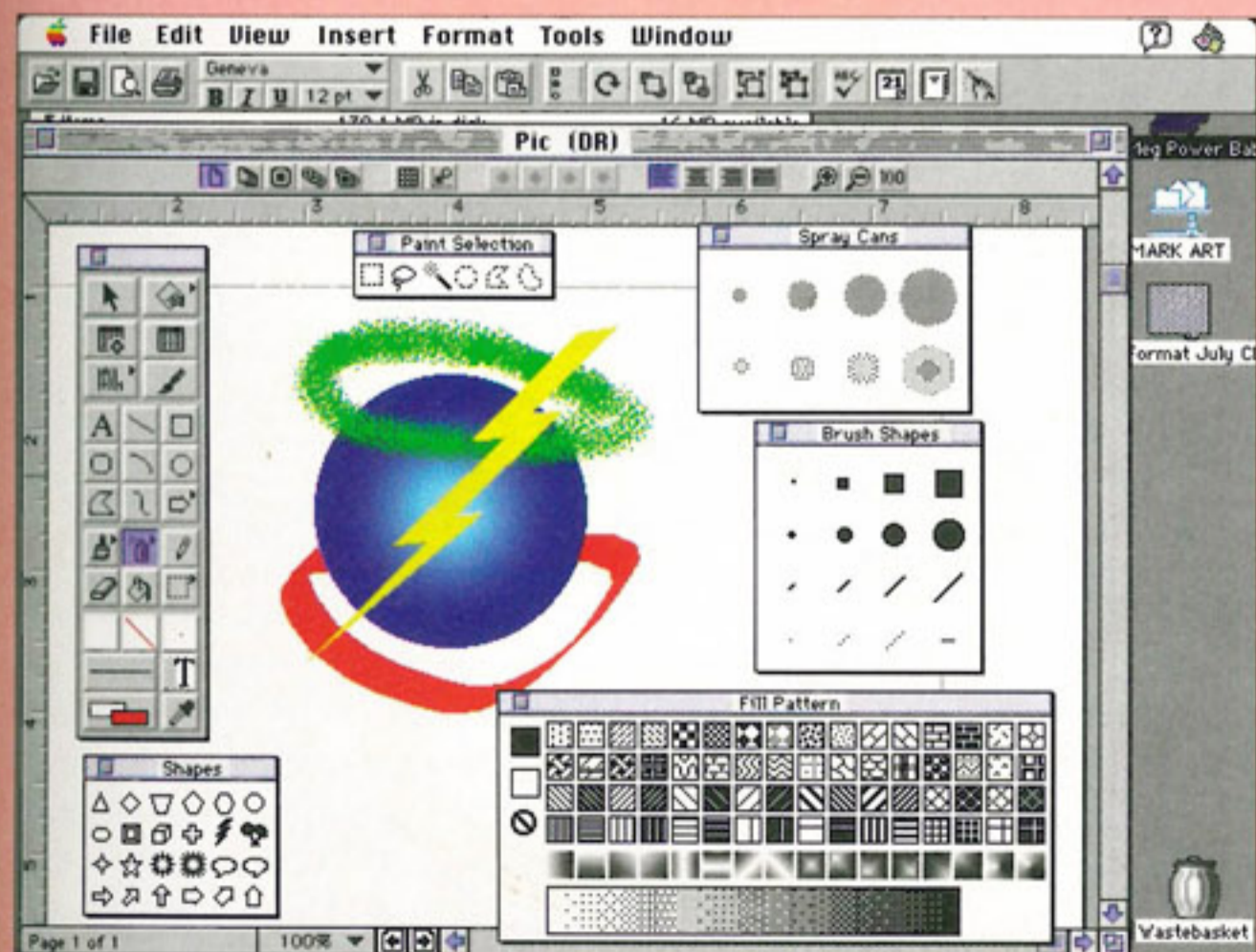
- *Adobe Streamline v3.0* £185 from Principal
- *Aldus SuperPaint v3.5* £195 from Principal
- *Canvas 3.5* £295 from Principal
- *Master Colour* £130 from Softline
- *Master Paint* £65 from Softline
- *UltraPaint* £149 from Principal

## GETTING THE WORKS

If you're considering a 'hybrid' package, why not go the whole hog and try one of the 'Works' packages? As well as paint and drawing functions, you'll also get word processing, spreadsheets, charting, databases and communications features, all in one inter-related bundle. Until recently, *ClarisWorks* and *GreatWorks* had the edge, with a top range of drawing and paint features. *WordPerfect Works* came next, with *Microsoft Works* lagging behind because it lacked any paint functions (see MACFORMAT 10). Now, however, *Microsoft Works v4* has caught

up, with a competitive range of paint tools, gradients and transparency effects (see page 78 for the full review). You wouldn't choose one of these solely for its drawing or painting, but if you like the Swiss army knife approach you might find one of these fits the bill.

- *ClarisWorks v2.1* £195 from Claris
- *GreatWorks* £116 from Symantec
- *Microsoft Works v4.0* £129 from Microsoft
- *WordPerfect Works* £182 from WordPerfect



Microsoft Works 4.0 now offers a range of paint and drawing tools to match the best.

## IMAGE-EDITING &amp; RETOUCHING

When it comes to image-retouching and image-editing on the Mac, one program is universally acclaimed as king: *Photoshop* from Adobe, the people who invented PostScript. It will set you back a cool £725, but its list of features and functions is extraordinary, and what it can do with images really has to be seen to be appreciated. Plus there's a range of 'plug-ins' (also supported by some other graphics programs) which add still more filters and effects. If

image editor from Electronics for Imaging, the company behind the superlative colour-management system incorporated into *QuarkXPress 3.2*. If you only need a greyscale package, try *Aldus Digital Darkroom* at £325 or *Letraset's ImageStudio*. *PhotoFlash* is Apple's own offering at just £150, but even better value are the excellent shareware alternatives *Pico* (which works in 32-bit colour) and *NIH Image* (which was developed by the US National Institute of Health for processing



Photoshop is the professional's choice, with a PowerMac native version 3.0 real soon.

you aspire to professional graphic design and image-processing, then *Photoshop* is the industry standard.

However, if you don't have a professional need for such a powerful program (or deep enough pockets!), there are a number of excellent budget options. A popular choice is *ColorIt 2.0*, sometimes unfairly called 'the poor man's *Photoshop*'. At only £195, *ColorIt* can perform many of the tasks that *Photoshop* can, at a fraction of the cost. At around £400 you have the powerful *ColorStudio* from Letraset or Caere's *Image Assistant*. *Cachet* is a colour

brain-scans and the like, and is a truly brilliant graphics-manipulation program in its own right).

- *Adobe Photoshop* £725 from Principal
- *Aldus Digital Darkroom v2.0* £325 from Principal
- *Cachet* £495 from Computers Unlimited
- *ColorIt 2.0* £195 from Softline
- *ColorStudio v1.5* £395 from Principal
- *Image Assistant v 1.1* £449 from Principal
- *ImageStudio v1.7* £195 from Principal
- *PhotoFlash* £150 from Apple

## WRONG?

This guide is based on the practical experience of working designers. With so many Mac graphics programs available, and so many new ones appearing regularly, we may have neglected your favourite one or

even praised what you consider a horror. If you disagree, have something to add, or just want to let the world know about the art and graphics programs you prefer, write and let us know. The address is: Everyone's A Critic, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

## CAD &amp; 3D GRAPHICS

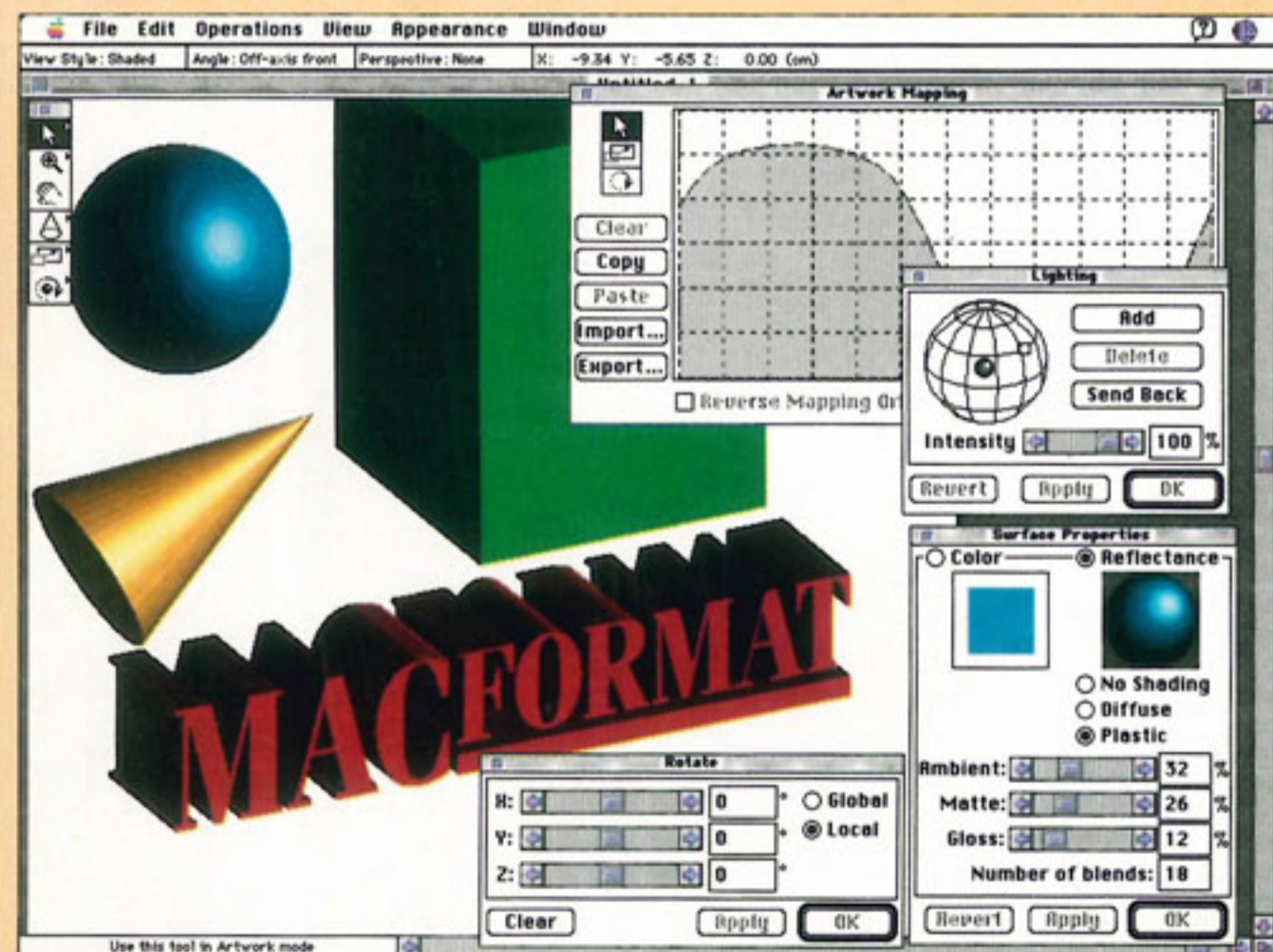
3D and Computer Aided Design programs, as the terms suggest, are mainly used by architects, engineers and packaging designers. Programs like Ray Dream's *AddDepth* (£139) and Adobe *Dimensions* (£160) have built a bridge between the 2D artists of the DTP world and the land of 3D art and illustration. Because they share many of the same tools, these programs are a wise choice if you are used to drawing programs like *FreeHand* and *Illustrator* but are unfamiliar with working in 3D. Also worth a look is *Swivel 3D* at £340. If you need to render type in 3D, have a look at Pixar *Typestry* – the £200 price tag might seem high for a program that just renders type, but you get some very powerful effects for the money.

Budget CAD starts with programs like *MacPlot* (£129), the charmingly-named *Generic CAD* (£395) or *Claris CAD* (£675). That may not sound like a budget price, but Computer Aided Design is a specialist field and CAD software can be hugely expensive – programs like *ArchiCAD* and *AutoCAD* cost around £3,000 and more. *PowerDraw* (£675) is a more modest CAD program which uses plug-ins to add extra features but works only in 2D.

3D modelling packages start at around £400 for Ray Dream *Designer* (see MACFORMAT 14 for the full review) and Pixar's *MacRenderMan*. These professional packages are still easy enough for the novice engineer or product designer. The top-

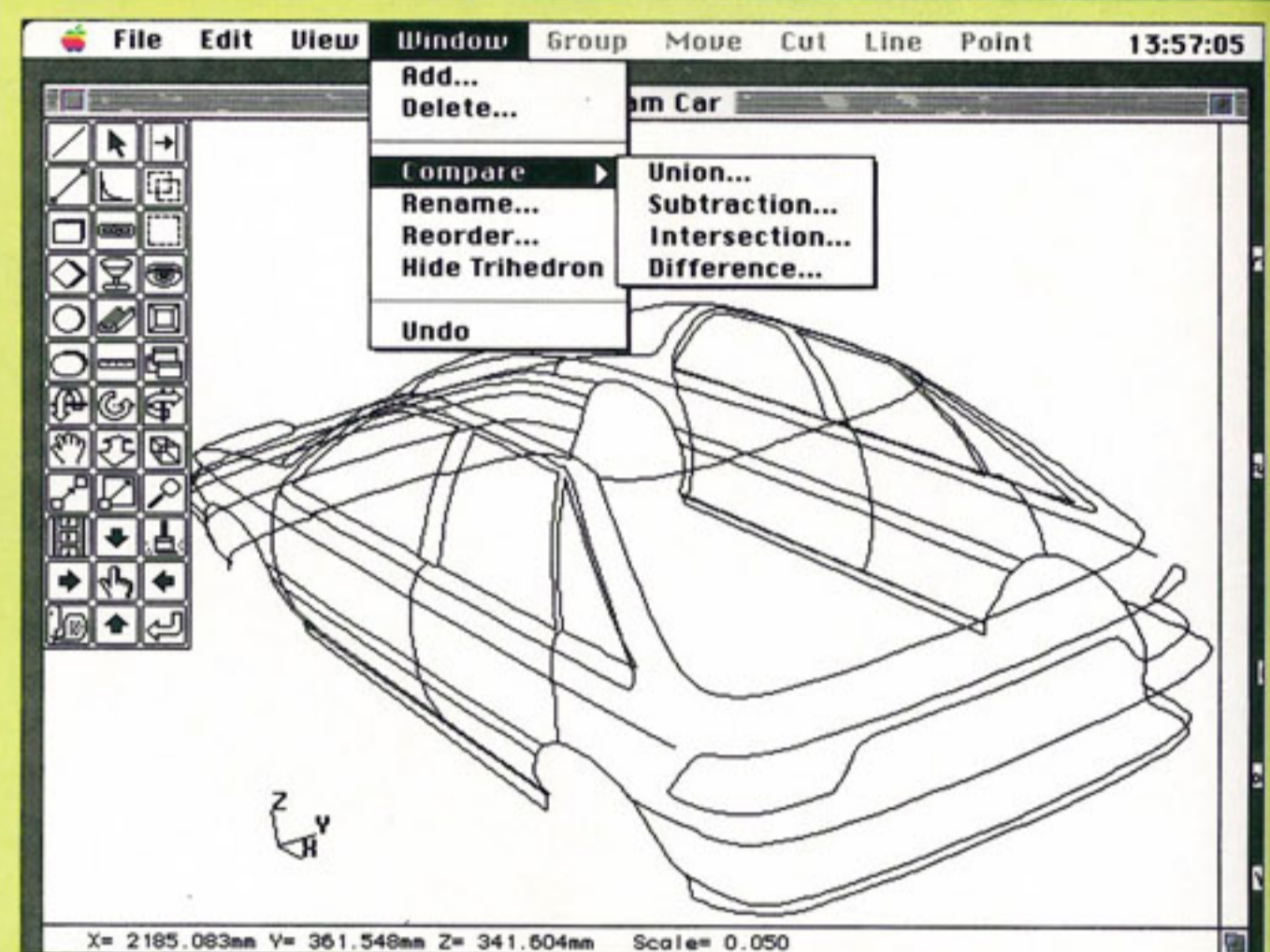
line 3D modelling packages also offer animation and ray-tracing, like *StrataVision 3D* for £680 and *Strata StudioPro* (£1,035), which includes photo-realistic rendering. Also around this price are the powerful *Infini-D* (£725) and *Macromedia Three-D* (£1,199). However, at the shareware (or even freeware) end of things, there's a great little ray-tracing program called *Rays* and a very fully featured CAD package called *MacConcept*.

- *AddDepth* £139 from Amtech
- *Adobe Dimensions* £160 from Principal
- *ArchiCAD* £3,495 from Computers Unlimited
- *AutoCAD* £2,800 from Autodesk
- *Claris CAD v2.1* £675 from Claris
- *Generic CAD* £395 from Merisel
- *Infini-D v2.5.1* £725 from Gomark
- *MacPlot* £129 from Principal
- *MacRenderMan v1.1* £419 from Computers Unlimited
- *Macromedia Three-D* £1,199 from Computers Unlimited
- *Pixar Typestry v1.1* £199 from Computers Unlimited
- *PowerDraw v4.0* £675 from PRD
- *Ray Dream Designer v3.0* £429 (£195 educational) from Amtech
- *Strata StudioPro* £1,035 from Gomark
- *StrataVision 3D* £680 from Gomark
- *Swivel 3D v2.1* £340 from Gomark



*Dimensions* enables you to enter the third dimension, but be prepared for learning.

## HANDY SHAREWARE UTILITIES



*MacConcept* is ideal if you are planning to start a production line in your garage.

A program like *NIH Image* could compete with many commercial packages, and yet it is released as shareware, at a fraction of the cost you'd expect to pay for comparable programs. Many programs, however, are

shareware because they are modest utilities designed for a specific task – the sort of thing you'd be unlikely to buy a commercial package to tackle. Here's a selection in addition to those already mentioned.

- Camera** Screen grabber utility
- ColorKnit** For designing patterns; of use for fashion and textile design
- DG254** DepthGauge – indicates bits per pixel colour depth
- Fractal** Fractal landscape generator
- Imagery** Imagery graphics conversion
- JPEG view30** JPEG format file viewer
- PhotoSizer 1.2 and Proportions** Of use to graphic designers and repro houses for sizing up pictures for design and page layout.
- Picdecomp** JPEG decompressor/viewer
- Quickgif** New GIF File displayer
- Stereogram Maker and 3D dots** Random dot stereogram maker
- Superconvert.s** Convert TIFF files to EPS

There are hundreds of shareware programs available. If you have found (or written!) one that's particularly useful for graphics work, send us a copy and we'll tell the 35,000-plus MACFORMAT readers about it, and possibly put it on a cover disk. The address is: Share and share alike, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

## WHERE TO GET IT

Adobe: .....081 547 1900  
 Aldus UK: .....081 568 8868  
 Amtech: .....0202 476977  
 Apple: .....081 569 1199  
 Autodesk: .....0483 303322  
 Claris: .....081 756 0101  
 Computers Unlimited: .....081 200 8282  
 Electronic Arts: ....0753 549442  
 Expert: .....081 551 2797  
 Frontline: .....0256 841841  
 Gomark: .....071 731 7930  
 Letraset: .....071 928 3411  
 Merisel: .....081 490 9000

Microsoft: .....0734 270001  
 PRD: .....0902 755293  
 Principal: .....0706 832000  
 Softline: .....081 401 1234  
 Symantec: .....0628 592320  
 WordPerfect: .....0932 850505

■ Ask your local dealer too about the program you're interested in, and check the adverts in every issue of MACFORMAT!

■ For shareware, try the shareware libraries which advertise in MACFORMAT, or user groups (see page 107). If you can't find the shareware you want, drop us a line and we'll try to put it on a cover disk or CD-ROM.

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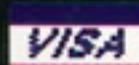
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# Across the board

**W**ith a graphics tablet, creating graphics on your Mac is as easy as drawing on a piece of paper. Graphic tablets are at their most useful with art programs that recognise pressure-sensitive input. Depending on the program and tools used, varying the pressure can have effects such as changing the width of a line or its density.

You may be surprised to know that the pen doesn't need to touch the surface of the tablet in order to move the pointer, but merely be within about 5mm of the surface. This is because the pen contains small batteries to power a transmitter, locating where the pen is and displaying the pointer at the same location on the screen. The tip of the pen acts as the mouse button, so double-clicking is a simple case of tapping the pen twice on the tablet.

As well as drawing freehand, the tablet can be used to trace a picture, and because the pen only needs to be within 5mm of the tablet surface, you can put a thick magazine on the tablet and still trace normally. If an accurate trace is required, all the tablets offer a puck. This is a mouse-like device with crosshairs at the top often used for CAD. A puck costs around £100 from each company, although Wacom includes it with its A4 tablet, making it good value. Pucks are available with either 4 or 16 programmable buttons that can be set up to duplicate any key press.

There comes a time when you have to ask questions about size and its importance. A4 tablets are the ideal choice for high quality work, but they have the disadvantages of bulk

**Creating graphics on the Mac is a piece of cake with a graphics tablet. We put three by Wacom, Summagraphics and CalComp to the test.**

and the area that they require on your desk. Many people will be perfectly happy with an A5 tablet, which requires less arm movement and is therefore quicker, and will fit happily in your lap, which is a very comfortable position to draw. So how do the three compare?

## Tablets

The Wacom and SummaSketch tablets are remarkably similar in weight and wedge-like shape, which is designed to slope gently when laid on a desk, and they both have removable feet that increase the angle if desired. It would be fair to say that they are bulky in comparison to the DrawingSlate, which is a flat board 5mm thick and weighs less than half as much as the other two. The DrawingSlate lies flat on the desk, unless propped up by a book, but it is the only one that can be stored quickly on its side next to the computer, out of the way. I found that the light weight of the DrawingSlate meant that it rested comfortably in my lap.

## Pens

As you will spend a lot of time holding the pen, ergonomic design is very important. The Summagraphics and CalComp pens have the batteries at the top end, making them slightly



Mark, our art editor, produced this picture using *Photoshop* and the DrawingSlate in under an hour. Not bad eh?

unwieldy, whereas the cylindrical Wacom pen has the batteries toward the tip, giving it a better centre of gravity. It is quite thin, however, and while that was fine for my small fingers, people with large hands may find it fiddly and may prefer the CalComp pen, which is also round but somewhat larger. Summagraphics goes for a totally different approach, offer-

**WIN  
A CALCOMP  
DRAWINGSLATE  
- SEE PAGE  
52**

## WACOM UD RANGE

### Pros:

- Good build quality.
- Best software.
- Well weighted pen.
- Most accurate of the three.
- Available in all sizes up to 4' x 3'!

### Cons:

- The most expensive.
- One button pen.
- External power supply.

## WACOM UD RANGE

Prices: A5 £470; A4 £700 (with puck); A3 £1,050; A2 £2,199; A1 £4,200; A0 £5,300.  
For more details contact Computers Unlimited on 081 200 8282.

**Ease of use**  
No problems at all. **85%**

**Features**  
Software offers best range of features. **90%**

**Value for money**  
Quality at a reasonable price. **90%**

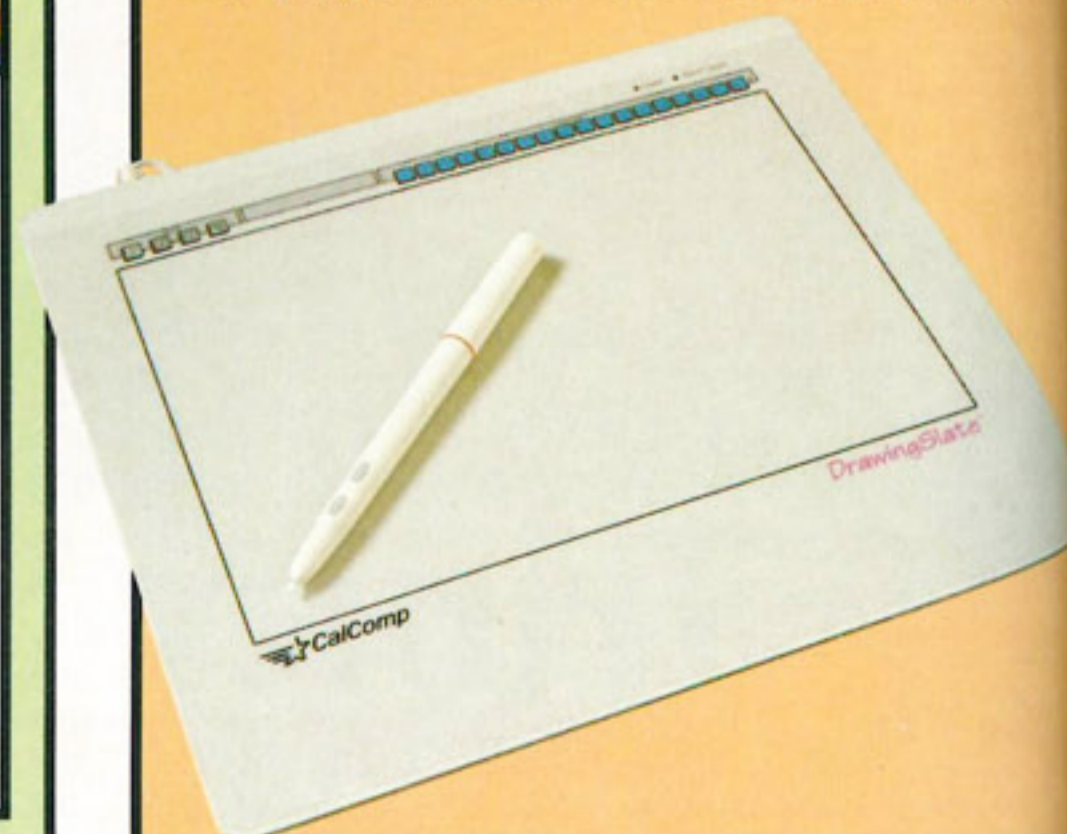
**MACFORMAT RATING** **92%**



## CALCOMP

### Pros:

- Lightweight and thin.
- Fully programmable two button pen.
- One small cable.
- No external power supply.
- 18 programmable buttons on the tablet.



ing a triangular pen which I found cumbersome and less flowing.

All the pens offer programmable buttons on the shaft that can be configured using the software. CalComp's pen leads the field with two buttons, both of which can be set for any function. However, the buttons are quite low down the barrel and interfere with the way you would normally hold a pen, as you are wary of accidentally pressing them. The Wacom pen has one fully programmable button which is moved higher up the barrel to a more convenient location so that you don't accidentally press it. Summagraphics' pen has two buttons, although the top one is for decoration as it doesn't do anything, and the bottom button can only be configured to act as the mouse button (which the tip does anyway).

## Cabling

Both the DrawingSlate and SummaSketch tablets plug into the ADB keyboard port, but there the similarity ends. While the DrawingSlate has one small, unobtrusive lead, SummaSketch is the choice for people with a cable fetish. It takes three cumbersome leads and a large box to do the same job, and is genuinely intrusive. The Wacom also uses a single lead but, like SummaSketch, it requires an external power supply which uses up another precious power socket. With all my peripherals, I had to plug a two-way adaptor into my three-way adaptor on the four-way extension cable. Luckily my desk is under the fire alarm. On the other hand the DrawingSlate takes its power directly from the Mac, which is one less cable to trip over and one more free power socket.

## Speed

Two things affect the speed of a tablet: the port used and an external power supply. The serial port is faster than the ADB port and an external power supply should also help. Therefore

## ALTERED IMAGES

Tablets are often used to touch up and alter pictures already on screen, rather than actually creating them from scratch. This is because when sketching with a pencil you look directly at both the pencil and the paper, whereas with a tablet you look at the screen but not the pen. This creates a disjointed feeling, and an alternative process would start with sketching an outline on to paper first using a pencil. You can then transfer that picture to the screen, where you can use the tablet to colour it.

To transfer a sketch to computer, you will need complementary hardware or software.

the Wacom should be faster than the DrawingSlate, with SummaSketch coming in between. In practice, this is correct but barely noticeable with perhaps just a 10% variation between tablets, although it is nearly impossible to measure drawing speed.

## Function keys

There you are, leaning back in your chair with the tablet in your lap, the pen in your right hand and a mug of warm tea in your left, when you realise with horror that you need to press **[delete]**. Function keys are buttons along the top of a tablet which can be programmed to perform any key presses just like buttons on a puck. This means that you can set up all your most commonly used keyboard commands, and you should only need to resort to the keyboard to type text in. CalComp leads the field with 18 buttons, Wacom has 12 and Summagraphics has, how can I put it, none.

## Software

All three graphics tablets are supplied with a Control Panel, which you use to set them up

The most obvious would be a scanner, which works like a photocopier but instead of printing to paper, it puts your image on to your computer screen.

You could also use Apple's new QuickTake 100 digital camera to photograph your picture and put it straight into your Mac. We will be reviewing the QuickTake in the next issue of MACFORMAT.

PhotoCD uses a regular camera, but instead of getting prints back from Boots you get a CD with your scanned snaps on it.

If you'd like to use a tablet but have all the artistic ability of a door, you could start with a clip art image, then touch it up or trace over it with a tablet.

and choose your options from. Wacom's is certainly the prettiest and most detailed, with every setting that a professional could possibly need. CalComp's Control Panel is much less glamorous, even though it does have nearly as many features, but bringing up the rear again is Summagraphics with what can only be described as a horrid piece of software that combines a lack of features with difficulty of use.

## The verdict

To run any of the three tablets, the only thing you'll require is a Mac - any Mac. Professional graphic artists may prefer the Wacom because it offers a greater range of features than the others. Home users may well favour the CalComp DrawingSlate as it is much lighter and easier to handle, although the pen is less sensitive than Wacom's. There is nothing wrong with the SummaSketch - indeed, it actually offers the greatest pressure sensitivity with 256 levels compared to Wacom's 120. In practice though, this is not very noticeable and although there is absolutely nothing wrong with it, there is nothing particularly great about it.

*Josef Morrell*

## DRAWINGSLATE

### Cons:

- Lays flat on a desk.
- Less pressure sensitive than other two.

## DRAWINGSLATE

Prices: A5 £470; A4 £580; A3 £815.  
For more details contact CalComp on 0734 320032.

### Ease of use

Lightweight, but the pen's not as comfortable as Wacom's.

**85%**

### Features

Greatest number of programmable buttons on tablet.

**85%**

### Value for money

The A4 and A3 represent particularly good value for money.

**91%**

### MACFORMAT RATING

**90%**

## SUMMAGRAPHICS FX

### Pros:

- Slightly cheaper A4 tablet.
- Triangular pen might suit some people.

### Cons:

- No programmable buttons on tablet or pen.
- Spaghetti cabling.
- Poor software.

## SUMMASKETCH

Prices: A4 £555; A3 £907.  
For more details contact Summagraphics on 0734 567115.

### Ease of use

Unfriendly software and a maze of cables.

**65%**

### Features

Nothing but the basics.

**65%**

### Value for money

Cheapest A4.

**75%**

### MACFORMAT RATING

**75%**



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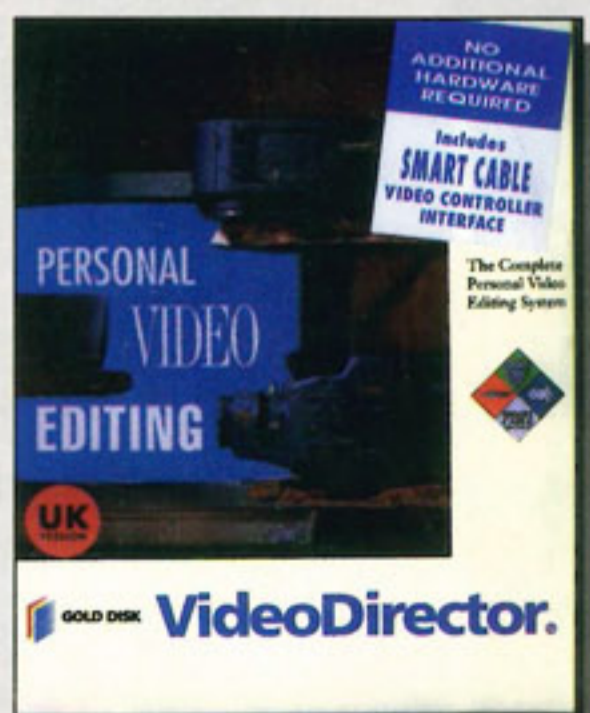
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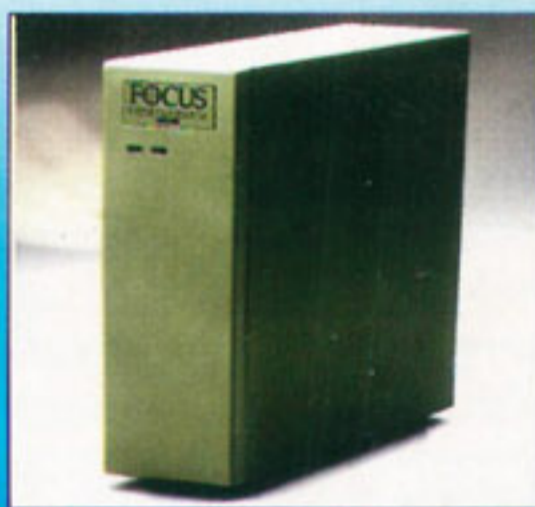
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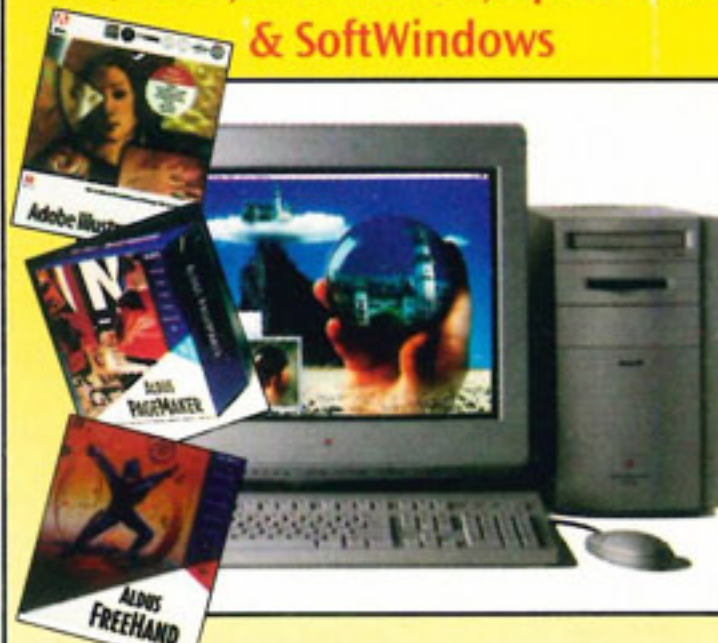
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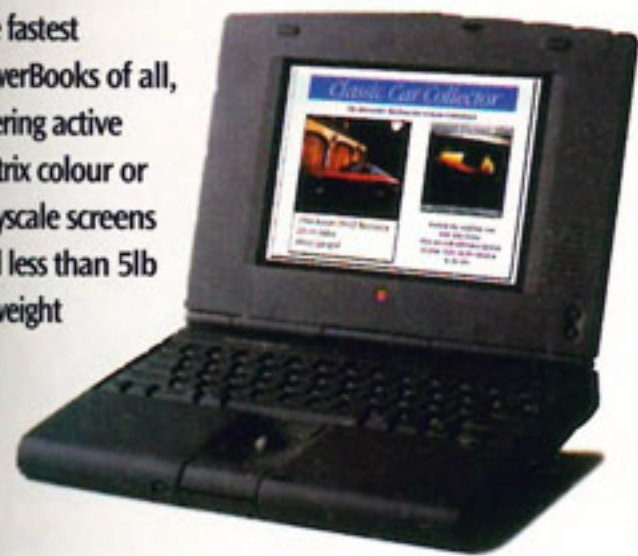
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# Dabbling in Natural Media

Fancy yourself as an artist? *Dabbler* offers a stunning simulation of natural painting and drawing on the desktop – and all at an affordable price.

The problem with a program like *Dabbler* is that it's so much fun to use, it's almost impossible to stop playing with it and get on with the job in hand. Even a boring task like drawing a simple chair is not as straightforward as it sounds. Oh no. The trouble is, *Dabbler* is so much fun that even drawing a boring chair is exciting.

*Dabbler* is a drastically cut down version of Fractal Design's *Painter* masterpiece which is strong on fun and ease-of-use, but perhaps a little weak on some of the media it provides. Can the 'fun' aspect of a program be enough to justify its purchase, though? Let's take a look...

The first thing that strikes you after launching *Dabbler* is how cute the interface looks. Below the usual Mac menu bar is a full-width, grained wooden panel with four drawer-fronts, each with a set of crisply drawn, smoothly



If you place a photographic scan on one page of the sketchbook with a blank page above it, you can produce a clone (by then selecting the **Clone** Icon in the Colours Drawer). Using this, it is possible to draw on the upper, plain, sheet with any tool. The colours used on this are drawn from the image on the sheet below, thereby transferring the main features of the image in the material and style of the marks made above.

drop-shadowed icons. You realise immediately that this is something out of the ordinary. Some computer professionals may think it's naff, but most designers will like it; visually oriented people usually like to work in attractive environments.

Of course, pretty environments can be very wasteful of space, and *Dabbler* – like *Painter* before it – is no exception. With all four drawer/tool-boxes open on a 14-inch monitor you only have a tiny area left to work in. However, the idea is to choose the tools you need for a particular job, drag them to the drawer-front in the order you need them, and then close the drawer. Up to six are accessible on each drawer-front at a time. This scheme works well until you realise you need to use an extra tool for a moment; when you choose it from the drawer, the program places it on the drawer-front at random, ruining your carefully positioned set. Ideally, you'd be able to save the drawer-front icon sets you'd created, so they could be brought back by a key-press or menu selection. Still, the system works fairly well as it is – so long as you are careful.

To use any drawer just click on its handle

## OPENING THE TOOLBOX



With all of the drawers open, there's little room for drawing. Normally, only the front faces of the drawers are visible, along with the selected tools, colours, paper etc. The Tools Drawer is the one you'll use the most. Notice the row of star icons for stencil and effects tools, the three red brush 'size' triangles, and the rotating white square with a red circle, used for rotating the drawing area for angled strokes.



You can start a new page simply by clicking on a blank thumbnail in this miniature sketchpad. No saving, opening or loading is required, unless you need a new pad. Pictures can be moved by dragging off to the 'pushpin' then back to a new page. Whole projects of sketches can be built up and stored easily in this natural way. It's just like using a real sketchbook. Brilliant.



Colour can be selected by using this brilliantly intuitive colour wheel, which is one of the best I've seen on any Mac program. A proper colour-mixing palette would be a welcome addition, but a page of the sketchpad can double as a palette, and the dropper can be used to select shades from it. Sound effects and sound volume are controlled, surprisingly enough, from the Sound Drawer.

and it slides out with an audible clunk to reveal more icons for the functions it contains. The main toolbox contains a wide range of implements including Pencils, Pens, Felt Pens, Erasers, Chalk, Crayons, Oil Paint, and True Airbrush; plus Stencils, Fill, Fade, Blur, wetting effects and a very efficient Liquid Brush smearing tool. None of these have the control or variety of similar tools in *Painter* (but let's face it, using *Painter* can be a daunting task, especially if you're only a casual dabbler). Gradient and colour-square palette sets, plus a beautifully intuitive colour wheel are found in the Color drawer, and you'll discover dozens of paper textures in the Paper drawer. As with the Tool Drawer, the current colour and paper selection remains on the front, so you can use them with the drawer closed. (See 'Opening the toolbox' for more details.)

Using the tools is completely natural, with realistic sound effects which, surprisingly, add to the experience rather than becoming irritating once the novelty has worn off, as one would expect. The icons are very informative and the materials react just like the real thing – even when you're using a mouse; with a pressure sensitive pen you can hardly believe it's really a computer you're using.

All drawing actions can be recorded as you make them, then played back later – ideal for a repetitive job or for recording tutorials. The package comes complete with a great set of ready-made, step-by-step tutorials based on some of the best drawing tutorials available, the Walter Foster 'How To Draw' series. This makes *Dabblor* ideal as part of an art educational system – and the best multimedia art education package so far!

Another excellent part of the system is the way the picture saving is handled. Each image is part of a 12 page sketchbook which retains whatever you paint. No saving or loading is required; just open a sketchbook and start painting. If necessary, pages can be torn off and pinned to a board, therefore changing the order of a pad (it would have been nice to be able to

move pictures to new pads in this way). Pages can also be tossed into the bin (with a satisfying crumpling noise). You can also change one page into tracing paper so that you can see the image on the page below. There's also a 'cloning' tool; this enables you to over-paint photos and other drawings with a medium of your choice.

There are some problems, however; after all, this is only version 1.0. Occasionally, even on a Quadra 650, selecting a new tool seems to take an age, and once or twice the screen became corrupted and the Mac had to be re-booted. In operation, the two main criticisms are the lack of a transparent watercolour brush and the limitation of just three fixed-size brushes; both could be easily overcome, and with luck they'll be improved in the next version.

At £88, *Dabblor* is aimed at the hobbyist's or kids' end of the market – although many professionals could do worse than to give this package a home. Unfortunately, however, while the software may be cheap, the overall cost can only be reckoned if you include 'extras' like a fast machine, large hard drive, extra memory (you need a 'real' 8Mb minimum – *RAM Doubler* is no use – not the 4Mb suggested by Letraset) and, if you want to make the most of *Dabblor*, you've really got to get a pressure sensitive tablet – it's not that cheap really.

*Dabblor* is an almost totally unique one-off. No other software really compares, although *Sketcher*, also from Fractal Design, is in the same price range. Like *Dabblor*, *Sketcher* is designed to work with less powerful machines by limiting the number of colours displayed. *Sketcher* works in 8 bits (256 levels) of grey; *Dabblor* works in



You can place a photographic scan on one page of the sketchbook with a blank page above it to trace the scan (by selecting **Trace** in the Sketchpad area of the Tools Drawer). This can be used as a guide to the picture above. Here, the composition of the scan was used, but colours and details were invented to suit the composition.

16 bits (65,000 levels) of colour. In most ways, though, *Sketcher* is more like *Painter* in operation. If you want to compare *Dabblor* with other Natural Media programs, check out part two of MACFORMAT's Natural Media series on page 32.

At first, *Dabblor* seems like a program for kids and complete novices. After a while, though, you realise that it's good enough for anyone to use – especially for sketching out ideas and roughs. It's just like using the real media – because the range is limited, you are forced to use your imagination to get an effect, rather than relying on tricks and gimmicks. The sketchpad system is especially useful, because it keeps a series of ideas together in an easily accessible form. With a little modification of toolbox operation and a few more tools, it would be unbeatable. In fact, for version 1.0, it's pretty irresistible as it is.

Brian Larkman

## DABBLER 1.0

Price: £88.

Requires: any Mac (except SE, Classic or PowerBook 100) with colour or greyscale monitor, System 6.0.5 or later, 32-bit Quickdraw and 4Mb RAM (bare minimum). For more details contact Letraset on 071 928 3411.

### Ease of use

Easier than the real thing – no dirty brushes!

95%

### Documentation

Full colour and the best tutorials of any paint program.

92%

### Features

Every material, but there's no watercolour and too few brushes. It's a lovely place to work, though.

89%

### Value for money

The best bits of *Painter* for a quarter of the price!

93%

### MACFORMAT RATING

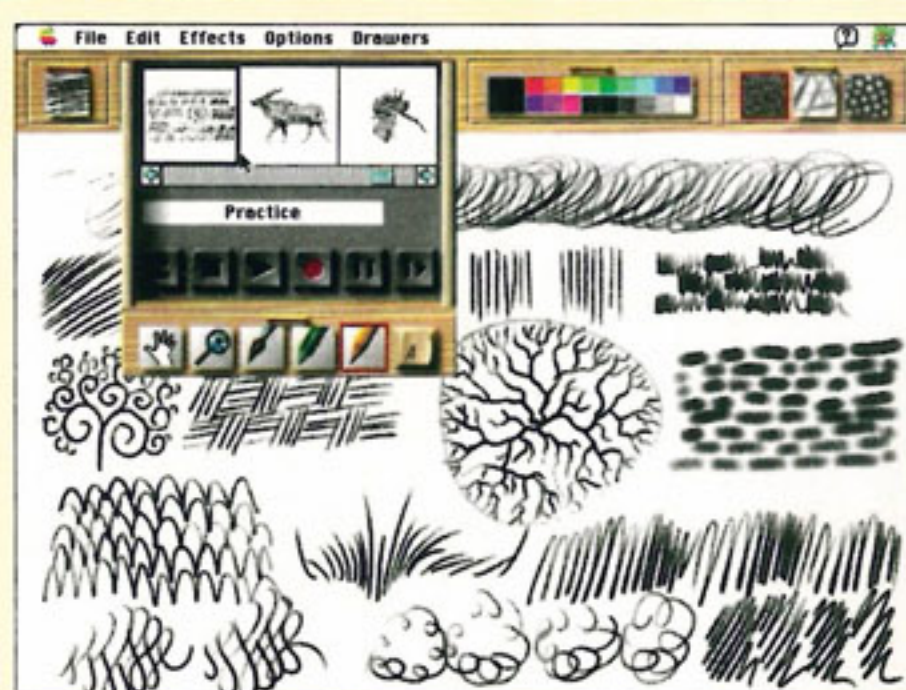
92%

## Where to get them

Fractal Design *Painter 2.0* costs £325. Fractal *Painter X2* costs £99. Fractal *Sketcher 1.0* costs £69. For more details contact Letraset on 071 928 3411.



The number of occasions on which you would want to use precisely specified typography in a sketchbook are going to be pretty few and far between. Which is fortunate, to say the least, because although *Dabblor* enables you to use any fonts stored in your system, the size control is limited to this slider and it lacks actual sizes. This means that only one line of text can be typed at a time.



As you work, all actions can be recorded to be played back later – an eerie experience at times. Unfortunately the recordings cannot be re-used with different tools, colours or resolutions as in *Painter*. However, the package comes complete with a great set of ready-made step-by-step tutorials based on the Walter Foster 'How To Draw' series. This could be the start of a new 'Action-Clip-Art' industry!

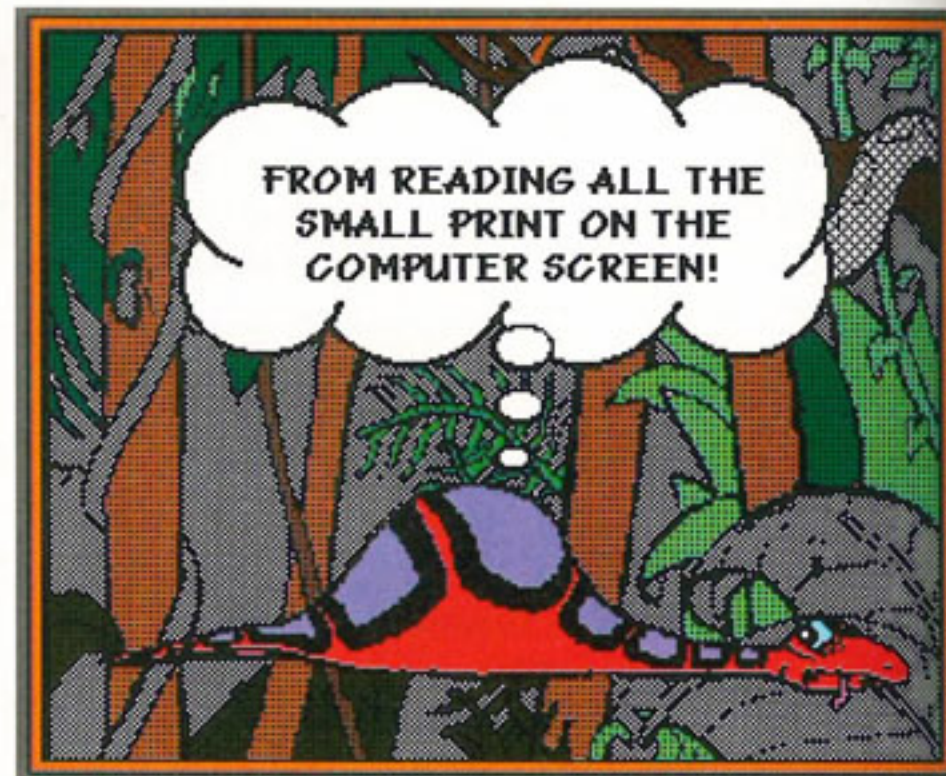
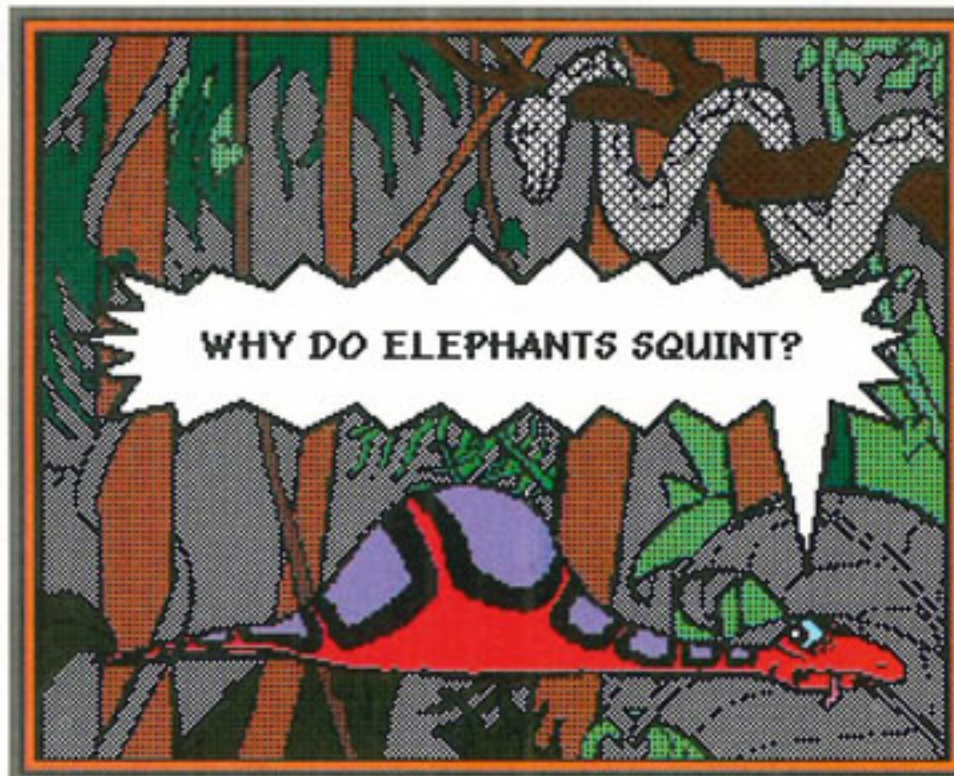
# The art of teaching

If there's one thing that kids love to do on a computer, it's draw – or rather scribble. Instant colour and the ability to correct mistakes make it appealing even to young children. If you plan to keep their attention for longer than the average innings of an England tail-end cricketer, though, there has to be something more – and that something is fun. *Kid Pix* succeeded in providing this, but now it has serious competition from *Fine Artist* – the sister program to Microsoft's *Creative Writer* (MACFORMAT 10: 90%). Aimed at the same 8 to 14 year old age group, it has an identical easy-to-use graphical interface with no pull-down menus – although there is a secret key combination which brings up some menus for adults.

The installation process is simple enough, even for an 8 year old – but let's be honest here, are you really going to let a child install a program on your Mac? I think not.

Right from the start, a character called McZee is on hand to offer genuinely useful help. He'll soon guide you to his house, which is divided into four floors, each of which represents a different part of the program. The heart of *Fine Artist* is the painting studio, where you can create your own pictures. Here you have a full range of brush sizes and shapes, as well as many more fun tools designed to draw railway tracks, roads, faces, trees, spiders' webs and

If you know a child who's desperate to draw on your Mac, get a graphics package quick – that, or risk finding crayon all over your monitor.



Producing cartoons is made very easy as Maggie leads you through the process step-by-step with guides that don't allow you to go wrong. The program will even suggest jokes, such as the one above, but I'm sure most children know better ones.

plenty more. Shapes like rectangles, squares, circles and triangles are a doddle, and there are even some more sophisticated tools such as pastels, crayons and chalk.

All the drawing is done on a bitmap layer.

So, if you draw a circle half covering a square, you can't move the circle out of the way to reveal the square underneath. It also means that all the pictures will print at a low resolution, whatever your printer type; still, considering the target audience consists of children, this isn't too critical.

The program also includes a sticker tool, which is basically a collection of cute clip art. Once your child has discovered this tool, you can leave him, her or it (?) alone for an hour, because it really is a huge amount of fun. Select one of the 100 or so stickers, then simply click to place it on your screen. The stickers are all well presented in a lovely cartoon style – some are even animated. So, within no time, your child will be happily absorbed watching dinosaurs romping across the screen. (Well, we certainly were.) The other great thing about the stickers is that although they are low resolution

## FINE ARTIST'S MAIN PAINTING SCREEN

**Sound Tool:** or should that be noise tool? Kids can really annoy you with this one.

**Stickers:** bound to be a favourite. These are clip art pictures, some of which are animated.

**Fill Tool:** colour in your picture. This has enough options to satisfy the most demanding child.

**Paint Tool:** draw lines, rectangles, circles, webs, train tracks, just about anything really.

**Palette:** click on one of these to select a colour for any of the tools.

**Text Tool:** with some really great special effects.

**Delete Tools:** vacuum up your mistakes.

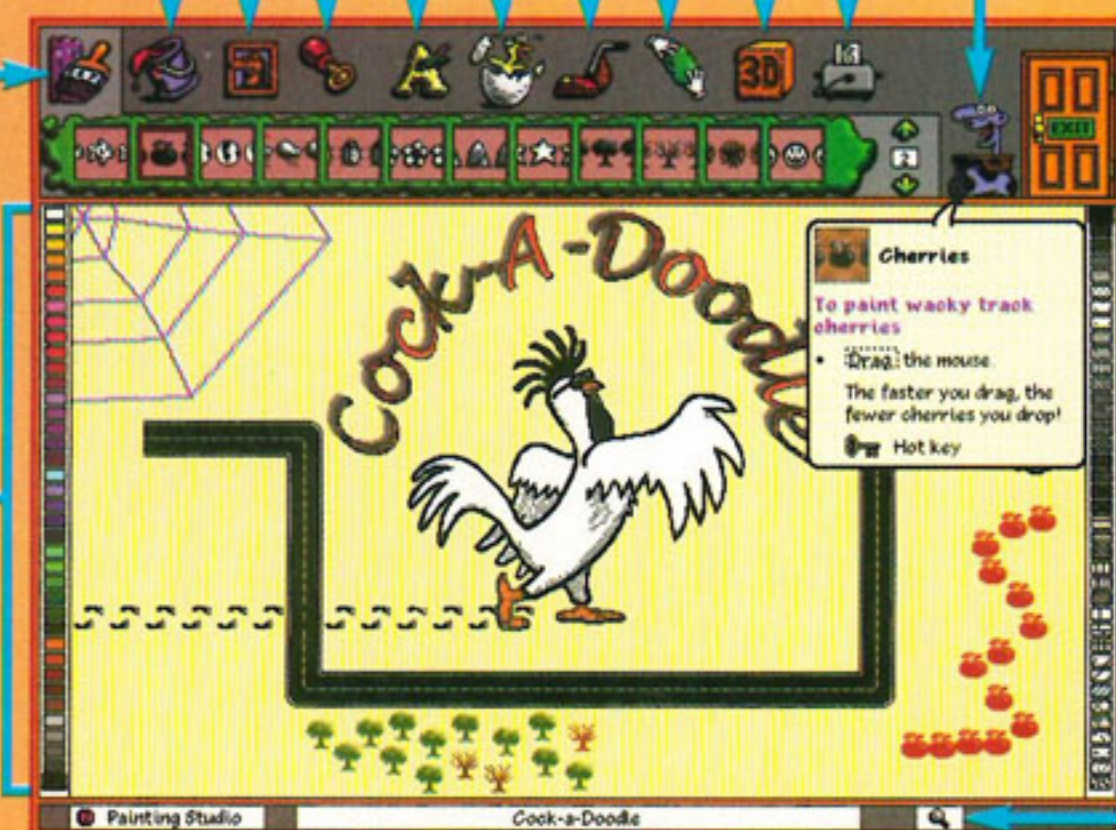
**Undo.**

**3D Tools:** enables you to add perspective by creating a vanishing point.

**Print Tool:** quick and easy printing for eager children.

**Transform Tools:** enlarge, reduce, rotate or just squish your picture.

**McZee** is always available to tell you what the various tools actually do.



**Fill patterns.**

**Zoom Tool.**



The normal **Open** and **Save** dialog boxes are replaced by a simpler, more colourful version. This is fine unless your children have already mastered the normal dialogue boxes, in which case they may be frustrated by this limitation.

pictures, they act like objects – that is, you can move them around without affecting what's behind them.

Once your budding artist is ready to print, simply click on the toaster icon (yes, that's right – a toaster) and McZee guides you through the process, avoiding the need for the normal print dialogue box. This program was obviously tested on children, because it won't let you print more than ten copies of a picture. Nice one!


Sounds can be assigned to stickers, so when you click on a pig, for example, it dances across the screen going 'Moo.' [I don't know how I've survived for so long without these features in a graphics package – Ed.] There's also a list of dinosaur sounds, which are great fun – although how Microsoft knows what a Dimorphodon sounds like is beyond us – and it's led to widespread speculation that the next version of Windows will feature time-travelling.

With the text tool, you can put the words into differently shaped speech bubbles, although most enjoyable of all is the way you can stretch, bend and fit your words into fun shapes. There's also a range of transformation tools which enable you to shrink, enlarge, flip or rotate stickers. If at any time you do make a mistake, then salvation is only as far away as a click on the egg icon, which undoes your last action. If you want to delete something, then the vacuum cleaner has enough options to satisfy anyone.

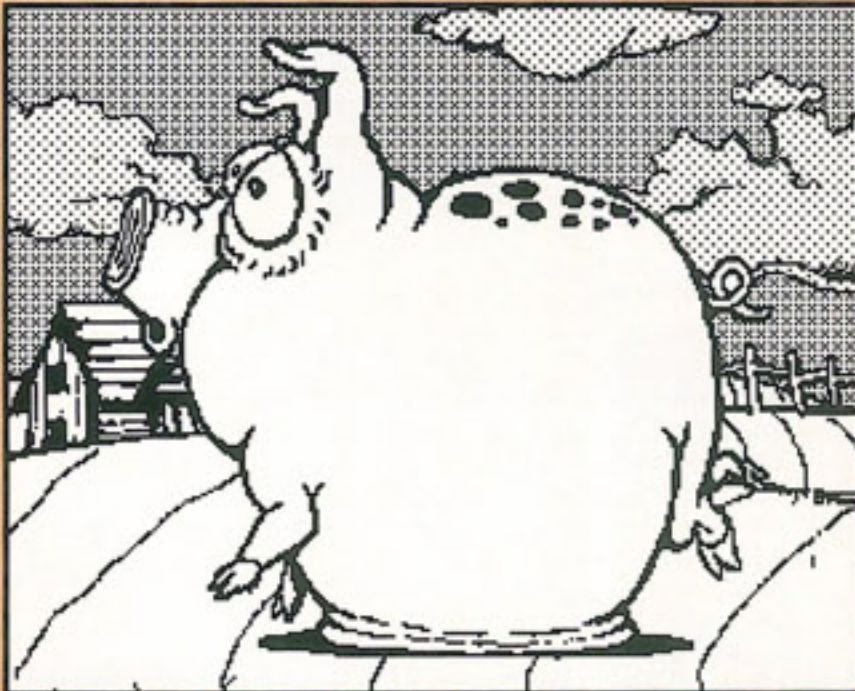
The 3D tool is a little curious; it doesn't quite fit in with the rest of *Fine Artist*. It's quite advanced and will probably only appeal to older children. You start by placing a vanishing point. The program will then automatically draw guide lines from anywhere on the screen to the vanishing point, enabling you to give depth to your work.

One of the best parts of *Fine Artist* is the cartoon designer. Maggie takes you by the hand, and in no time you can produce a four frame cartoon. Since most cartoons have the same background, *Fine Artist* enables you to copy a basic design from one frame to another. Add in your own characters or use the stickers, then drop in the speech balloons. It's enormous fun and if you can't think of a joke, don't worry, *Fine Artist* has a large selection from which you can choose. Unfortunately, they seem to have been taken from the *Bumper Book Of Very Weak Children's Jokes*, but then I suppose they couldn't really feature the one about the

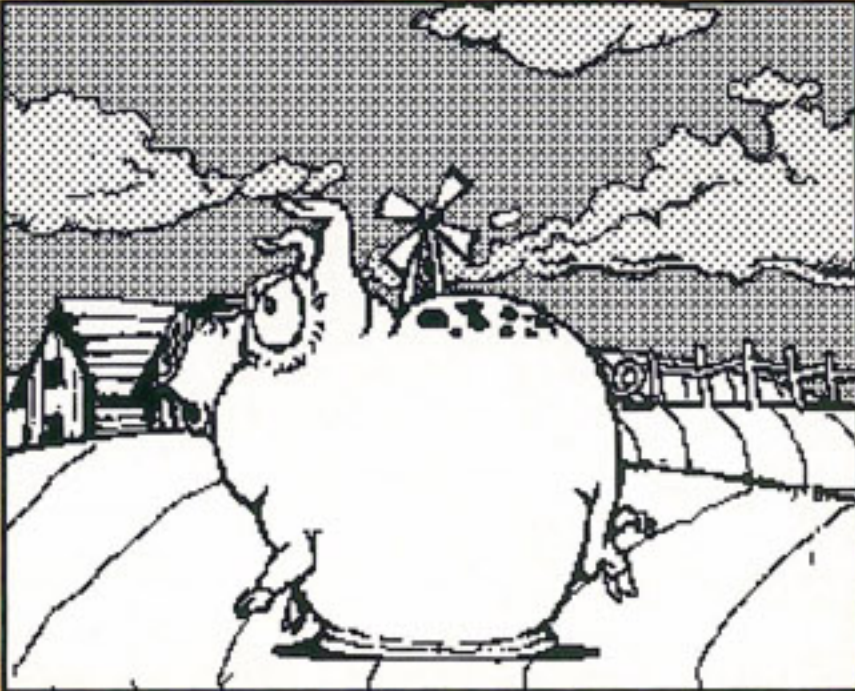
## A MASTERPIECE IN MINUTES



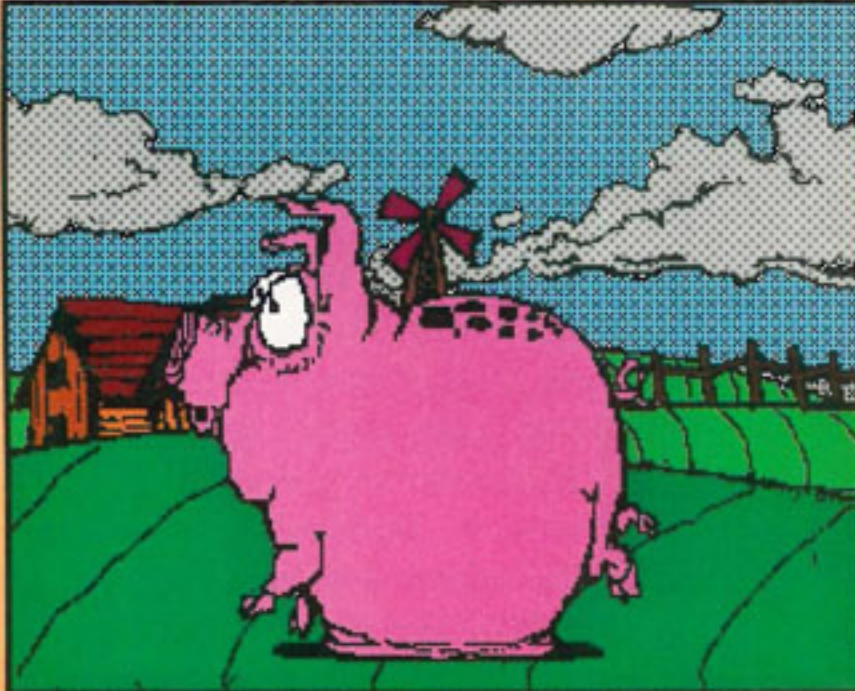
**1** Select a sticker for the background from a choice of scenes in the same excellent cartoon style.



**2** Select another sticker, either black and white or ready coloured, and place it on the background.



**3** Use the transform tools to enlarge, shrink or rotate your character to fit on the background.



**4** Using the Fill tool you can colour your masterpiece with any shades or patterns you desire.

Systems Analyst and the electric cucumber.

Once your child has produced enough art, why not put it together in a slide show? That way you can get your own back on the neighbours who insist on showing you umpteen snaps of their last trip to Norfolk. It may not be as sophisticated as *Aldus Persuasion*, but the options are, nevertheless, quite impressive. Pictures can change by a dozen different sliding methods; you can add sounds between pictures; you can even control how quickly they change. This feature alone will inspire your offspring to produce mountains of work and keep them glued to the screen.

*Fine Artist's* main competition is the excellent *Kid Pix*, which already has a strong following. *Fine Artist* is a slightly more advanced program

with more features; this is reflected by the older age range which Microsoft suggested. And although *Kid Pix* is slightly cheaper, you'd need to buy the *Kid Pix Companion* program in order to get a slide show facility. Children under eight will love *Kid Pix*, but for older children, *Fine Artist* would make a very welcome present indeed.

Derek Smith

## MACFORMAT estate agents offer you a new property

This screen is available at any time in *Fine Artist* to enable you to visit all the program's features. So let me take up my clipboard and show you around this very desirable residence.

### Drawing Tricks

Maggie will greet you in the attic, where she will take you through a couple of detailed tutorials.

### Project Workshop

The second floor contains facilities to create comic strips and slide shows. Maggie will take over from McZee to show you around the property, and give you any additional help you may require.



### Painting Studio

Access to the first floor is via an elevator – or there's a fireman's pole if you're more adventurous. Here you'll find a delightful painting studio.

### Lobby and Gallery

On entering the house, you'll be drawn into the spacious lobby. This gives access to the Gallery, where the walls are adorned with previously created pictures.

## FINE ARTIST

Price: under £50.

Requires: System 6.0.7 or later and 10Mb of hard disk space. Black and white machines require 2Mb of RAM, while colour machines need 4Mb.

For more details contact Microsoft on 0734 270001.

### Ease of use

Great on-screen help and no pull-down menus.

**95%**

### Documentation

A brief installation manual and not a lot else.

**60%**

### Features

Everything needed to enthrall children – and keep them out of your hair.

**90%**

### Educational value

Encourages artistic flair and helps teach perspective.

**85%**

### Value for money

Anything which quietly occupies children has to be good value.

**85%**

## MACFORMAT RATING

**90%**

# Brave *new* worlds

Visit the US, fly over mountains, journey to undiscovered planets and waste hours and hours in front of your computer with virtual landscaping package Vistapro.

**V**istapro generated a lot of interest on the Amiga when it appeared several years ago. Now that it is available for the Mac you can see for yourself why it is so popular. Vistapro draws three dimensional landscapes. That's it. Nothing else. It may sound like it has the same short-lived appeal as Kylie Minogue, but in fact it's more of a Cliff Richard – it lasts for ages, although no-one is quite sure why.

You can use the pictures created with Vistapro in an art package, but the main purpose of the program is fun. And while at first glance the idea of creating landscapes may seem a touch dull, you are quickly drawn in and hooked by the beauty of the images it is possible to create.

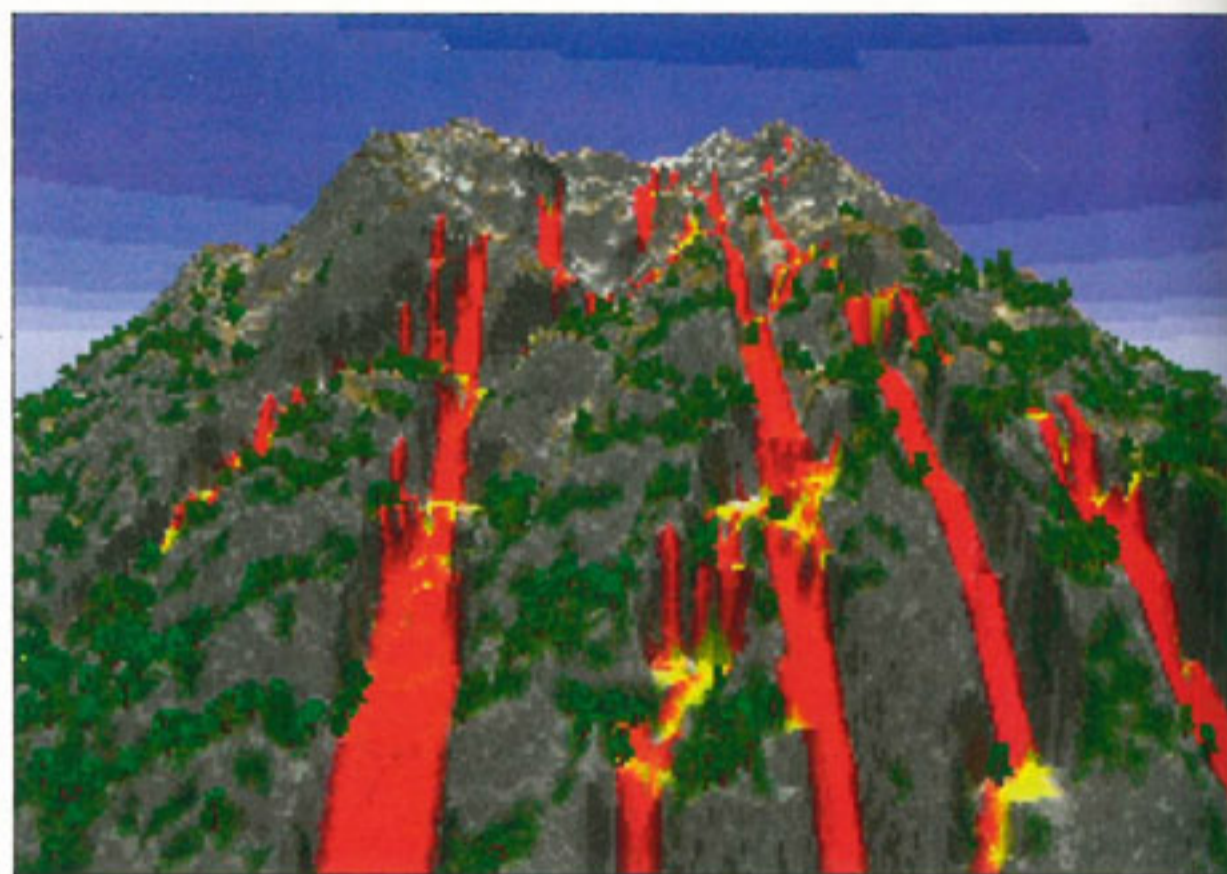
There are two types of landscapes that you can draw: randomly generated worlds and about 20 real-life locations, which are supplied with Vistapro. You start with an overview of your selected location, and your first job is to decide how you would like to view it. The program accurately likens the process to taking a photograph. You place the camera anywhere on the map and select which way to point it. The camera can be at any height and angle you want, and has a zoom facility. When you think

you have a good photo lined up, one click of the mouse will render (draw) the scene.

A fully detailed rendering can take hours to complete, so you will want to use a low resolution setting at first to check if things are lined up correctly. It's easy to adjust the camera for that perfect angle, and, when you have got it, select the better quality settings and re-render. When the computer finishes a rendering it gives a beep, which is handy if you're in the kitchen making tea at the time. Once finished, the pictures can be saved in PICT format, so you can load them into your favourite art program for further fun.

This alone is very satisfying – it offers a type of pleasure that must be very similar to that felt by an artist capturing a landscape on canvas. However, the fun really starts as you play with all the options. Everything is definable, down to which type of tree you would like. About the only thing you can't alter is the species of grass. You can have a night scene with stars shining in the firmament, or a clouded misty day.

Trees add a lovely finishing touch to your world, but they do take a long time to draw,

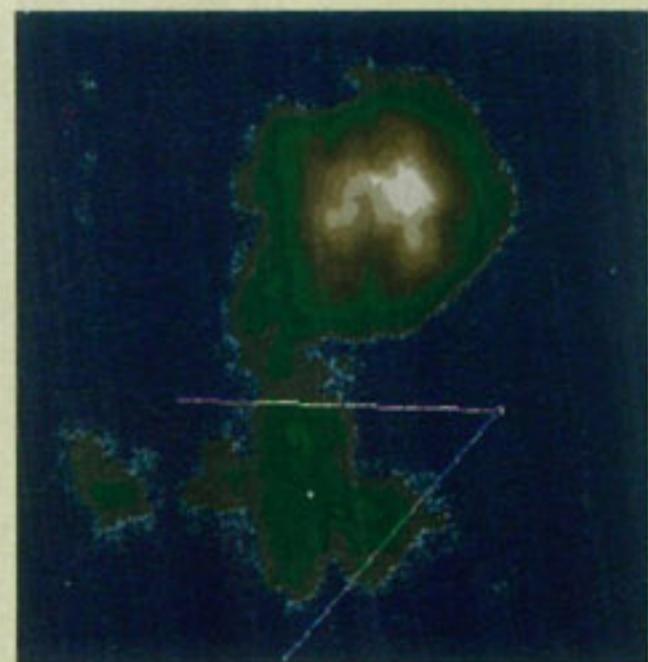


Among Vistapro's options is the facility to change the colour of any object. Here I've changed glittering blue mountain streams into lava flows.

particularly if you elect to have three dimensional leaves and textured bark. Want beautiful autumn colours? Then bring up the colour palette and use the standard Macintosh Colour Picker to alter your trees to russets and golden yellows. You can change the colour of anything in your world, so why not have a purple landscape with pink cliffs, chocolate rivers and orange cacti? Well, because it would look horrible, but at least you can sleep at night knowing that you could have them if you ever wanted.

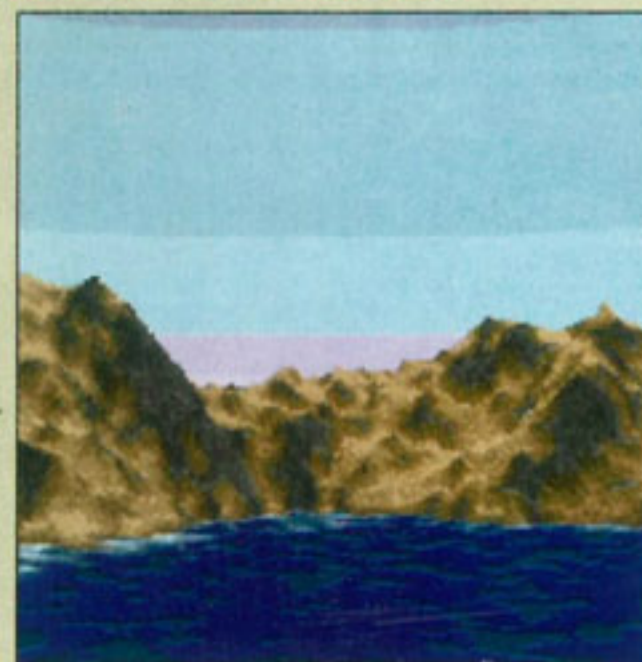
For maximum effect there is a panoramic option. This creates three separate views from the same camera location. These can be subsequently displayed on three monitors angled at 90° to each other, greatly increasing the angle of view. The only drawback, of course, will be

## DESERT ISLAND DISK



Take one randomly generated landscape, then add sea, waves and palm trees to create your own island paradise.

And this is what it would look like if you were drifting towards it on your raft. But where are the trees I ordered?



As you paddle towards the shore, you can see the palms waving gently in the breeze. It all looks very inviting, doesn't it?

'And for my one book, Sue, I would take an MS-DOS manual to keep me laughing throughout those long lonely nights.'



## Controls for creation

### Sky

From here you can control the quantity, size and altitude of clouds. You can also produce a night scene with stars.

### Earth

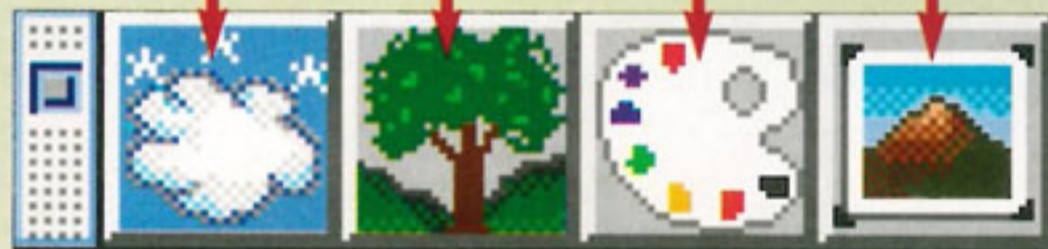
Pick the size and type of trees you would like to cover your landscape, from a choice of pines, oaks, palms or cacti.

### Colour Palette

From here you can select lush green fields or sand-coloured deserts, trees with autumn tints or beautiful red sunsets.

### Rendering Options

Click on this button to decide the quality of image you would like, with a choice of blends, shading and textures.



finding a Mac with two extra monitor ports. Still, it's a good idea.

On the subject of hardware requirements, it's time to mention a few of the drawbacks with *Vistapro*. It will run quite happily on an LC 6/40 with a 12-inch colour monitor, but you'll be limited in what you can do. To draw larger pictures requires more memory, and you will need at least 8Mb of RAM to get the best out of this program. People who are planning to use it professionally should bear in mind that a huge picture in millions of colours requires no less than 75Mb of RAM!

The next problem is speed. Drawing a small high quality image with trees took up to half an hour on a top-end Mac. Large pictures on slower machines need to be left overnight, but at least the results are worth it. For any smug people out there with PowerMacs, be warned – although *Vistapro* is installed easily and runs at a very respectable speed, it will not save properly, which makes it useless. You will have to wait for the native PowerMac version, which is being written at the moment. This is good news – *Vistapro* is exactly the sort of application that needs the power of a RISC processor.

## Lamentable overture

The manual is well laid out, although there are one or two inaccuracies, but my main complaint is that it is in black and white. This gives you the same feeling as listening to the *1812 Overture* recorded in mono – a bit of a let-down, really. Another problem is the chapter on scripting (or macros if you prefer), which is entirely inadequate. *Vistapro* has its own scripting

language, which is very similar to any scripting language and has commands such as **Camera-XYZ 1253, 2098, 1163** to set the position of the camera. The main purpose of these scripts is to create movies. You can write out a list of positions for the camera, taking a snapshot at each location, then save the whole sequence as a *QuickTime* movie. When played back, this gives the appearance of smoothly flying over your world. At top-quality rendering, this would take a long time... a very long time – I'm talking leaving your Mac running while you spend two weeks in the South of France.

After much head-scratching, I finally discovered that scripts cannot be created in *Vistapro* itself; instead you will need to use a separate word processor and export your list of commands as a text file. Since *Vistapro* eats all of your spare RAM, this usually entails quitting *Vistapro* and opening the word processor every time you make a small change to your script.

A much more cynical person than myself might suspect that the reason scripts are so fiddly is to tantalise you into buying an extra program called *MakePath Flight Director*, which is a more advanced way to create movies that simulate a plane flying across your landscape or a vehicle driving over it. For those who get really hooked, there is another program called *VistaMorph* which, well, morphs vistas, really. A barren parched desert can transform slowly into a green and pleasant land, or a mountain can be made to rise out of the sea. Both of these products will be available soon on the Mac, and cost around £40 each on the PC.

Don't let a couple of quibbles put you off, though. *Vistapro* is a wonderful program that

## BUY AMERICA

The American creator of *VistaPro*, Virtual Reality Laboratories, sells extra disks containing more real life landscapes, but, as you've probably guessed, they are all American. In fact, most seem to cover areas around California, where the company's offices are based. However, British company Confluence produces three data disks of our own great nation, with more landscapes to come. We will be reviewing these in a future issue and hope to give you a treat on the *MACFORMAT* cover CD. Meanwhile Confluence can be reached on 093 875266.

## Terraforming tools

Place the point to which the camera is looking.



Place the camera itself anywhere on the map.



Select a small area of the map to render for greater speed.



Zoom in on the map for greater accuracy.



Place the altitude above which there won't be any trees.



Place the altitude below which there won't be any snow.



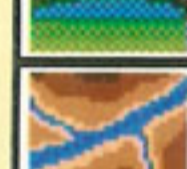
Set the level to which the sea will rise and flood the land.



Create a lake in a naturally occurring depression.



Let a river flow down the landscape to sea level.

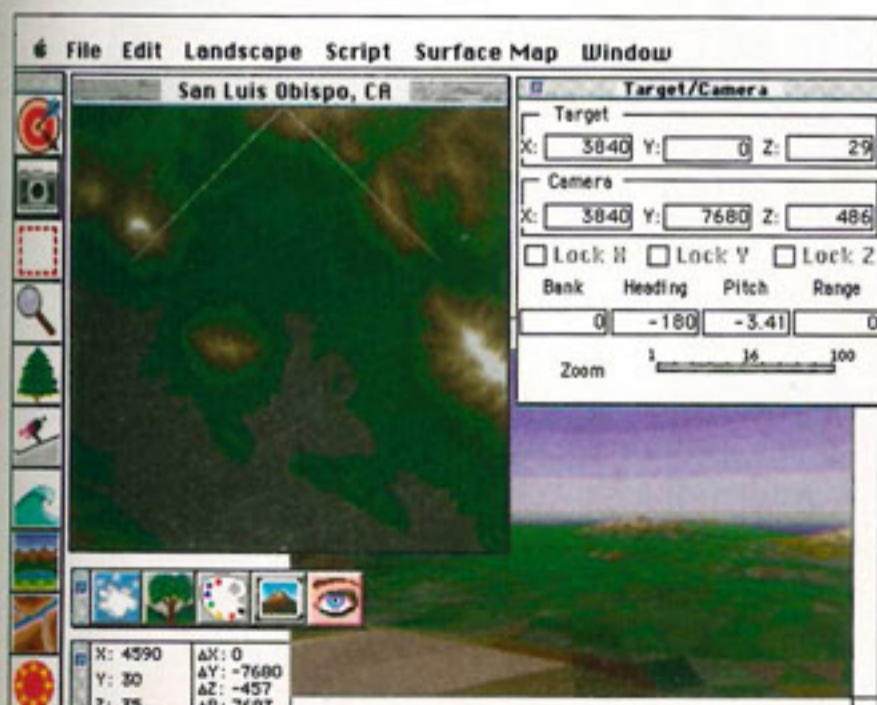


Place the position and angle of the sun in the sky.



grabs you in much the same way as an addictive game, albeit a rather expensive game. Several software companies already use this program to produce backgrounds for their own programs, and anyone with a professional use for *Vistapro* will not be let down by its power and versatility.

Derek Smith



*Vistapro's* floating palettes mean that all the tools are close to hand. It looks like it's time for me to buy a bigger monitor.

## VISTAPRO

Price: £119.95.

Requires: a colour Mac running System 7, with at least 4Mb of free RAM.

For more details contact Meridian Software on 081 543 3500.

### Ease of use

Very good use of the Mac interface.

90%

### Documentation

Well laid out, shame about the scripts.

80%

### Features

Incredibly detailed options which will satisfy anyone.

95%

### Value for money

Expensive at the recommended price, but at 'street price' it's good value.

80%

### MACFORMAT RATING

90%

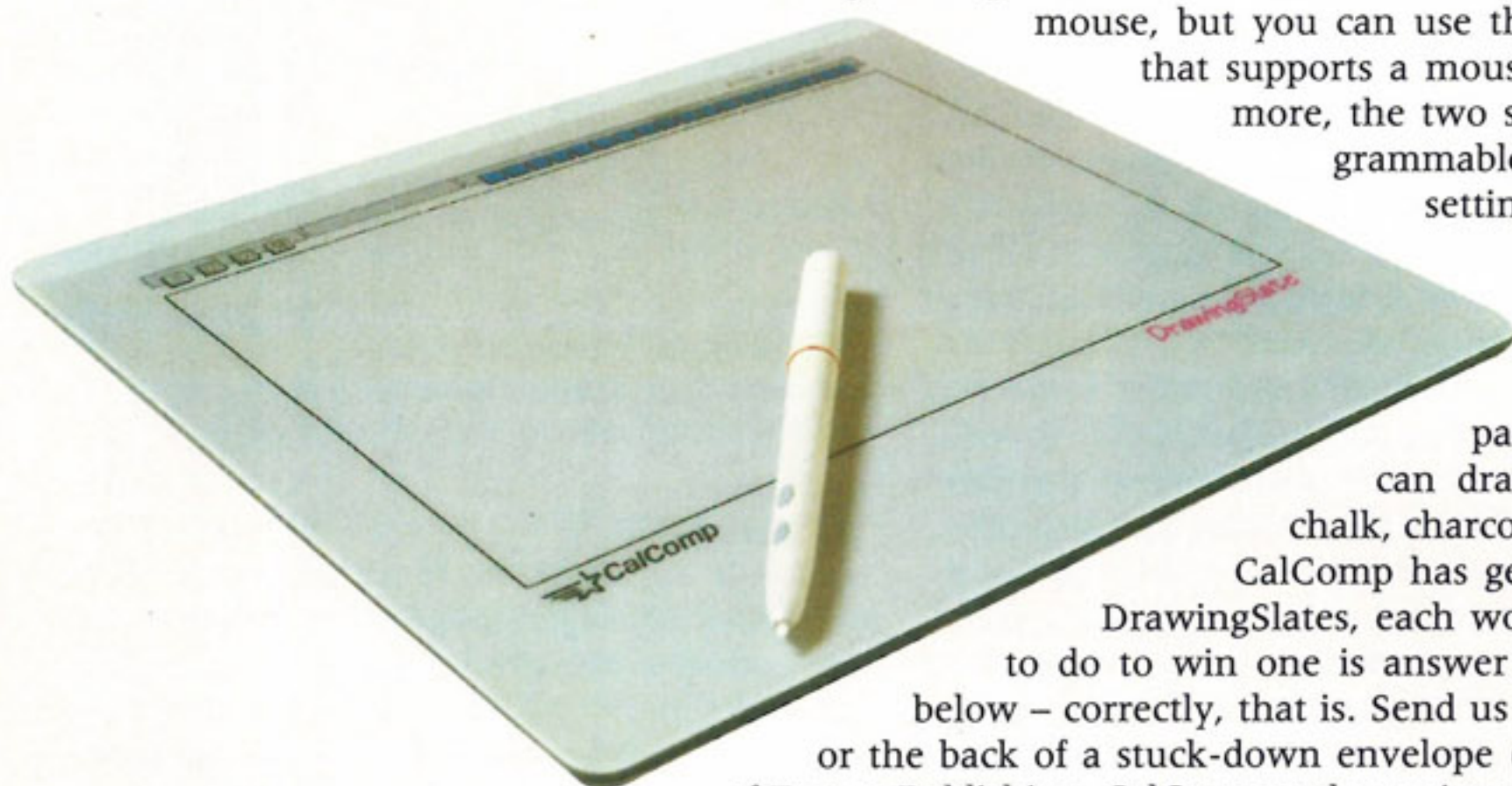
# Win a *state-of-the-art* DrawingSlate

A graphics tablet can revolutionise the way you use your Mac and make computer art as easy as drawing on a piece of paper. Here's your chance to win one of three A4 DrawingSlates from CalComp, worth £580 each!

If the Macintosh is the computer for people who hate computing and just want to get on with being productive, then a graphics tablet is the perfect input device for people who can't be bothered with keyboards and just want to get on with being creative. The CalComp DrawingSlate is particularly simple to set up, dead easy to use and very lightweight, being only 5mm thick, so you can even rest it on your knees like a conventional drawing board. Plug it in, install the software in a minute, and working on your Mac will never be the same.

Using the stylus is more natural than trying to trace shapes with a mouse, but you can use the tablet with any software that supports a mouse, including games. What's more, the two stylus buttons are fully programmable, so you have the option of setting them for all sorts of commands, not just mouse-clicks, and the tip is pressure-sensitive, so if you have a dedicated art package such as *Painter* you can draw just as you would with chalk, charcoal or paintbrush.

CalComp has generously donated three A4 DrawingSlates, each worth £580, and all you have to do to win one is answer the three simple questions below – correctly, that is. Send us your answers on a postcard or the back of a stuck-down envelope (nothing inside). Employees of Future Publishing, CalComp and associated companies, and their families, are not eligible to enter (and Derek says 'I do recognise your handwriting, Mum, so stop it'). No multiple entries are allowed, unless they're engraved on a piece of slate the size and shape of a floppy disk. Please state if you don't want your name added to a mailing list. The editor's decision is final, and the closing date is Friday 12 August.



## THE QUESTIONS

1. Which company makes the DrawingSlate graphics tablet?  
 (a) Microsoft  
 (b) CalComp  
 (c) Spud-U-Like

2. The DrawingSlate is easy to rest on your knees because it is very light. How thick is the DrawingSlate?  
 (a) 15mm  
 (b) 5mm  
 (c) About as thick as a short plank

3. How many buttons does the DrawingSlate's stylus have?  
 (a) 2, fully programmable  
 (b) 1, but it's very versatile  
 (c) 21

If you get stuck with any of these challenging questions, just check the text above for the odd clue, such as the answer. Then send your entry to:  
 'CalComp Comp', MACFORMAT,  
 30 Monmouth Street, Bath,  
 Avon BA1 2BW.

# PRINTERS *direct*

If it's not on  
the page -  
Please Ask !

Printers Direct		
0 items	57.5 MB in disk	96.6 MB available
<b>LASER PRINTERS</b>		
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# Illustrating the point

Most professional publications rely heavily on photographs, but photos aren't always the ideal choice for illustrations if you're producing a small publication on your Mac...

There's only one thing worse than having no illustrations in your newsletter or small publication, and that's having muddy, indistinct and poorly reproduced photographs. Last issue we considered how to select and use photos, but they're not the only way of bringing visual material into your publication. In fact, if your method of reproduction involves photocopying or cheap laser printing, then the chances are that photos aren't going to work particularly well. You should, therefore, be considering alternative methods of illustration – and there are plenty of them. Before the photograph became dominant, illustrations were the norm – and there are still occasions when non-photographic artwork is the best approach.

For the sake of convenience, let's make an arbitrary distinction here, between illustrations

(including cartoons and caricatures) and information graphics. Illustrations are there to give visual appeal to a page, to express an attitude or create a mood. Information graphics, like diagrams, maps, charts and graphs, depict some specific facts in a way that words never could.

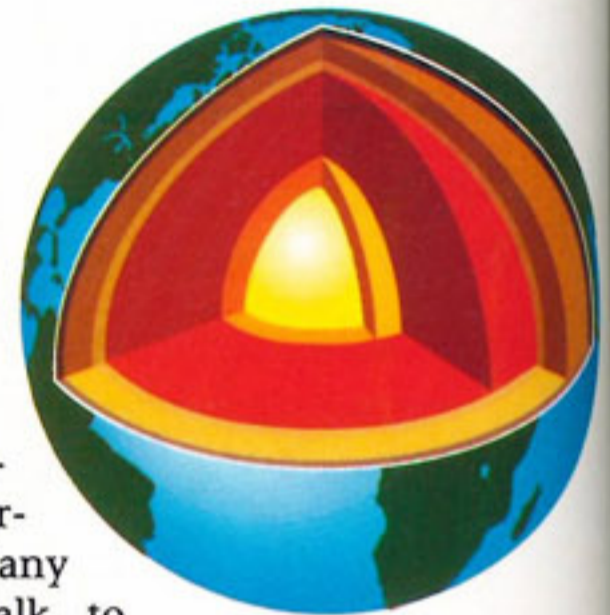
## When to use illustrations

The first thing to say is that illustrations always look softer, more informal and less immediate than photographs. For instance, take a look at all the recent D-Day features and supplements. Most have used photographs. Others have opted for artists' impressions and, it has to be said, that these have a distancing effect. The effect is to make these factual matters take on a slightly unreal air. You may recall the various attempts to show what went on during the Falklands War and the Gulf War, which suffered from the same problem.

Fictional material is naturally one of the main places where you may want to use illustration rather than photography. The fiction may have a real setting, of course, which you could photograph. But it won't, almost by definition, have real people. An alternative to illustration is to use models or volunteers playing the parts, but then your finely-crafted short story will look like a Photo-Love page.

A much more common situation than fiction is where you are trying to preserve someone's anonymity. A classic example would be an account of, say, the tricks used by shoplifters or dodgy market traders. The same applies to stories about

This clip art image depicts a cutaway view of the earth's layers clearly and accessibly.



something personally embarrassing. Many people will talk to you about their operations, or their love-lives, or their secret vices – but only if you keep their identity secret. So you can't expect to illustrate the article with their picture.

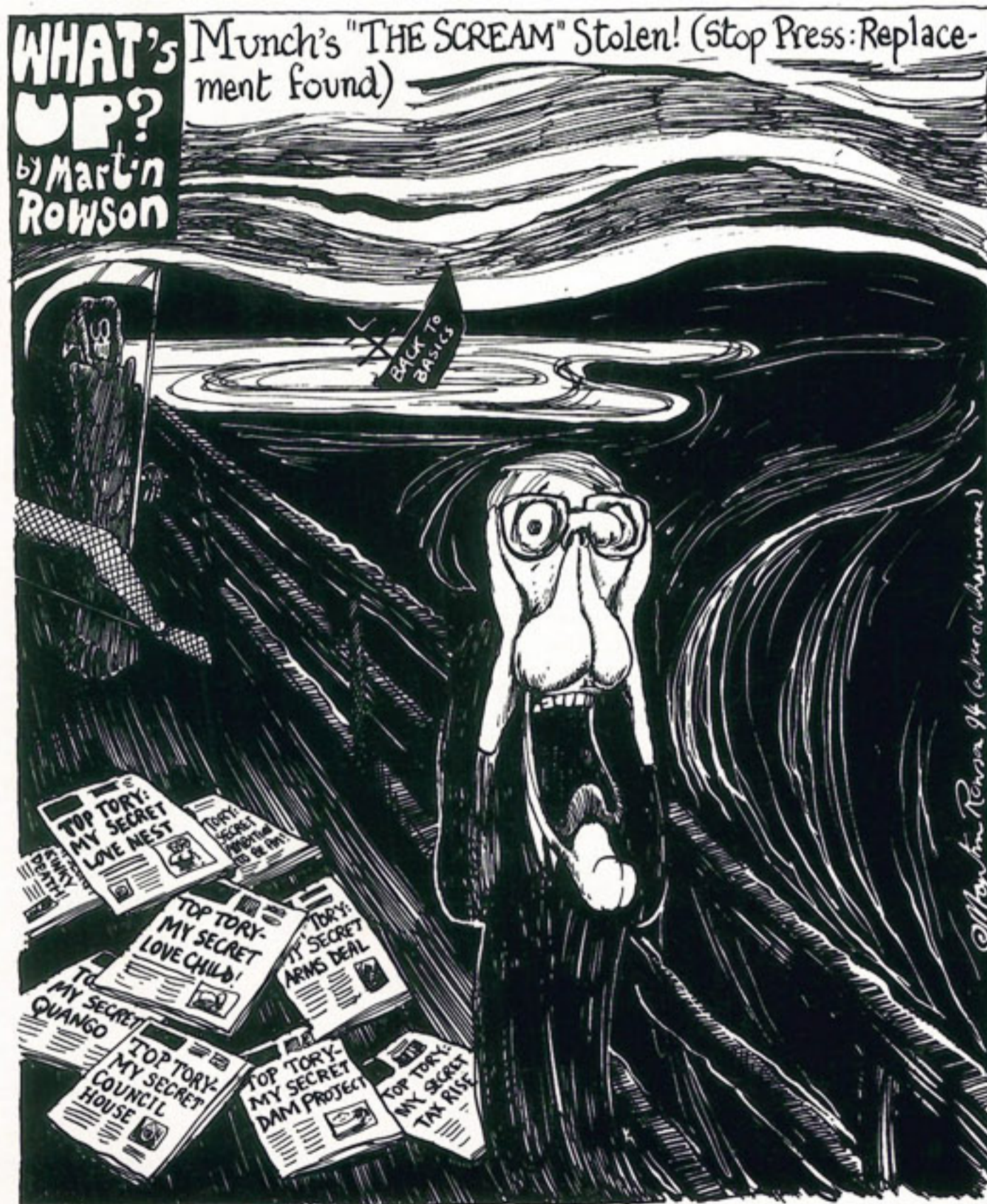
You could use a picture of someone else entirely – any old market trader. But your readers will assume that that person has been doing the deed in question. You will have opened yourself up to an action for libel. There are also occasions where there are legal constraints on you identifying a person – if you are writing about children involved in crime, for instance.

There are ways round this if you insist on using photography: you can leave out the person's face; or you can use models, make them sign something to say they won't sue you, and label the picture 'posed by models'. But you might be better off getting someone to do an illustration without identifiable people in it.

On other occasions, often you will very much want the person to be identified, but you will want a picture with a strong attitude. A caricature or illustrated portrait is often a stronger approach than using a photograph. The very best photographers can capture a person's character, but they cannot usually place them into a context or exaggerate certain aspects of their appearance with the freedom enjoyed by a skilled caricaturist. A caricature signals to your readers that now they are going to read something with a slightly different, more irreverent attitude.

One of the advantages of illustration is that it can express a view or encapsulate a mood, making it ideal to accompany emotional material. If you look at women's magazines, you will see illustrations used on stories of the 'I love him but he doesn't love me' or 'I can't get on with my mother' variety, where the individuals in the story are not the point but the emotions are. A sensitive illustrator can find a visual image which connects with the written material and reinforces it.

Another use for illustration is to depict



This cartoon of John Major by Martin Rowson places the PM far more strongly in context than a photograph could ever do.



Showing a picture of this architecturally renowned building is a damn sight easier than trying to remember its name...

things that cannot be photographed. That may be because, for instance, cameras are not allowed. We have all seen those dreary illustrations that they use on *News At Ten* when they are reporting on a court case: no photography is permitted inside British courts. Nor is it in Parliament, although it is feasible to digitise images from the television screen these days.

Another set of things which can't be photographed are those which don't exist yet – for instance, new buildings, which are shown as architects' drawings or models. Sometimes photography isn't practical: those Gulf War illustrations of Tornado bombers under attack come under this heading.

## Information graphics

Information graphics are those visuals which are there because they are the best way of explaining something. Included in this category are all the charts, graphs, maps, diagrams, and graphics of the sort we now see in our newspapers. The great majority of these are produced on Macs using programs such as Adobe *Illustrator*, *Photoshop* and the like.

To take the simplest first: tables. Say you are comparing half a dozen laser printers or cinemas, and each one has half a dozen aspects

to be considered. You could run a lengthy piece of prose on each one, enumerating the good and bad points. But you'd do better to draw up a simple table, with the names of the cinemas down the side and the various aspects you are judging across the top. Then you'd give each cinema marks out of ten, or stars, in each category. The simplest integrated package or spreadsheet program will do excellent tables or you can do it with tabs.

This may not allow for the most subtle judgements about things, but it works. If you want more subtle judgements than the star system allows, you can always run a little prose commentary as well.

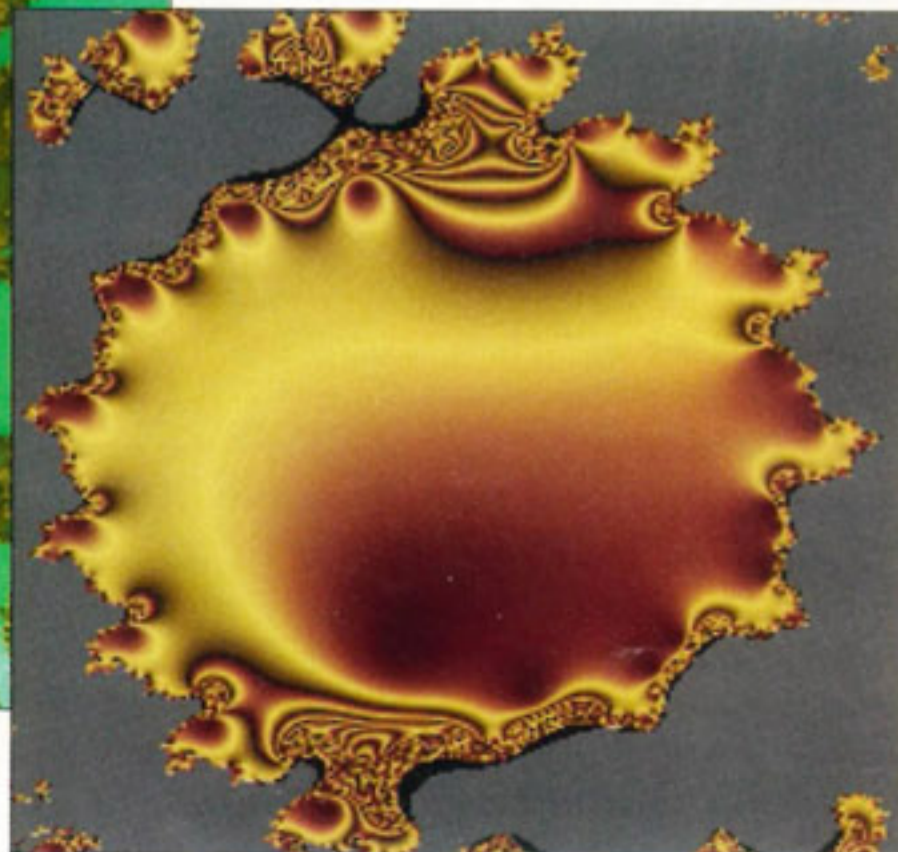
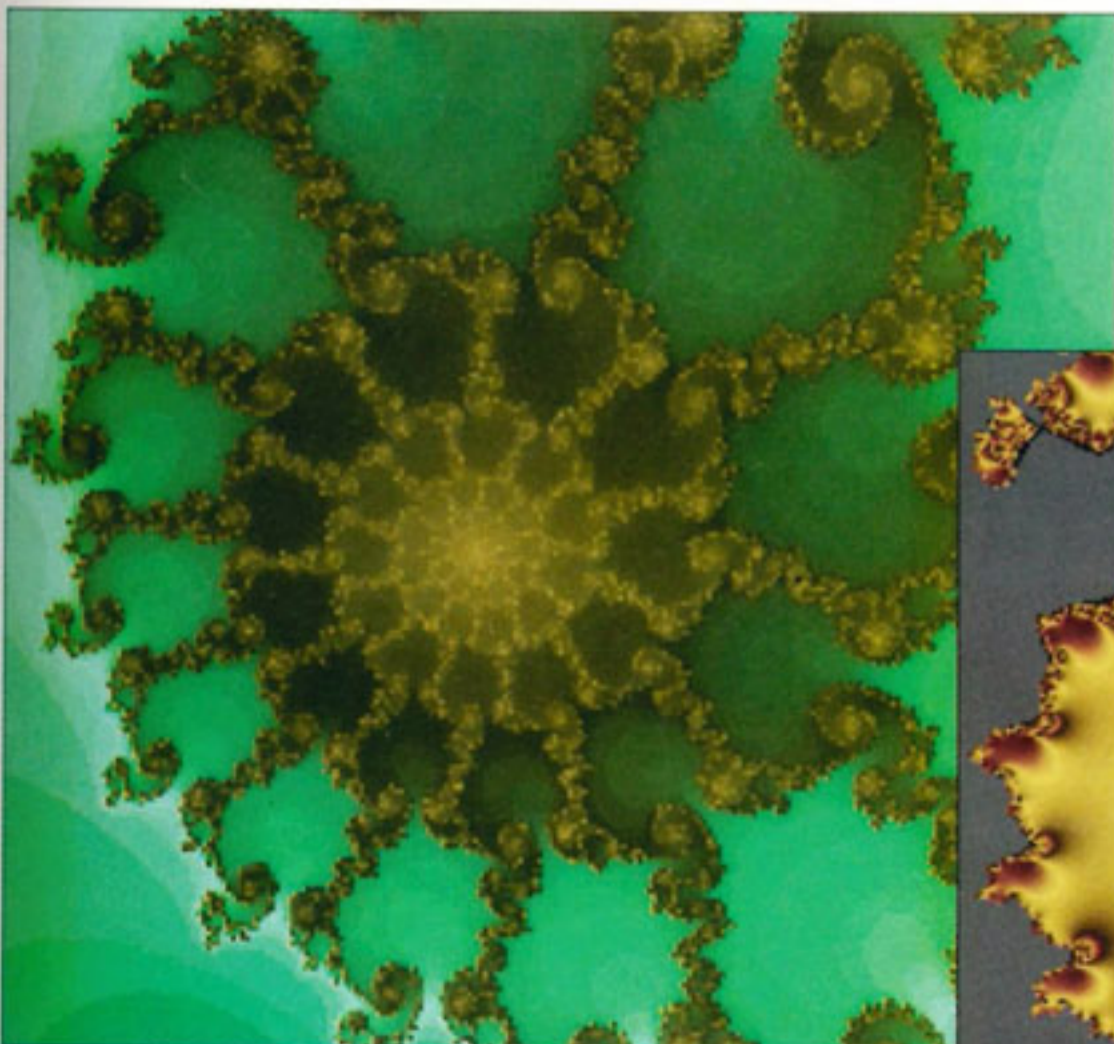
Another area where the information graphic is essential is where the essence of the story is visual or spatial. Maps are the obvious example. It would take several thousand words to explain, say, the route taken by the Bristol to Bath cyclepath. A map does it instantly.

Processes and sequences of events are often difficult to describe verbally. A series of drawings, a flow chart or a cartoon strip can often make these much simpler. The classic example is instructional material. How would you explain to someone how to do up a bow-tie? A series of diagrams is the best way.

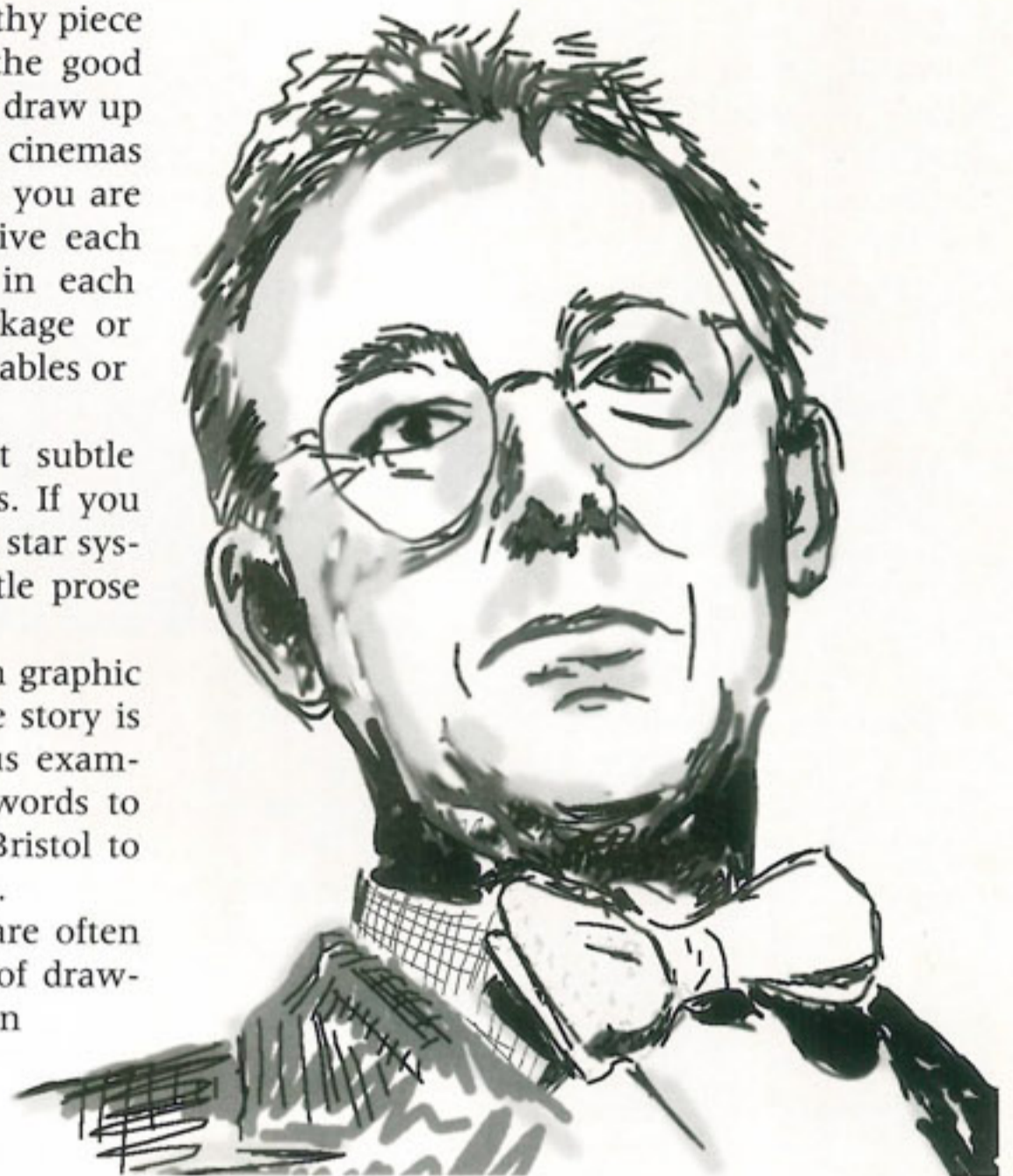
The same goes for things which cannot be photographed – for instance, processes which happen too quickly, which are too small, or which we can only theorise about. A diagram can show the first micro-seconds of an atomic explosion, or how viruses attack cells, or what happens inside the sun. They can also give an instant sense of scale, if you simply show the object in question alongside something familiar. You'll recall those pictures showing a brontosaurus towering over a London bus, or the early microchips alongside the head of a pin.

Abstract subjects also demand illustration – the formula that defines a Mandelbrot set, for instance, is much less clear (and much less interesting!) than an illustration. This is particularly true of technical material – how a complex piece of equipment fits together, say, is much better explained by an exploded drawing or series of diagrams rather than page after page of tedious description (and in this case, colour and composition can make matters far clearer than mere photos could ever hope to do).

Your task as an editor is to find the right form for your information. If



These computer-generated fractal images are an excellent example of 'objects' that can't be photographed (because, er, they're not real) and are therefore best depicted by a picture.



Photography is not allowed in court, so illustrations, such as this one of an innocent bystander, are the only real option.

your background is in words, your natural inclination will be to write something and then find something visual to accompany the words. But you should always stop and think to yourself: would a graphic explain this more simply?

Graphs and charts are a very useful way of dealing with comparisons between figures – for instance, rising profits or falling numbers of employees. But they need to be instantly readable. As soon as your readers have to start studying the labels and scales, the point is lost. On the other hand, you must make sure all that stuff is done accurately for those who want to look into it more closely.

The first step is to decide exactly what you want to communicate. A bar chart compares quantities. Sometimes it shows how they change over time. A line chart does that job, but always looks more dramatic: we have all seen those cartoons where the profit line drops down, off the end of the chart and down the wall. Technically, that's a misuse: scientists and statisticians will tell you that line charts should only be used for continually changing quantities where every point on the slope accurately represents the state of play at that moment. Where discrete amounts of money appear at different times, the bar chart is the correct thing to use. And yet, I would always use the line chart, because it has much greater impact.

A third common type is the area chart, in which different values are shown by comparing different areas of the same shape, or by dividing a single shape proportionately. The classic example is the pie chart: you use this for depicting proportions of a whole, for instance the different aspects of a person's spending.

With all these charts, the secret is simplicity. If you are doing a line chart showing rising average income, you can easily put in several lines to show different countries. That does not over-complicate, because you are only using one upward (or Y-axis) scale. But you might be

tempted to show two aspects that change over time – say average income and cost of living. These two would need two separate scales, which you can accommodate by showing one on the right and one on the left. But if you do that you must forget about showing more than one country.

Once you have decided on what quantities your chart can legitimately show, you can work on making it look good. But you should beware of using the graphs exactly as they come out of *ClarisWorks* or *Impact* or whatever you are using. They'll look like everybody else's. One way of enhancing your own graphs is to use pictograms in place of the normal graph elements, but again, avoid clichés. You could use a £1 coin for your pie chart of personal spending, or national flags as the elements in your bar chart of comparative GDPs. Better to think of something new. (More on charts, page 58.)

Because the best graphics look nice and simple on the page, the amount of work they require should not be underestimated. If you are doing a plan of a school, showing where the intruder entered, where he took the children hostage, where the police marksmen entered, and where the final gun battle took place, this all takes as much research and time as a lengthy feature article. Allow enough time in your schedules for the job to be done properly – and enough money in your budget to pay a fair price for it when it is.

*John Morrish*

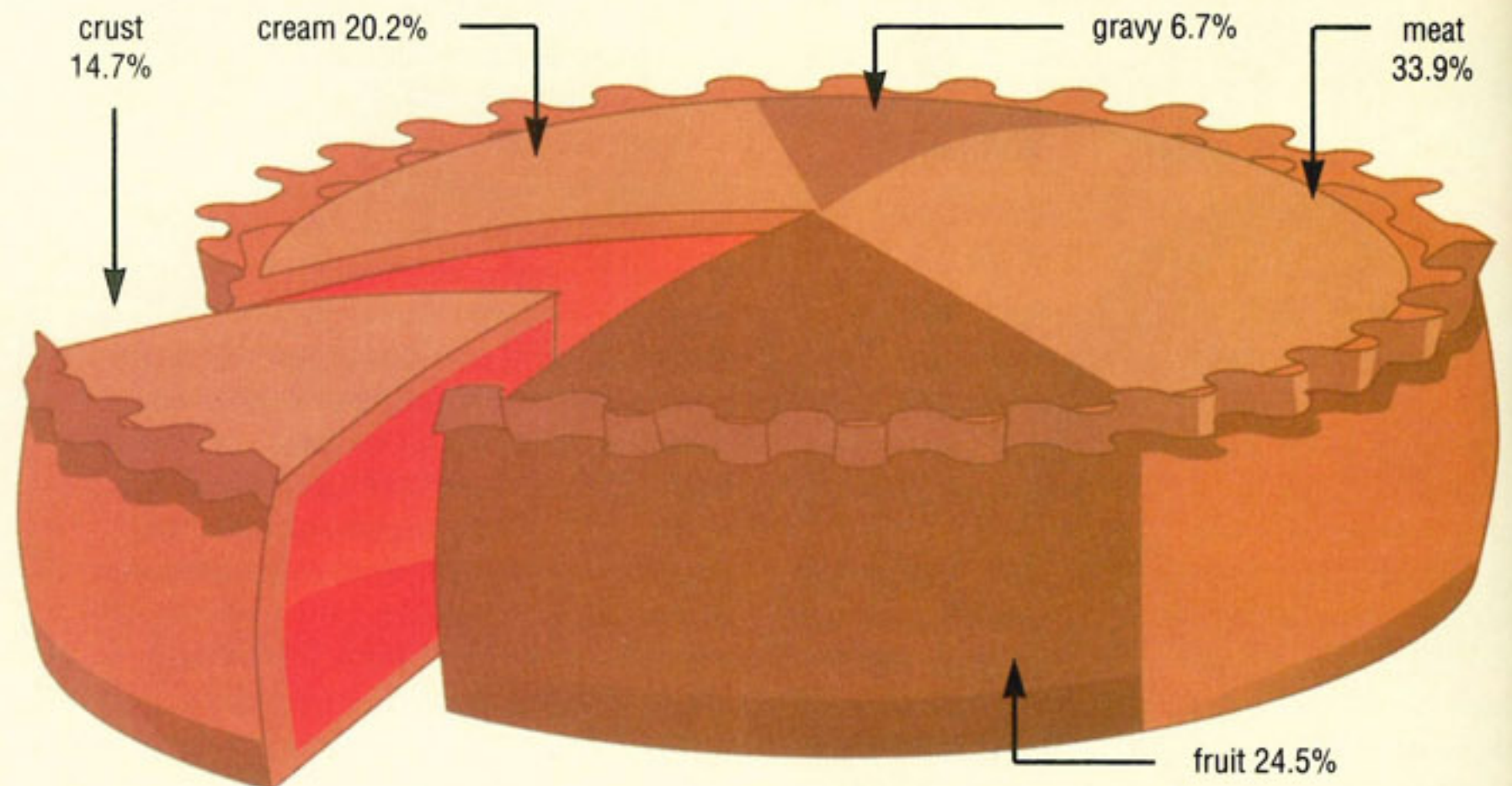
## DIVIDING UP THE PIE

Graphs and charts are invariably the best option when it comes to illustrating statistics. In this particular case, a pie chart has been chosen to show a breakdown of an

imaginary firm's profits for 1993/4. You can see at a glance which areas made up the largest percentage of the company's profits – meat is obviously a good area to get into.

### SLYMAN'S PIES

#### 1993/4 profits



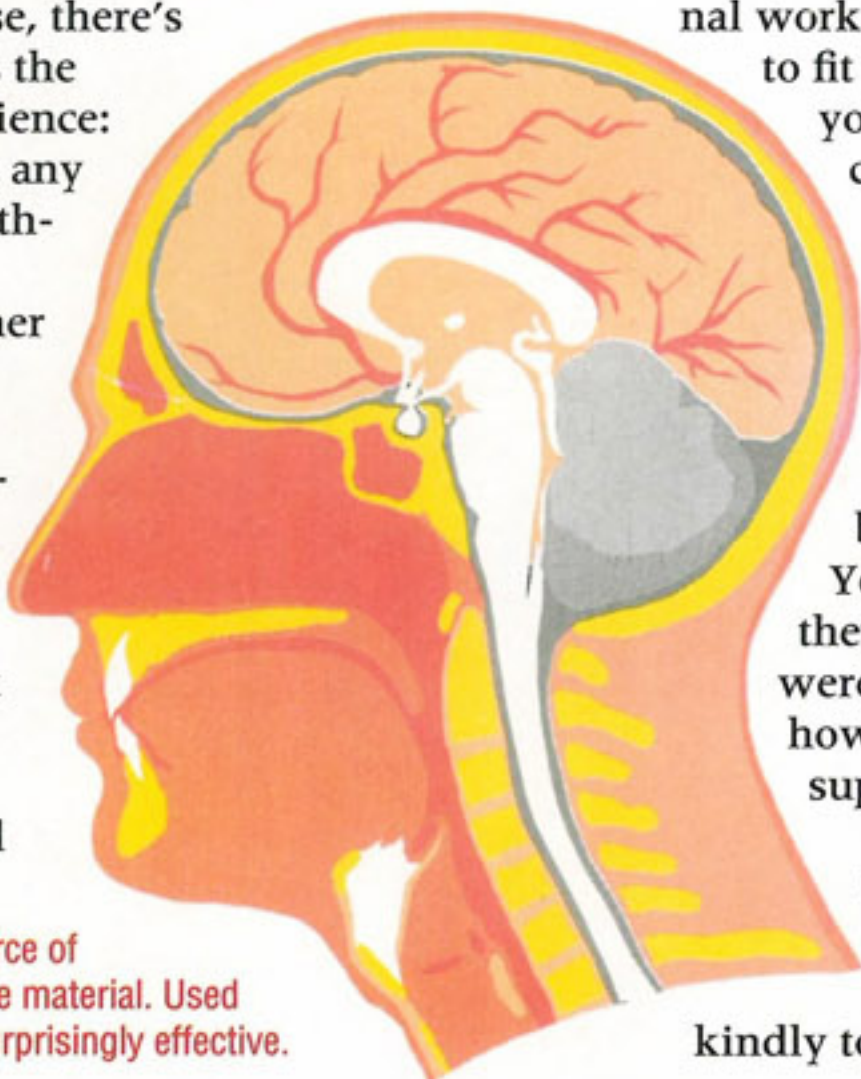
## HOW TO GET THE ILLUSTRATIONS YOU WANT

There are as many styles of illustration as there are illustrators, ranging from watercolourists and oil painters at one end of the spectrum, through pen-and-ink cartoonists and caricaturists to computer artists wrestling with *Illustrator* and the like at the other. How do you get what you want?

Frankly, if you are producing a small publication with your Mac, you'll be lucky to have much choice. Many people can write serviceable prose. Far fewer can do acceptable illustrations. Halfway competent cartoonists, for example, are exceptionally difficult to find. For publishable quality, you may have to pay real publishers' rates.

Then, of course, there's clip art. This has the virtue of convenience: you can use it in any way you like without having to worry about either copyright or the artist's ego. Unfortunately, it always seems to me to have that clip art look about it. Clip art libraries tend to favour a certain rather bland, old fashioned style,

*Clip art is a good source of inexpensive illustrative material. Used sparingly, it can be surprisingly effective.*



particularly in cartoons.

A much more versatile source of free illustrative material is real clip art, the stuff that comes in books. There is vastly more choice available in non-copyright illustration if you take it from printed sources and scan it in yourself. Dover Books of Covent Garden in London (071 836 2111) has a vast selection, or you could look for them at your local bookshop. Again, the key is to use it sparingly, so that using a Victorian engraving to illustrate an article on computers comes as an amusing surprise rather than a predictable gambit.

Clip art is, however, not a patch on original work you have commissioned yourself to fit your particular requirement. So you would do well to master the commissioning process.

Professional artists will have a 'portfolio', a file full of examples of their work in different contexts. Encourage your volunteer illustrators to show you a selection of their work. Make a note of both their style and their range.

You will need to know whether they generated their own ideas or were following an exact brief. Ask how fast they can work. Can they supply ready-to-use images on disk?

If you ask someone to do some work for you, briefing is essential. There is a certain delicacy involved. Some artists will take

kindly to your suggestions ('I'd like Roy

Hattersley dressed as Queen Victoria riding a penny-farthing over Waterloo Bridge'), while others will not. Get around this by asking for roughs, sketches of two or three ideas. When you both agree on the right approach, they can turn the rough into a finished drawing.

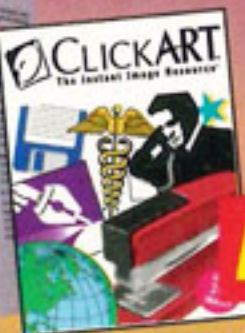
Of course, before they get to that stage you have to tell them a couple of things. The first is the size and shape of the hole you want their drawing to occupy. Although many artists work much larger and then have their work reduced to fit, they need to know the correct proportions – there's no point in getting a square drawing when you need to fill a tall, thin gap. What's more, a picture full of intricate detail may well look superb on an A3 sheet of cartridge paper, but it will look like nothing at all when it is reproduced at the size of a postage stamp.

At the same time, you need to be aware that dealing with illustrations is not like dealing with photographs, where cropping is usually acceptable. Drawings and other artwork are the shape they are: cropping is much frowned upon.

Artists also need thorough briefing on the words that their illustrations are to accompany. It's up to you whether you give them the actual copy or just communicate the gist. The disadvantage of giving them the copy is that they may get hung up on a single passing phrase and miss the main thrust (though you can weed that out at the rough stage). But if you don't give them the copy, your briefing has to be very thorough.



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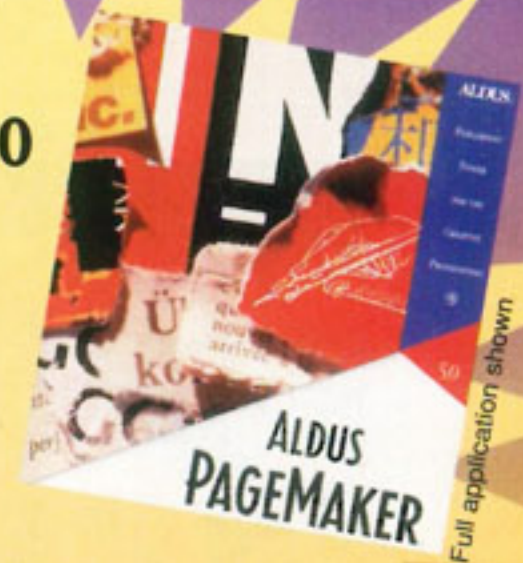
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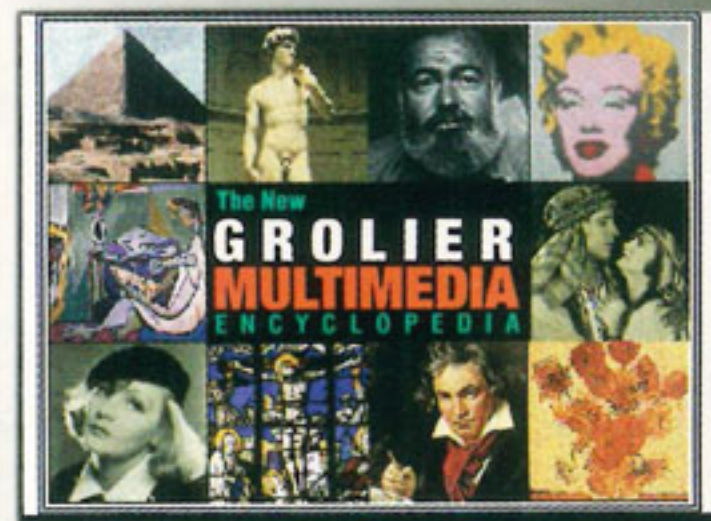


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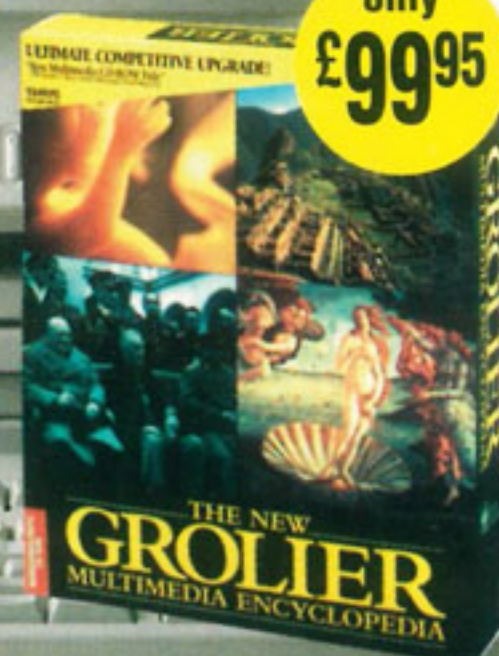


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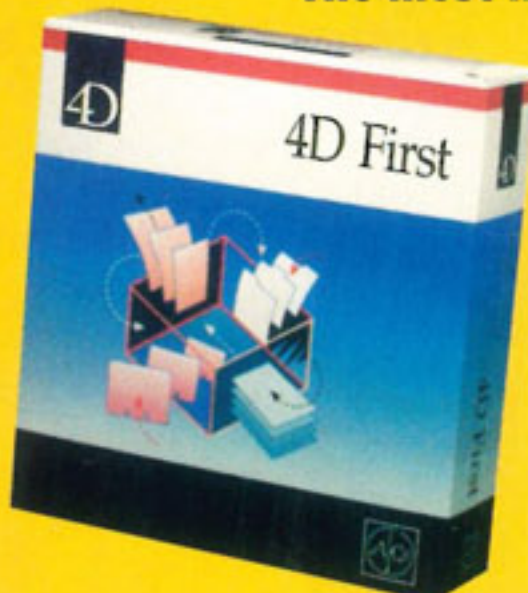
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# Charting

To make your figures clear, you'll need to understand the charting power of your spreadsheet application.

# SUCCESS

Spreadsheet applications offer two main facilities. First, they provide a large 'clever' piece of paper where you can scribble numbers and formulas, which should produce useful results. As we have seen in the past, though, how 'clever' these pieces of paper are varies from them being able to perform simple, secondary school-level calculations, to the sort of number-crunching that would put the average accountant to shame.

The second facility spreadsheet applications provide is a method of presenting the results of your calculations. Obviously, you could just jazz up your worksheets so the columns of numbers are more presentable, but the best method is to use a chart or graph. The few applications which provide spreadsheet facilities – and which are still available on the Mac – all provide some form of charting. Here, we will show you how to turn a table of numbers into a chart. But more importantly, we will also show you how the different types of chart can better display the information you have gathered. Most of the charts shown here were cre-

ated in the spreadsheet module of *ClarisWorks*, but you should be able to reproduce them with other spreadsheets.

## The data

The data we are going to use in this article is not of great importance, and has, in fact, been made up. The numbers are intended to represent the sales of three types of video recorder (Sony's Betamax, Philips's V-2000 and VHS) over a number of years. Although fabricated, the data is still interesting to look at as it includes the gist of the buying trends which influenced the market at that time: the first video formats on the market were all displaced by one format (VHS) which arrived later. Usually, data for charting is produced as part of some calculation, even if that only involved adding-up some numbers. If that is the case, the result has to be set up to form a table similar to the one shown here.

If you want to understand the best way to get data ready for a chart, you need to under-

stand what the application is going to do with it. So, when you create a chart, the data for each video recorder type should be presented in the same way (that is, all the data for VHS recorders should be shown in the same colour). Therefore, we must put all the data in the same column or row. (Usually you can organise your data into either columns or rows, but here we'll stick to columns.) If the name of the data, in this case 'VHS', is placed at the top of the column, the spreadsheet can then use that to identify the part of the chart that relates to VHS recorders. Data should, therefore, be arranged in columns with the name of the data at the top. Working down the column, each number will represent sales in a particular year. If the year numbers are put in a column at the left hand side, the spreadsheet application can use that to label the chart.

## Making the chart

Once you've arranged the data into the correct format and chosen to produce a chart, the application will produce a dialogue box which contains a number of options for you to choose from. In the case of *ClarisWorks*, there are five separate sets of options (see Figure 1).

The most important of these is the first one, called 'Gallery'. This is used to select the type of chart. *ClarisWorks* offers 12 types, each with its own options – not all of which can be used here. Initially, we will choose the simplest type (a bar chart), and discuss how to create that. Later, other types will also be presented, while in the 'Jargon Busters' box we will touch on the remaining types. With bar charts, there are various options that can be selected (like

## WHAT ABOUT EXCEL?

Microsoft *Excel* can do all that *ClarisWorks* can do and more. In particular, *Excel* offers more control over how a chart is displayed, plus more chart types and more powerful versions of the *ClarisWorks*-style charts we have seen here. These extra charting facilities are hard to use, however, and can obscure the facts. For example, while three-dimensional line charts have more initial visual impact, do they actually convey more useful information?

Often the more visual impact a chart has, the less people look at it. Three-dimensional charts, therefore, are better used in presentations (where you're not expecting your audience to take in detailed information), rather than in reports, where your audience is able to sit down and read the information.

*Excel* at its best and worst! Gratuitous use of chart facilities can produce exciting things like this, but how easy is it to extract information? Compare this with the simple bar and area charts produced in *ClarisWorks*.

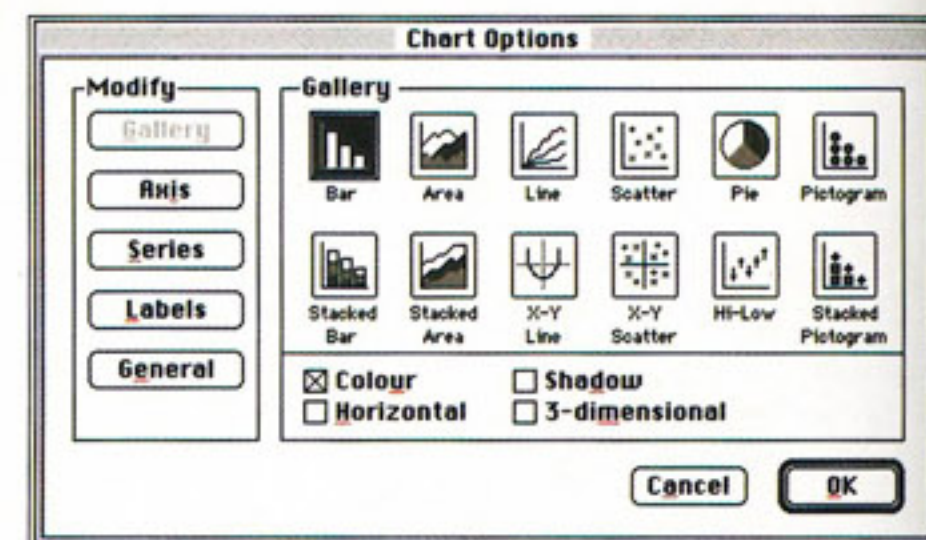
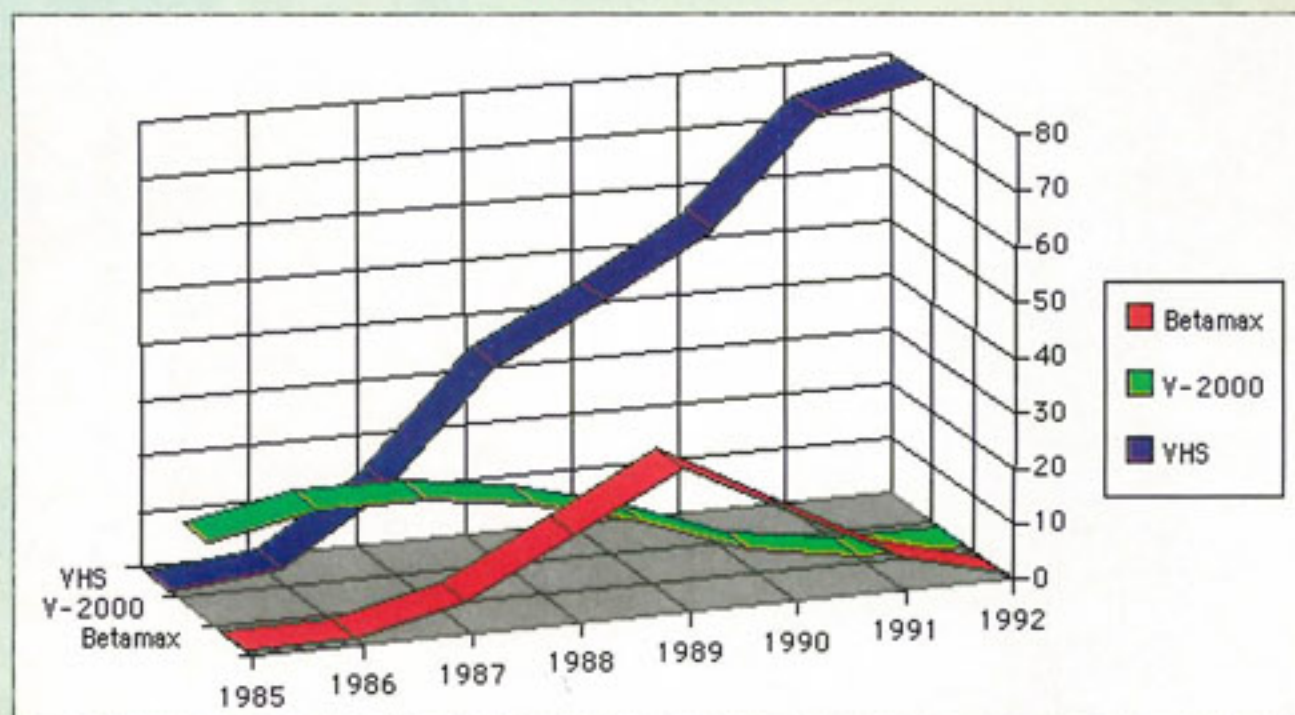


Figure 1 When drawing a chart, your spreadsheet will present you with a number of options. *ClarisWorks* provides five separate groups, each with its own set of sub-options. Here, *Gallery* gives access to the various graph formats.

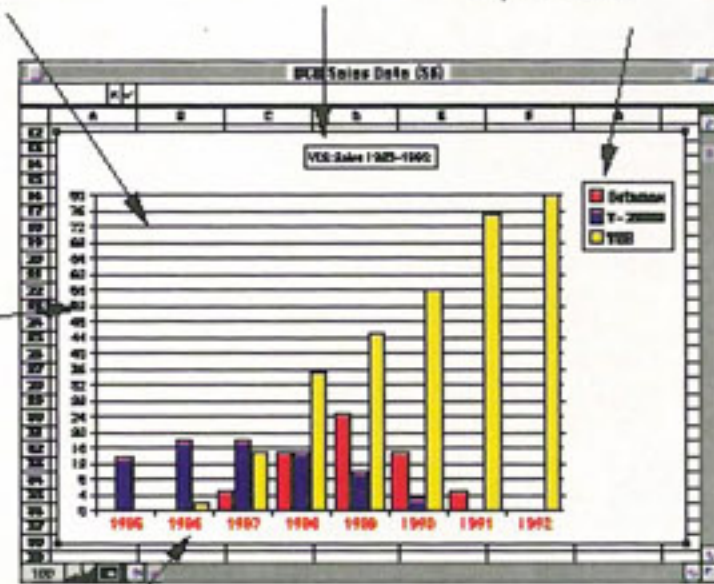
## THE ANATOMY OF A CHART

Scale lines like these are optional, but are useful to read off values.

The chart title was added by hand.

The chart legend shows what each colour used represents.

This is the y-axis. The top, bottom and interval are chosen automatically by *ClarisWorks* and can be changed.



This is the x-axis. The numbers come from the first column of the data. They are in red – same colour as the original data.

**Figure 2** We've given *ClarisWorks* our data and this smart little bar chart is the result. The only thing we've added is the title.

whether the bars are three dimensional), but we'll ignore those for the moment.

Once you've chosen the chart type from the Gallery, you'll need to select the axis options. These describe how the horizontal and vertical lines down the side of the chart should be displayed. For example, there can be tick marks on the lines to mark units. The main thing you can change here is the number scale which appears along the axis. This is useful when you don't want your scale to start at zero – say for example when the important data falls between two large values, like one million and

## JARGON BUSTERS

**Hi-lo chart:** takes pairs of values which represent the high and low points for a stock market share, then produces a chart.

**Pictogram chart:** a form of bar chart in which the bar is replaced by an appropriately scaled picture.

**Pie chart:** a chart in which a circle is divided into segments; the size of the segment is proportional to the amount of data the item takes up.

**Scale:** the numbers attached to an axis.

**Scatter chart:** the data items are marked by points. It's like a line chart without the line.

**X-axis:** the horizontal scale usually found at the bottom of a chart.

**X-Y line chart:** takes pairs of numbers representing positions along the x-axis and y-axis, then marks points which are connected by a line.

**X-Y scatter chart:** takes pairs of numbers and marks their positions; it's the same as an x-y line chart, but without the line.

two million – in this case having a graded scale between zero and one million would be pointless, because the meaningful information would all be crammed into the top half of the chart.

The series option enables you to set various options which control how the data is displayed on the chart. This varies from chart type to chart type, but for now, we'll leave it unchanged.

The label option enables you to set the title, the legend and their positions. The title is self explanatory, but the legend describes what each chart colour or symbol means (a key would be another way to describe it). Finally, there are the general options which set out the location of the data and how it is formatted. This enables you to tell the

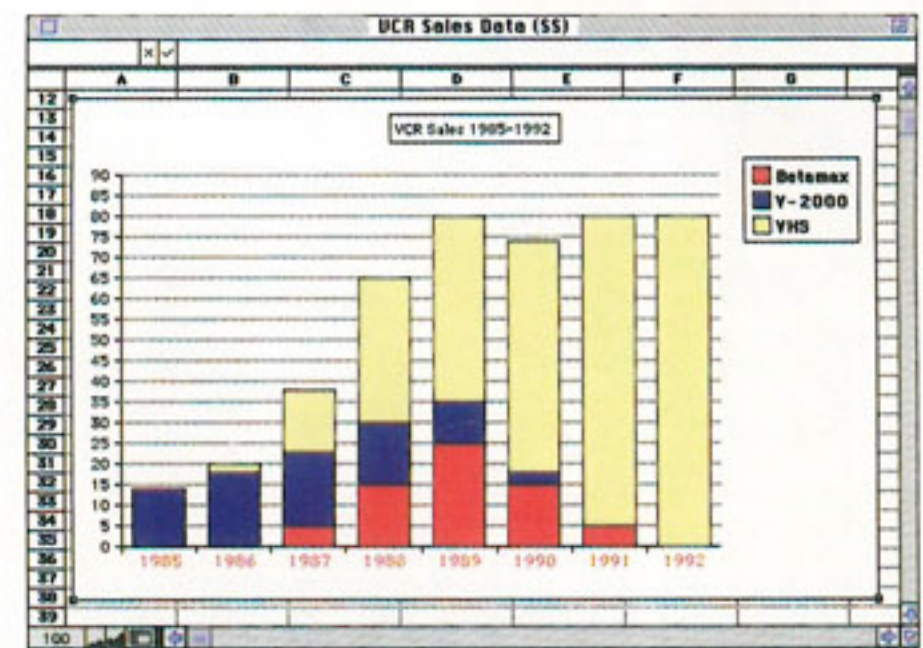
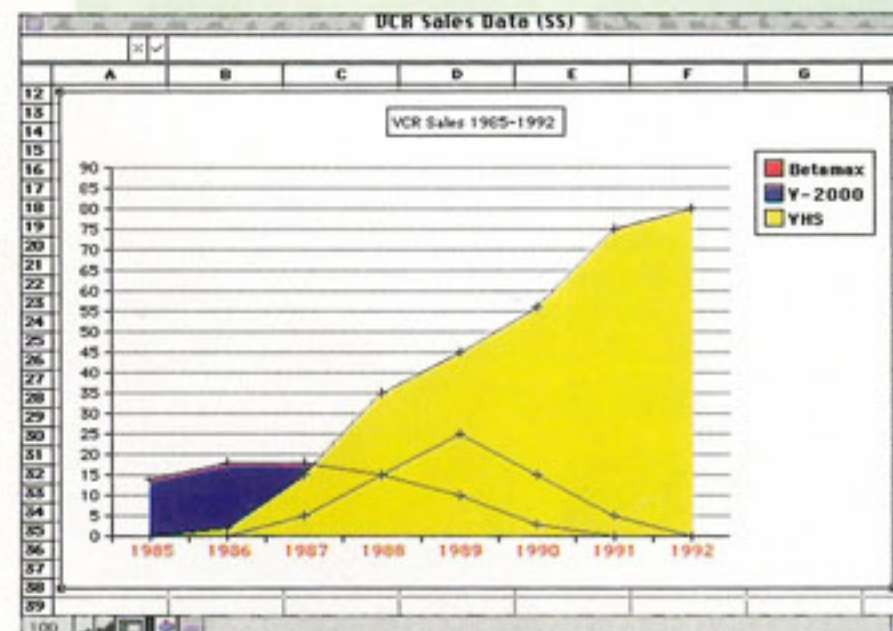
spreadsheet application that the data is in columns, and that the first column contains labels. Once you've worked your way through all the options, *ClarisWorks* will then produce a chart (see Figure 2).

## Changing the chart type

Different charts work on different occasions. *ClarisWorks*' bar chart default setting can be useful – particularly when you're only presenting one piece of data. In this case, however, the result is rather confusing. It is difficult both to compare the sales for each type of video recorder during each year and to see how the sales of each type varied over a given time. If the application had produced three separate bar charts, it would've been possible to see this trend, but it'd still be hard to compare the sales for each year.

A different approach is to use a stacked chart. In this case, the individual amounts are stacked on top of each other. So for each year you get a single bar which is composed of up to three parts – one for each video recorder type. It's now easy to see the total sales for a year, as well as the proportion that went on each type (see Figure 3).

Another possibility is to use an area or line chart. A line chart is one in which the data is plotted as points (often with crosses) which are then connected to their neighbours with straight lines. These graphs are the sort drawn



**Figure 3** This stacked bar chart showing video sales enables you to see the sales totals for each year, and also to recognise the proportion of sales each type of recorder has achieved. The scale on the x-axis has been changed to an interval of five, rather than the four-interval scale which *ClarisWorks* used initially.

in school science lessons, and are the most simple ones available. However, they can be very confusing when more than one set of data is presented, mainly because it's unclear which line relates to which set of data – particularly when colour is not available.

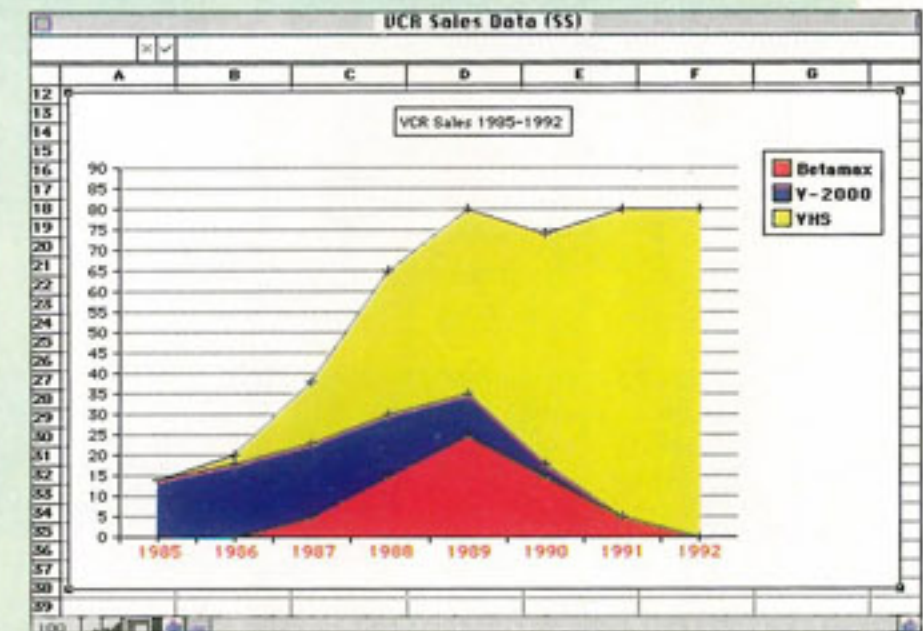
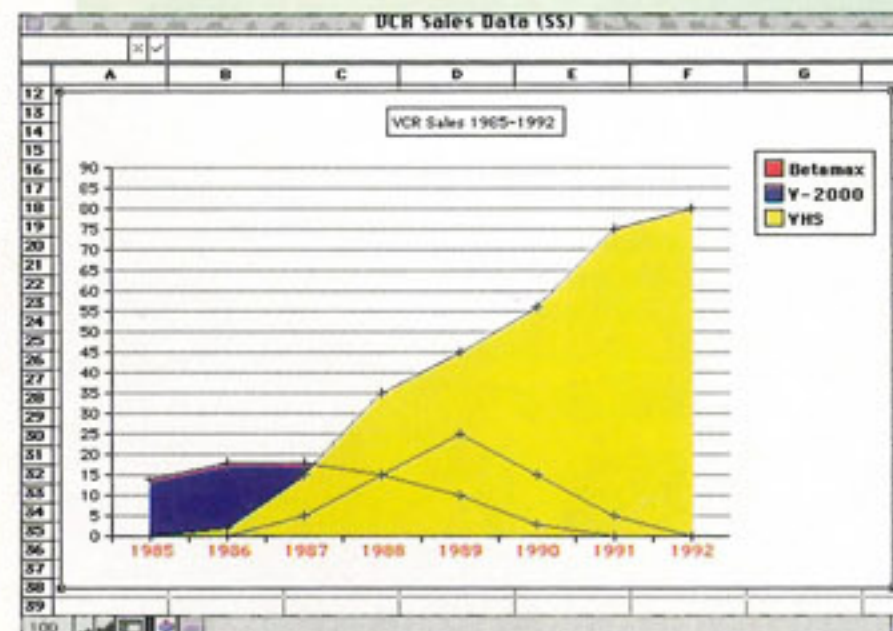
The area chart is a variation on the line chart, in which the area 'under the line' is coloured in some way. This can be useful to differentiate different sets of data. The areas are superimposed upon each other, though, and this can be confusing. You can remedy this muddle by using a stacked area chart, in which the areas are stacked on top of each other, in the same way as a stacked bar chart.

## Parting words

Before you give a chart to someone else, you first need to consider whether they'll be able to use it. In this case, the charts have been presented in colour, because *MACFORMAT* is printed in colour. Most people don't have access to colour printing, though, and therefore you should think again about what type of chart to use. Often, a number of multiple grey block charts don't look very appealing and, in some instances, they may not print very well either. In this case, you'll probably need to think more in terms of line charts.

Charts can be extremely useful and they are simple to produce. Whether you are using them to look at your own data or to show your data to other people, they remain one of the best methods of illustrating all those vital statistics.

*Simon Cox & Greg Morrison*



**Figure 4** An area chart and a stacked area chart are shown here. Again, the stacked version conveys more useful information.

# Facing the interface

Who's the boss around here? You or your database? Which one decides how you enter and present your data?

What exactly do you expect a database program to do? Obviously, it must enable you to store, manipulate and retrieve data, but there's more than one way of doing that. And if what you have in mind isn't the same as what the program's developers intended, the result is likely to be one big, expensive mistake. This problem isn't simply to do with features (although they are obviously a part of it), but with attitude and expectation – how the software approaches the job of being a database. This month, we delve into this rather intangible area, in the hope of preventing some of the mistakes and frustrations which often ensue.

## Box of magic

A good place to start is with an analogy. Before you start to read reviews, or even compare features and prices, try to think of a non-computerised equivalent of the database which you plan to create. Is it like a card index? A list? An arrangement of folders in a filing cabinet? Or maybe it's more like a magic box which you can throw things into, but where you can always be sure of pulling out exactly what you want. Whatever image you have of the database will invariably affect the choice of product you buy. It may seem perfectly logical, even self-evident, that a database should work in some particular way, but not every product will share that view.

Traditionally, databases had a very particular

interface which owed a lot to the way that early mainframe computers operated. Back in the '60s, when a lot of modern database ideas were developed, the sort of real-time interaction that we enjoy today simply wasn't feasible. Instead, data had to be keyed in off-line on to punched cards; these were then stacked up, put into a queue with other work, and fed through when their turn came round. If you wanted to retrieve data, the query again went in via punched cards, and the results came back as a list of records printed on to fanfold paper.

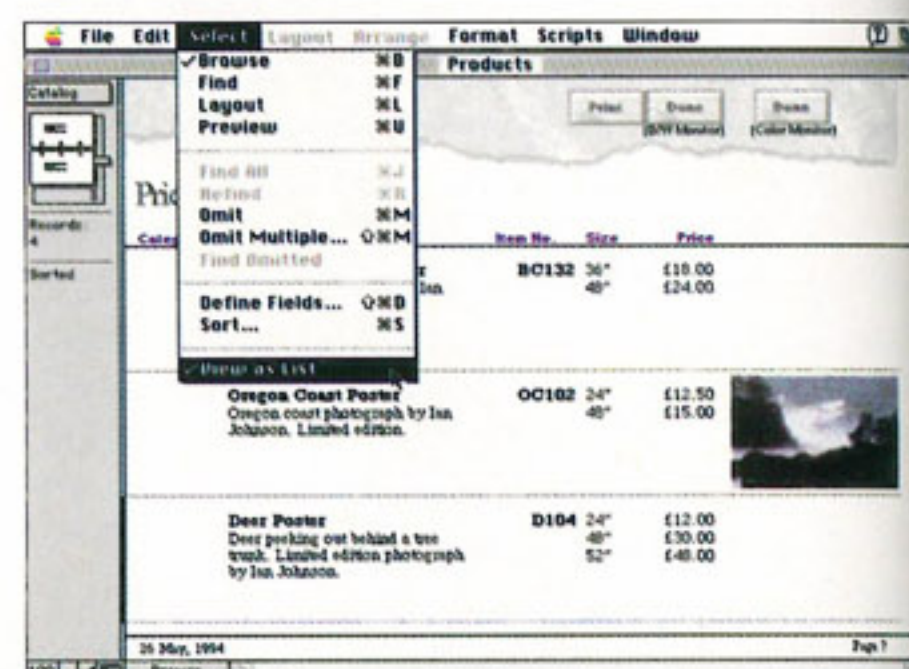
It all made very good sense at the time, but this mode of operation is still colouring the way many databases are designed today. There's a common assumption that you will enter data using a form layout, which only lets you see the record which you're working on (echoes of those punched cards), and retrieve data in the form of a tabular list of many records (just like the old fanfold printout).

This need not be a problem – often, a form view really is the best method of entering data. It displays a screen full of empty fields which you fill in, just like those on a printed form; if each record is entirely self-contained, this method avoids confusion and distraction. But, in some cases, you may prefer to enter data in the form of a list which shows many records. This could be useful if there are common field entries that you want to copy and paste, or if a group of records somehow belong together, meaning that you want to keep an eye on what other records contain or how many you have completed. A good database should give you total freedom to

... and this is how the same form looks if you try to designate it for data output. Both the related list and the buttons have disappeared. This will suit some users, but it may come as a nasty shock to others.

Class	Instructor	Time	Room
Accounting 101	Kowolski	4:00 PM	Building A Room 4
English 101	Camillo	1:00 PM	Trailer 1
Data Structures I	Netnin	10:00 AM	Building 1 Room 5

4th Dimension tries to insist on forms for entry and lists for browsing. This is an entry form complete with a list showing related records from another file, and with a set of customised navigation buttons...



FileMaker Pro provides great flexibility over how you view and enter data. The **View as List** option enables you to take quite complex layouts and scroll through them as a continuous listing.

choose whichever entry method you prefer. But not all do.

FileMaker Pro is one of the best in this respect. This program enables you to enter or view records in any layout, without restriction. It also has a **View as List** option under the **Select** menu, which enables you to scroll through a sequence of forms which weren't designed as one-record-per-line lists. This can be very useful if there are too many fields to fit on one line across the screen.

## Input and output

On the surface, *4th Dimension* and *4D First* appear to provide similar facilities to *FileMaker*. In reality, they are fairly traditional, that is, they assume you'll use forms for entry and lists for viewing. Although you can have any number of layouts, there must be one that is specifically designated for input and one for output. If you double-click on a record in the output list, *4D* will automatically open its input form to let you modify the record. Alternatively, you can enter data into a list, but what you can't easily do is browse on a record-by-record basis. The only way round this is to pretend that you actually want to modify a record by opening its entry form, then flipping through from there. Once you've finished, you have to click **Enter** or **Cancel** to complete the pretence that you've been editing data. What's really odd is that navigation buttons, which let you move to the first, last, next or previous record,

Name & Address-Extended (DB)

**BIRTHDAYS!!!**

Kennith	Abel	Sat, Mar 4, 1961
Leanne	Akerson	Wed, Mar 7, 1956
Joey	Dale	Sat, Sep 12, 1970
Marcia	Davidson	Fri, Nov 11, 1955
Alicia	Folsum	Wed, Sep 2, 1970
Paula	Gabriel	Sat, Nov 4, 1961
Karen	Jensen	Sat, Jul 23, 1949
Stella	Kirke	Fri, Sep 1, 1961
Joe	Lubber	Thu, Jan 19, 1961
Louis	Peterson	Tue, Jul 30, 1968
Stephen	Markowitz	Tue, Sep 17, 1963
Dory	Quigley	Tue, Mar 2, 1961
Margaret	Simpson	Thu, Jul 19, 1961
Bella	Thomas	Fri, Jan 8, 1961

Most of the integrated programs offer you plenty of flexibility, if not very much power. The best of the bunch is *ClarisWorks*, which lets you enter or modify data in any type of layout. (*WordPerfect Works* is not far behind it.)

only work in data entry mode. You'd have thought that they'd be far more use when browsing.

*Helix Express*, another popular relational program, also suffers from the old form/list dichotomy, but has a different set of quirks. In this case, you can browse through records one at a time – in fact, *Helix* does this rather nicely – but you can't, under any circumstances, enter data into a list. So, again, it pays to think of those analogies before you buy. Among the other database programs, *FoxPro* gives you plenty of flexibility, although not much in the way of simplicity; the integrated packages present very few restrictions – all will enable you to enter or view data either in a form or list layout. Traditionally, *ClarisWorks* and *WordPerfect Works* have stood out as the best, while Microsoft *Works* has been the worst – things change, however, so for a more up-to-date picture check our reviews starting on page 76.

Thinking carefully about what you expect from a database is important even with the simplest program, but it becomes essential when you move up to relational databases. Here you have the added complication of needing to view, edit and enter data across several files. Suppose, for example, that you run a club, and that you want to keep one file for members and one for subscription receipts. Using a relational program enables you to see member details, such as the address, each time you look at a subscription record, and to see all the subscription payments whenever you look at an individual's record.

In most cases there is a one-to-many relationship (one member may have paid many subscriptions), and this almost inevitably involves a combination of form and list layouts.

## Navigating your database with buttons

Navigation buttons are an enormous help if you're browsing in a form view. *FileMaker* enables you to define buttons which will move you to the next and previous records, or to any specific record number (use '1' for the first and any very large number for the last). *4D* and *4D First* both have pre-pro-

grammed buttons for first, last, next and previous, but they won't let you use them for browsing through your files. In *Helix*, you can use the buttons to browse, but slightly more work is needed to produce them. *FoxPro* is extremely flexible, but you need to program all the buttons yourself.

File Edit Window Type View Format Utilities

Denver

Roster - Layout2 (DB)

First Name	Last Name	First	First	Mo	Last	Address	City	Phone Number	State
Guy	Honda	Scott C.	Foresman			90 Macintosh	El Cajon	unlisted	CA
Jon	Gentler	Ann	Gentler			Apple Wood Dr	Santee	123-4567	CA
Geoff	Young	Mark	Young			1 Rider Ave	San Diego	345-6789	CA
Mark	Rommel	Irv	Rommel			200 Calm Seas	Mira Mesa	452-5500	CA
Bevey	Promonovich	Jon	Promonovich			1990 Market	San Diego	444-5555	CA
Michael	Bernson	Joanna	Bernson			7578 Lamar C	Ramona	991-0407	CA
Marc	Toney	Simon	Toney			1992 Australi	Mira Mesa	456-7890	CA
Albert	Melanson	Chris	Melanson			45 Point Leste	San Diego	246-8024	CA
Wes	Koad	Robert	Koad			1990 Black Fo	Mira Mesa	135-7913	CA
Fiona	Bricker	John O.	Bricker			Wild West Circ	San Diego	678-2431	CA
Nick	Drolee	Lou	Drolee			North Island D	San Diego	452-5500	CA
Denver	Cade	Missy	Cade			51 Paris Park	Mira Mesa	422-5502	CA
Matthew	Reinhart	Robin	Reinhart			4096 Platinum	Santee	246-5816	CA
Joan	Hendon	Mike	Hendon			294 Oldenberg	Loma Linda		CA
Alan	Allen	Tim	Pugh			2888 Partitio	Descubra	136-2727	CA

List of Restaurants

Select ..... Sort Order ..... Enter New Restaurant

Specialty	Name of Restaurant	Phone No.
American	Hard Rock Cafe	(617) 424-7625
American	Copley's Restaurant and Bar	(617) 267-5300
American	Top of the Hub	(617) 536-1775
American	Bull & Finch Pub ("Cheers")	(617) 227-9605
Chinese	Golden Palace	(617) 423-4565
Chinese	Joyce Chen	(617) 720-1331
Continental	Another Season	(617) 367-0880
Diners and Delis	The Blue Diner	(617) 338-4639
French	Hungry i	(617) 227-3524

*Helix Express* is another program which is adamant in its use of lists and forms. Unlike *4D*, it enables you to browse through the data in just about any way you want – the only thing is you can't enter data into a list. Double-clicking a list item always opens its form.

So, you'd use a full-screen form for the member records, with a list of all the subscriptions they'd paid within a defined area of the form. Easy. Well, you'd think so, but sometimes it isn't. *Helix Express* approaches this in a very odd manner; it doesn't allow you to create scrolling lists within another form. This is totally daft, because you have to make the area where you want to display the list at least as tall as the longest list it is ever likely to contain. If one founding member had chalked up 50 payments, for instance, every member's record would need space for a 50-line list. In a complex business database where you may be pulling in anything from zero to thousands of related records, this just isn't practical.

## Beautiful logic

By contrast, *4th Dimension* is beautifully logical. You can make the included list whatever size you need and *4D* will automatically add a scroll bar to cope with any number of lines. *FoxPro* too has no problems with scrolling lists, although it is rather complicated to set up. However, you can at least partially automate the process by using the *FoxApp* utility to create the layouts for you.

So far so good, but what happens when you look at a member record and notice that one of

*WordPerfect Works* is another integrated program with reasonable facilities. Notice the navigation buttons in the palette at the top. Switching the layout is easy and you can enter or view data in any of the formats.

the subscription entries is incorrect? A good database will enable you to enter data into the other file with the minimum of fuss. Here, *4D* and *Helix Express* both do well, enabling you to enter or modify records in the related list. The difference is that *Helix* insists on opening an entry form (remember, *Helix* won't let you enter into a list), while *4D* gives you the option of entering changes directly into the list or via a separate form.

Differences like this are rather subtle and can be hard to envisage if you've not worked with databases before, but they really do make an enormous difference to the usability of a program. If you're planning to spend several hundred pounds on an application which is going to be an important part of your business or hobby, it's well worth planning the whole project before you even look at any products. Try, if possible, to list all the files and fields which you'll need, then draw out possible layouts for how you want to see the data on-screen. Think carefully about what you want to see when you enter data, and about how you want to browse the records. Above all, ignore what anyone tells you about the right way to do it – you're the one who'll be using it, and any program that can't adapt to what you want isn't worth considering.

Jack Weber

## WHERE TO GET 'EM

- *4D First* costs £199. For more details contact ACI on 0625 536178.
- *4th Dimension* costs £750. For more details contact ACI on 0625 536178.
- *ClarisWorks 2.1* costs £195. For more details contact Claris on 081 756 0101.
- *FileMaker Pro 2.1* costs £275. For more details contact Claris on 081 756 0101.
- *FoxPro 2.5* costs £300. For more details contact Microsoft on 0734 270001.
- *Helix Express 2.0* costs £420. For more details contact Computer Capability on 0392 364253.
- *WordPerfect Works 1.5* costs £169. For more details contact WordPerfect on 0932 850500.

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Complete Audobon CD .....	£44.95	Learn to Speak Spanish CD .....	£44.00	StarTrek CD .....	£34.94
<b>Cosmic Osmo CD .....</b>	<b>£39.95</b>	<b>Game Pack-Monkey Island, Monkey</b>		Supertoons CD.....	£25.00
Countdown CD.....	£29.95	<b>Island 2,Indiana JonesCD .....</b>	<b>£44.96</b>	Swiss Family Robinson CD .....	£29.00
Curse of Catwoman CD .....	£29.95	Lunicas CD.....	£44.00	Tortoise and Hare CD .....	£34.99
<b>Cyberblast Floppy .....</b>	<b>£19.99</b>	Magic Death CD.....	£39.00	Traci I love youCD .....	£29.95
<b>Darkseed CD.....</b>	<b>£49.99</b>	Majestic Places CD.....	£25.00	<b>Train Engineer Floppy.....</b>	<b>£29.95</b>
<b>David Bowie-Jump .....</b>	<b>£29.99</b>	<b>Micropose Games Pack-Command HQ,</b>		Tropical Rainforest CD.....	£25.00
Deception CD.....	£39.00	<b>Railroad Tycoon, Pirates, and</b>		Distant Suns Floppy.....	£35.00
Desert Storm CD.....	£29.00	<b>Rex Nebula CD .....</b>	<b>£39.95</b>	Distant Suns CD .....	£69.00
Deep Voyage CD .....	£25.00	M/Soft Musical Instrument CD .....	£49.95	Vegas Games Pack Floppy .....	£29.99
Dinosource CD.....	£40.00	Mischevous Marvin CD .....	£39.95	Virtual Valerie CD .....	£39.00
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# MAC ANSWERS

**GOT A PROBLEM WITH YOUR MAC? WE'RE HERE TO SOLVE IT!**

**W**hatever your Mac problems we're confident that MACFORMAT's experts can solve it. All you have to do is fill in the form on page 66 – or photocopy it if you don't want to cut up your copy of MACFORMAT – and then post or fax it to us. Include as much detail as you possibly can about your setup and the software you're running, in particular the version number (to get this, highlight the program icon, then select **Get Info** in the **File** menu or press [command] I).

Please note that we are unable to answer questions over the phone – so there's no point ringing us up with technical enquiries. We're also unable to enter into personal correspondence – even if you enclose an SAE.

## Do-it-yourself problem solving

One of the main causes of a program not working properly is something called an INIT clash – this ominous-sounding term means your program isn't happy with one of the system-level Extensions (INITs in System 6) that are running.

Fortunately, it's easy to check if this is the case. First of all, restart your Mac without any System Extensions (INITs). If you're running System 7.0 or above, that means restarting the Mac and holding down the [shift] key – a message telling you

'Extensions off' will appear. For any System version below 7.0, move all the Control Panels and INITs out of your System folder and restart the Mac.

If your program now works, it must have been unhappy with one or more of the INITs. The only way to work out which one is the culprit is to move them all out of the System folder, then put them back in one at a time – not forgetting to restart your Mac after each one – and test the program again after each one has been replaced.

## A line on hardware

### HARDWARE

**Q** I have a faint line around two inches from the bottom of the screen of my Apple 14-inch monitor. I've been told this is the 'Trinitron Line'. Am I being taken for a ride?

**Nick Shorey**  
Rotherhithe, London

**A** No, it's all true! This has been a common subject of debate over the years – people do find it hard to believe, and I'm sure that more than one person has reported it as a fault. But it's actually something you'll find on any Sony-made Trinitron screen. The line forms where the aperture grill (a grid of vertical wires) is stabilised by a horizontal support. This grid acts against shimmering and generally improves the picture. In fact, the 16-inch monitor has two wires. Don't worry about it – just try to ignore it!

## RAM fragmentation

### MEMORY

**Q** After using MS Word and quitting the application completely, I have insufficient RAM to open a large program such as Graphics Converter unless I restart. Why does restarting create more RAM, if I've already quit out of the application?

**David Turner**  
Clapham, London

**A** What you're actually experiencing here is fragmentation of RAM. Usually when a program requires, say, 2.5Mb of RAM, it wants it all in one block. There are two possible things that can prevent this. First, an Extension may be sitting in the middle of the space that the

program you're trying to load needs and the program can't run if its code loading is split in half. It would usually be an old or perhaps badly written Extension that would cause this.

The other possibility is that the 'slot' formerly occupied by the application you just quit is not being freed up and added to the total memory that the System can see. Well-written programs shouldn't really give you any problems, but when you have programmers from different companies working with different methods, this kind of thing can happen. (For more details, see the 'Memory Magic' feature in MACFORMAT issue 13.)

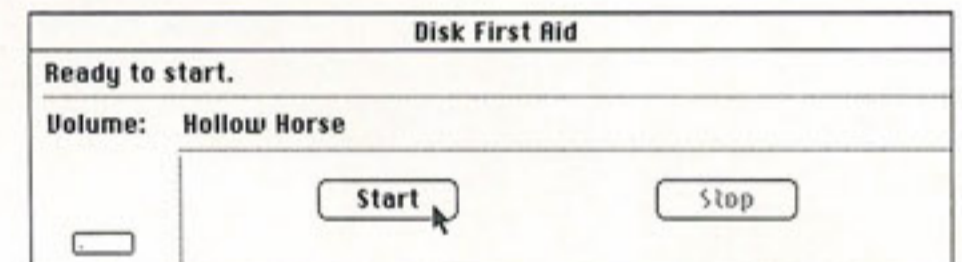
## Startup errors

### DISK ERROR

**Q** My Disk First Aid verified my hard drive, then displayed a message saying 'Problems were found but startup disks cannot be repaired.' Is this a problem? If so, how can I fix it? I do have programs running – should I test it with Extensions off?

**Iain William Robert Dean**  
Formby, Merseyside

It is possible to check a disk while programs and the like are running, because *Disk First Aid* is only 'looking' at the data. Repairing any problems is a different matter, however, because this will actually alter data which is already in use. In fact, the message 'Startup disks cannot be repaired' is telling you that a repair cannot be put into effect if you start up with your internal hard disk, because the System files will be open. What you need to do is start up with the *Disk Tools* disk (it has a System on it). You can achieve this by inserting it in the floppy drive just when you restart the Mac. Then all you need to do is run the *Disk First Aid* program that's on the floppy. This process will



*Disk First Aid* is a useful hard disk utility that comes free with your set of System disks, on a disk named *Disk Tools*.

ensure that nothing on your hard disk is being used, and means that repairs can be attempted.

## Port problems

### HARDWARE

**Q** 1. I moved house recently. When I reconnected my Mac, I found that whenever I tried to print a dialogue box, it asked me to check if the printer's cable was connected, or whether it was connected to the modem port. After trying to print several times, I changed the port and connected the cable to the modem port. The printer started to function. Will the problem persist, and what will happen if I start to use a modem?

2. I tried to verify my hard drive using *Disk First Aid*, but it couldn't repair the problems it found. I then scanned the hard drive using *Disinfectant*, but no errors were found. Is there a hidden virus, or something else which I should worry about?

**Tony Vella**  
Paola, Malta

1. I think you've worked out a way around this problem yourself. It would seem, since the printer and cable are fine when used in the modem port, that something has happened to the printer port itself. The two ports are identical (the only reason there are two is to give you the chance to use two devices simultaneously). So, the modem port here is acting as a handy

backup! The problem is, unless it's a very simple problem, you'll need to replace the entire logic board – and that's expensive if the machine isn't still under warranty. If you want to start using a modem without repairing the damaged port, all you need to do is unplug each device as you change over. Bear in mind, however, that constant plugging and unplugging can cause wear and tear, which might eventually damage this port too. You might want to consider tracking down a T-switch, which would at least enable you to have the plugs permanently in place. Check at your local electronics hobby shop. (Do you have Tandy stores in Malta?)

2. Well, you only have one problem – and it's not a virus, it's a disk error. (*Disinfectant* reported everything normal as far as viruses were concerned – that's all it was checking for.) Disk errors and viruses don't generally go together. Unfortunately, what you have here is potentially just as damaging, if you're unlucky. The errors are areas where it's no longer possible to store data, and if your System decides to write a file to these areas (it's not under your control where they go), then you might get an error message. However, if these damaged areas contain previously stored files, it's possible you could lose some important information. If *Disk First Aid* (or *Norton*, or whatever you use) can't repair a hard disk, then the first thing to do is get a backup of all your vital data. You could also try *HD Setup* and attempt a repair. The best way to get rid of errors is to completely erase your hard disk and reinstall everything from your backup – a daunting thought, I know, but it is effective!

## Scrapping QuickTime

### GENERAL

*Is there any way to copy and paste QuickTime movies into the Scrapbook? If there is, please could you tell me how it's done?*

**Akira O'Connor**  
Stanmore, Middlesex

This should be a perfectly simple procedure – you just highlight the movie, then copy and paste it into the Scrapbook.

If this isn't happening, then you may have an old version of the Scrapbook. The one which comes with *QuickTime 1.6.1* is version 7.1 – this is the most recent Scrapbook accessory. Mind you, if you have System 7, then the Scrapbook within this System version should support *QuickTime*. You could be short of memory – try using a smaller movie and see if that works.

## RAM upgrades

### MEMORY

*When I recently considered increasing my RAM (before I bought RAM Doubler), I was told by my Apple dealer that I can't just add extra SIMMs, but that I also have to change the 5Mb one which is already present within my Performa 600.*

**J Van Rijn**  
Utrecht, Netherlands

Yes, that's true. The 600 has 4Mb on-board (5Mb if there's a CD-ROM built in) and four slots for memory. This means your Mac con-

*My mouse has begun to behave oddly. A double click sometimes picks up an item, meaning that it can be dragged as though the mouse button were held down. In ClarisWorks (word processor), a single click produces this effect, meaning that a text block is highlighted and extends with the pointer – without the mouse button being held down. Is this a virus?*

**Donald MacDonald**  
Ullapool

*My mouse seems to have developed a will of its own! Occasionally, it refuses to accept that the button has been released. I have cleaned the rollers, but I can't get to the button without dismantling the mouse itself. Is a replacement mouse my only option?*

**Ian Worthington**  
Darlaston, West Midlands

tains four 256K SIMMs, filling all the slots. On a Performa 600, all the SIMM slots must contain SIMMs of the same capacity, so to add more memory, you must first remove all four 256s before you can add 1, 2 or 4Mb SIMMs. (For more details see our 'Upgrade your RAM' feature in *MACFORMAT 14*.) I'm afraid the 256K SIMMs aren't much use to anyone, except to owners of older Macs. This is one reason why *RAM Doubler* is so popular! (For those who haven't heard yet, this is a nifty piece of software that does just what it says – doubles your RAM – without any extra hardware at all! There are some limitations, though, and there are other solutions to your memory and disk space problems – for the full story, see the 'Memory Magic' feature in *MACFORMAT 13*. If you missed that, see page 112.)

## A cracked System?

### GENERAL

1. What actually happens when you rebuild the desktop? How is this different from defragmenting the hard drive?
2. I have disabled a number of unused Extensions. Are these all on the disks supplied with the Mac? If so, could I dump them until needed?
3. What is 32-bit addressing?
4. Can you recommend a simple auto-save program, and a program to compress info on floppy disks?

**Liam Walsh**  
Waterford, Ireland

1. The desktop is a file which keeps track of all your files. It is accessed by the System software



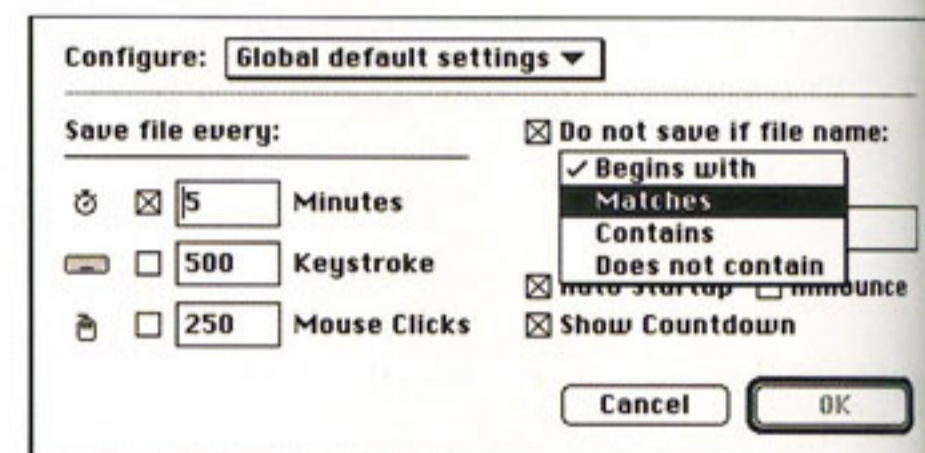
*Norton Utilities* has an excellent disk defragmentation application that will keep your Mac in peak condition.

## The mouse trap

### HARDWARE

In the past, a replacement mouse – at a cool £75 – was the only option available. Often, this was only to correct a fairly minor problem: a broken or faulty microswitch. The microswitch is the thing which makes sure the mouse button actually 'clicks'. Nowadays, however, some dealers have discovered suppliers for these, and they will happily repair your old mouse rather than sell you a whole new one.

The AppleCentre in Exeter, which is the dealer I've used in the past, will charge you £23.50 for the repair. (Call 0392 420024 for further information.) The other option open to you is to buy a new Apple mouse from your own favourite dealer, which will cost you £40.



*Now Utilities* has a program that automatically saves your work for people who find pressing [command] S an effort.

and the bigger it is the slower Finder operations will become. Rebuilding the desktop (forcing the System to update it and remove redundant information, such as details about files which have been deleted) speeds up this access time and thus speeds up the System generally.

Defragmenting is a similar thing, in so far as it will improve performance, but this is actually an operation which is performed on the entire hard disk. When a file is deleted, it's possible that a gap will be left, and although the next file to be created may fit here, it may not. Or perhaps, when space is low, half a file will be placed here and the other half fitted elsewhere. And if the gap is too small, this space may not be used at all and will effectively be lost. Defragmenting moves all your files along into one continuous block and, likewise, all the spare space is gathered together. You can end up with more usable space than you had, and those files which were previously split will be much faster to open and use.

2. Extensions can come with the System or as shareware (like those on the *MACFORMAT* cover disks). They can also be bought. Generally, you will already have a backup on the original floppy; when you buy a new Mac, you should be given a backup copy of everything which has already been installed. Bear in mind that if you delete an Extension and then find that you want it again, you'll need to restart your Mac to re-load it.

3. Put simply, 32-bit addressing enables you to install and, more importantly, access more than 8Mb of RAM on your Mac. It increases the physical maximum RAM that the central processing chip is capable of using. For the mathematically minded, the total RAM that your Mac

is capable of 'seeing' is given by the formula  $2^n$ , where  $n$  = the number of bits that the chip can address. Older Macs – such as the Mac Plus, the Classic and SE – have 24-bit addressing capability, which means they can 'see' a maximum of  $2^{24} = 16\text{Mb}$  (if you have that much installed, of course!). Unfortunately, 8Mb of this goes on hardware-related functions, such as NuBus slots and SCSI buffers, leaving you a maximum possible of just 8Mb of RAM. Macs with a 68030 processor and 32-bit addressing – such as the SE/30 and LCII – can see up to one gigabyte of memory (although, again, some of this is taken up with hardware related functions).

4. If you check out the shareware section (page 89) you'll find a program called *Sav-O-Matic* which will give you a good auto-save utility. *Now Utilities*, which costs £89, is another program which, in addition to many other useful utilities, offers a good auto-save module.

Compression programs abound – see the 'Memory Magic' feature in *MACFORMAT 13*. Commercially available ones like *Stuffit* and *DiskDoubler* are good, and contain some interesting features. But for simple compression, *CompactPro* is my favourite – it's available as shareware for just \$30 (and it was featured on *MACFORMAT 3*'s cover disk).

## A woman's work

### DATA TRANSFER

My wife uses Word 5 for Windows 2 at work. (Interestingly, they then transfer these files to Macs for publishing.) Sometimes she wants to work on these files at home (horror!). What's the best way to work with these files on our Mac, while retaining the for-

mat of the document? Is Word for the Mac our best option? (We have ClarisWorks 2.1 and WordPerfect 2.1.3.) I've used Apple File Exchange to lift documents off PCs before, but I've had trouble sending them the other way (using ClarisWorks).

**Paul Mackey  
Shrewsbury**

The key to transfers such as this is finding a common format which both Systems will read. Naturally, if you are converting documents from *Word* on the PC, then *Word* on the Mac is the logical choice for reading these. (*ClarisWorks* doesn't have very many options for saving in different formats.)

However, with PCs there are many formats, and *WordPerfect* is an old-timer on the PC stage. A good bet would be to save the files on the PC as DCA/RFT\*, because *WordPerfect* should be able to read these when you get them on to the Mac – including most of the text formatting. This will save you having to buy *Word Mac*.

\*RFT shouldn't be confused with RTF, which stands for Rich Text Format. RTF is another text format which might be worth trying if you're moving text between PC and Mac.

## Icon panic

### GENERAL

When I used the *Open* dialogue, I noticed an extra icon file on the cover disk supplied with the November issue of *MACFORMAT*; is this a virus?

**PJ Brookes  
Wincobank, Sheffield**

In the memorable words of that other Macin-



The Mac is great for creating custom icons, so at last you can catch the roadrunner and put him in the Wastebasket.

tosh addict, Douglas Adams, 'DON'T PANIC!' It's just an icon, that's all. You won't see it when you insert the disk in the drive, though, because it's set up to be invisible. In fact, this is the rather attractive floppy disk icon which you'll see on the desktop; there is a rather dull default, but if you want a custom icon, it's saved in this small file.

## How to gain pounds

### FONTS

Is it possible to adapt fonts using ResEdit? I was thinking of 'cleaning up' some of the TrueType fonts you gave away with the March issue of *MACFORMAT* – several are lacking a '£' sign.

**Matthew D Shaw  
London**

Unfortunately, once again it's a case of getting what you pay for. Sometimes you'll find that the '\$' sign is the only currency symbol available (particularly if the font has been designed in the US), but some of the fonts (particularly the script ones) don't have symbols at all. In some fonts you'll find the '£' symbol is replaced by a '#' sign; if that's the case, try looking for the '£' where the '#' would normally be: [option] 3.

Editing fonts in *ResEdit* isn't really practical if the fonts are TrueType or PostScript. To be honest, you'd need to have a lot of knowledge about both programming and fonts to even attempt this – and, unless you work for Adobe, I'm afraid that it's unlikely you'll be successful. I'm told there is a shareware TrueType font editor available, but I've never seen it. If someone does track it down, though, we'll certainly mention it.

Amending bitmap (screen) fonts is possible in *ResEdit*, but this is only for low-resolution work, so while you could add a '£' sign, it wouldn't look great on a printout.

## Easily turn on and offable

### EXTENSIONS

Is there any program which will turn Extensions on and off without you having to restart your Mac?

**Willie S Tan  
Tokyo, Japan**

This isn't possible, I'm afraid – and yes, it certainly is a pain! When you start up your Mac, the Control Panels and Extensions are loaded into memory along with the System software – in fact, they are loaded into the System heap (the area the System uses). As everyone knows, interfering with the System or Finder can lead to crashes or worse, and badly written Extensions can also cause a whole stack of problems. If you loaded something into the System heap

## The battle against DOS

### DATA TRANSFER



I have a Colour Classic at home, but I'm taking IT as a GCSE subject at school, where they have a network of PCs. I want to do homework on my Mac (which is a lot better than a PC in my opinion) and load it up at school.

Could you please advise on how to do this, because I'm getting lost in the jargon of emulators and translators.

**Douglas Lutener  
Handforth, Cheshire**

You haven't gone into great detail about what programs you may be running at school, so I will try to keep this general.

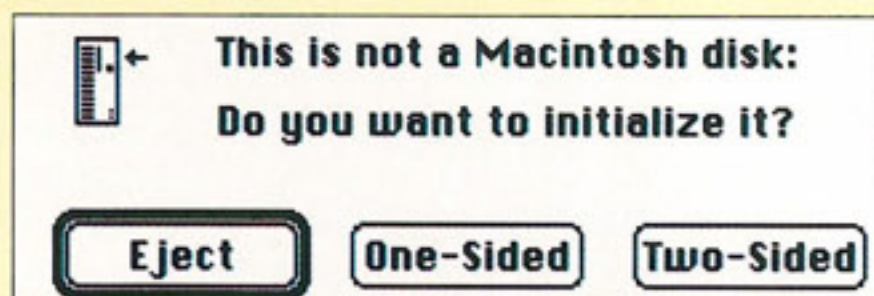
Briefly, an emulator, such as *SoftPC*, will actually simulate PC performance on your Mac – the DOS prompt environment and, if you like, the whole sorry mess that is *Windows* – although on a Classic, running *Windows* programs would be rather prohibitive in terms of performance (although if you get a PowerMac, it will run fine). An emulator is the only way of actually running PC programs on a Mac.

If you're really lucky, however, you might be running PC *Word* or *PageMaker* and have its Mac equivalent at home. Then the files, rather than the programs, will be freely interchangeable. However, this is perhaps too

much to hope for...

The alternative is to take the data files from your PC programs, bring them home and open them with Mac programs. Any text work which you do at home will be readable on a PC, providing you save it without styles or formatting. If you're using *ClarisWorks* or similar, then simply save your file as text-only. Oh, the other thing is to make sure that you have a PC disk, because PCs can't read Mac floppies. Macs can read PC disks using *Apple File Exchange*, which comes with most Macs, but for a more seamless usage (where the disk will actually appear on the desktop) you might want to splash out on commercial program, such as *Access PC*, *PC Exchange*, or *DOSMounter*.

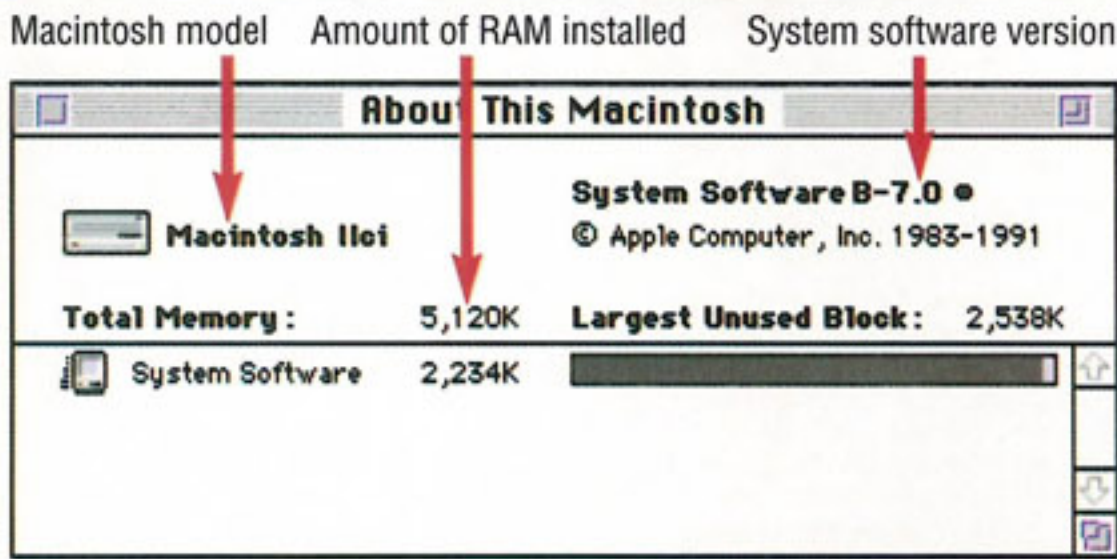
Finally, give your Mac file an eight-character name, followed by .TXT – this will ensure the file can be read by most PC word processors.



System 7.5 should see an end to messages like these, as it will swap data more easily between Macs and PCs.

## HOW MUCH RAM HAVE YOU GOT?

Obvious, but true: even the same models of Mac can have different amounts of memory or run different System software. To solve your problem, we need to know all about your setup, and this is where you can find out. Make sure you are in the Finder, point to the Apple menu and go to the first item About This Macintosh, then release the mouse button.



after it had already been set up, it would have a similar effect.

The Extensions and Control Panels (which are basically Extensions which enable you to adjust their settings as you work) must be in the System heap and, because they affect the way that the System and Finder run, they themselves are always running in the background.

Incidentally, Apple Menu items are different because they're really just programs which you can access through their own menu - they aren't doing anything to the System; the only reason they have a reputation as being System-

related is because under System 6 they used to live in the System file as Desk Accessories.

## Paperweight PRINTERS

*Your recent feature about printers missed one vital ingredient: paper. The quality of paper has a lot to do with the quality of print. What is the best paper for clean, crisp printing on my StyleWriter II?*

**P Paxton**  
Ovingham, Northumberland

Well, I suspect that you've already tried putting

ordinary photocopier paper into your StyleWriter - the result being a rather warped and soggy mess. An inkjet printer uses a wet ink which soaks into the page (as opposed to the dry toner which comes from a laser printer). So you really require a less absorbent paper. In fact, Apple recommends 20lb cotton bond paper, though the StyleWriter will take any weight from 16 to 28lb. 'Cotton' refers to the hairiness of the paper (the paper is basically a weave of fibres). Generally, the denser the fibres, the less absorbent the paper will be, but there are many treatments and production methods, which give an enormous choice of papers. The measure in pounds is the weight of one ream of the paper, though this is more of an Americanism - here in the UK this figure will more often be in grams. The StyleWriter will also handle 310 business envelopes, 3M brand CG3480 transparency film, and labels. These three types of media will be fed through the rear manual feed slot, while regular paper will go through the front or in the cut sheet feeder, which will take up to 50 pages at a time. It's also possible to get coated paper which has a 'gloss' on the surface to stop the ink soaking in - it also happens to be faster drying. But this is rather expensive and is more likely to be used in high-quality colour bubble-jet printers.

# MACANSWERS

If you send in a question for the MACFORMAT experts to solve, please fill in and include this form (or a copy of it). And please make sure that you include all the relevant details - version numbers of software and so on - so that we have the best chance of helping you. Send your form and question to:  
Mac Answers, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW, or fax it to us on 0225 446019.

Name .....

Address .....

Your Mac  
(For example, Performa 200, IIfx, PowerBook 145):

Approximate age of machine: .....

System version  
(see About this Macintosh screenshot above):

Amount of RAM  
(Total Memory figure from the About This Macintosh dialogue box):

Are you using virtual memory? .....YES/NO  
(This is accessed from the Memory control panel under System 7)

Do you have 32-bit addressing turned on? .....YES/NO  
(This is accessed from the Memory control panel under System 7)

If your Mac has an external monitor, list the make and model; if you are using a video card, give details:

Details of any SCSI devices connected  
(eg CD-ROM drive, hard drive, scanner):

Details of any other relevant hardware which could help us to answer your question:

Now, use this space to describe your problem or question. Include as much relevant information as possible. Please continue on a separate sheet if necessary.

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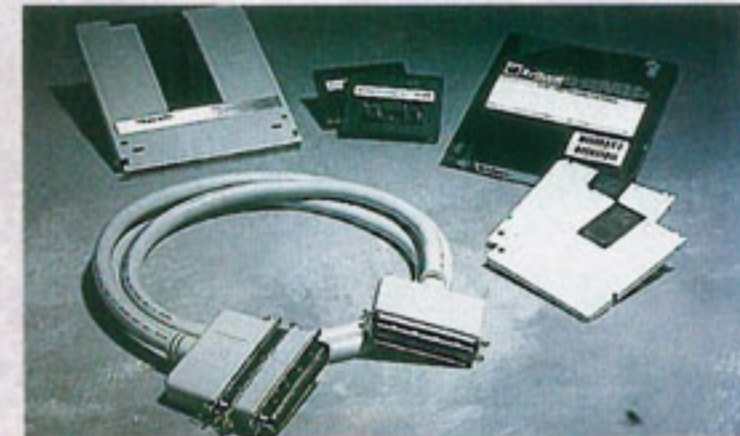
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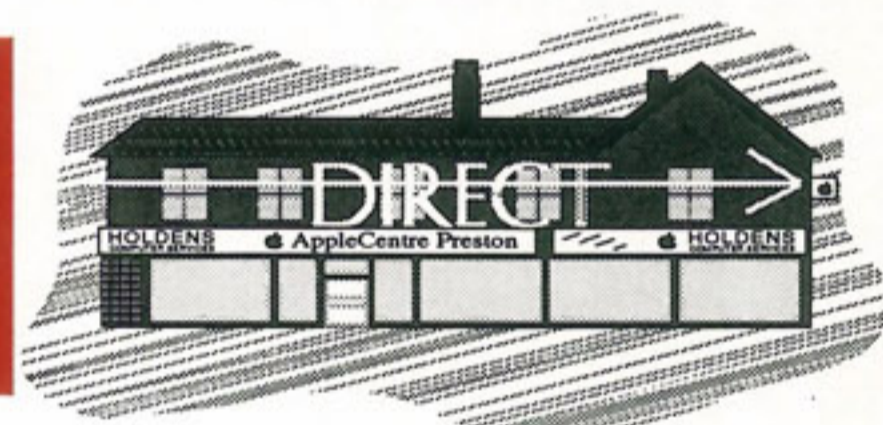
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# A routine call

Programming theory is all very well, but what about putting it into practice? Over the past year, we've covered all the *HyperCard* basics. Now's the time to do something with it.

**W**ith the exception of last month, *MACFORMAT* readers have been getting an additional item on their cover disk over the past few issues. It's a short *HyperCard* stack/utility designed (a) to show you what *HyperCard* can do and (b) how it does it – the scripts are not hidden, so feel free to study, dismantle and use them in your own stacks.

On the cover disk this month, you'll find a stack called *PhoneLogger*. This month and next, we're going to take a detailed look at this stack, because it demonstrates some useful HyperTalk routines and tricks. It also demonstrates how HyperTalk lets you continually develop and add to existing stacks.

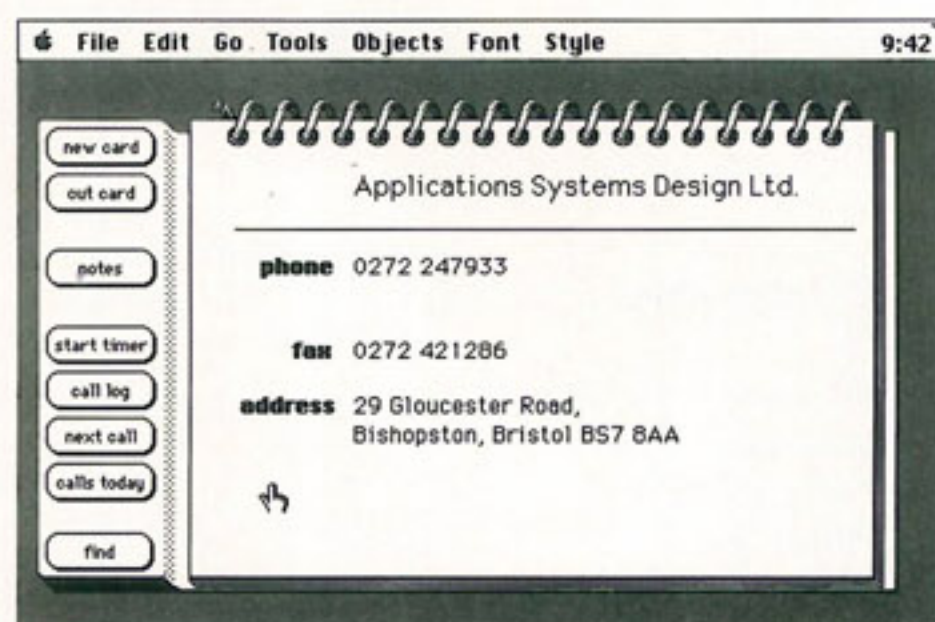
## Phone book with a twist

Do you do the sort of job, or have the kind of social life, where you regularly talk to a dozen or more people? Is it hard to remember what you said to whom and when? If you're a journalist, or involved in the legal profession, this can be very important.

Just as important in any kind of business is keeping your promises to call back, and keeping the pressure up on slow payers, writers, tradesmen, etc.

Which is why *PhoneLogger* was written. It doesn't just let you look up the phone number of a contact or company. It also:

- provides a scrolling, pop-up notes field which enables you to store as much inside info about each contact as you like.
- incorporates a timer, so you can keep track of how long you spend on the phone during each call – this helps you identify the time-wasters and control your phone-time.



This is *PhoneLogger*. It's basically a card-index-style database, but with some useful added features...

- provides a 'call log' which enables you to record the outcome of any telephone conversation, and automatically stamps each entry with the date and duration of the call.

- offers a 'next call' feature. This enables you to type in what you should talk about next time, and set a date for that call.

- offers a 'calls today' feature, which collates all the 'next calls' you're due to make today.

- provides a real-time 'find' function which searches through your list of names, progressively zeroing in on the right name as you type each successive character.

## Notes field

*PhoneLogger* uses a short and very neat little handler for displaying a pop-up field. Here's the script of the 'notes' button:

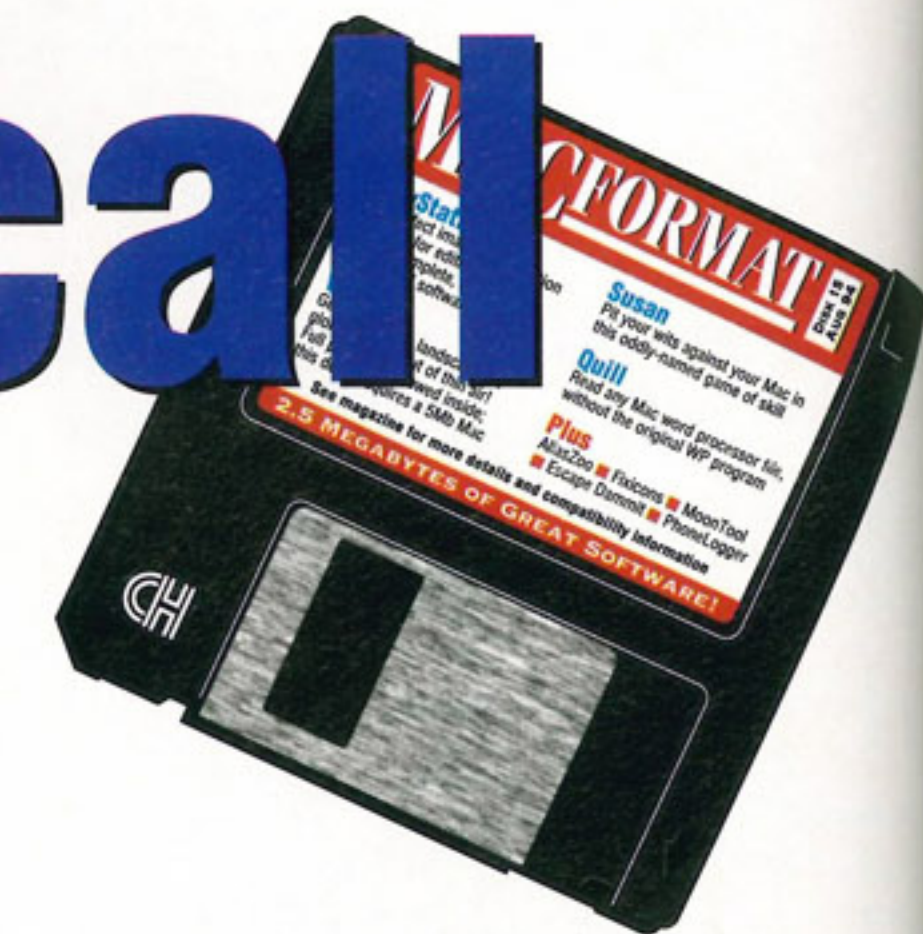
```
on mouseUp
  set the hilite of me to not the
  hilite of me
  set the visible of field "notes" to
  the hilite of me
end mouseUp
```

See how it works? The first line simply toggles the 'hilite' property of the button on and off. If it's on it turns it off, if it's off it turns it on. The second line simply sets the 'visible' property of the 'notes' field according to the 'hilite' property of the button. This simple on-off trick is used for the 'call log' button too.

## Start timer

This button activates a timer which keeps ticking away until you click the button again. The duration of your call is then stored, together with the date and your own notes about the call in the 'call log' field. It's a fairly complex sequence of events – here's the button's script:

```
on mouseUp
  global tm
  play harpsichord c7
  if the short name of me is "start
  timer"
  then
    put the seconds into tm
    set the name of me to "stop"
    set the hilite of me to true
    put empty into field "timer"
```



```
  show field "timer"
else
  set the name of me to "start timer"
  set the hilite of me to false
  answer "Record this call" with "No"-
  or "Yes"
  if it is "Yes"
  then
    send mouseUp to background -
    button "call log"
    get the number of lines in field -
    "call log"
    put the long date & "    " & -
    field "timer" into line it + 2 -
    of field "call log"
    hide field "timer"
    select line it + 3 of field -
    "call log"
  else
    hide field "timer"
  end if
end if
end mouseUp
```

Now there are a couple of interesting things to note about this script. First, you'll see that the name of the button changes when you press it. At rest, the button is called 'start timer', but when the timer is running, the button's name changes to 'stop'. This is really simple to do. As well as switching the button's 'hilite' between true or false when we click on it, we're also swapping its name between two choices.

Second, we want the button to do one of two different things, according to its 'state' when we press it. If the timer's not running, we want it to start the timer. If it's already running, we want it to stop and prompt us to record the outcome of the call.

There are two ways we could do this. We could check the button's 'hilite' property and do one thing if it's false, the other if it's true. Or we could check the button's name, and base our decision on that.

In this case, the latter is the best thing to do. Why? Well, in order to have a timer running and updating constantly, we need to use the HyperTalk 'idle' message – the only one that's continually being sent even when you're not doing anything. In fact, it is *only* sent when you're not doing anything. We can intercept this message with the following handler:

```
on idle
  global tm
```

```

if there is a background button "stop"
then
  put the seconds - tm & "seconds" ~
  into field "timer"
else
  pass idle
end if
end idle

```

The problem with the 'idle' message is that you can only intercept it at card level and above. So to make it work in our case, we need to put this handler in the background script (so that it's available to all our cards).

Now, we don't want the timer to be updated all the time, because we have to get it to stop sooner or later! And the way we've done that is to get the handler to first check for the existence of a button called 'stop' before going ahead and updating the timer. Normally, there isn't a button called 'stop' on our cards. But when we press the 'start timer' button, its name changes to 'stop' so the 'on idle' handler, above, becomes active. The moment we click on the 'stop' button to stop the timer, its name changes back to 'start timer' - there's no longer a button called 'stop' and the 'on idle' handler is deactivated.

One more thing. Obviously the timer has to be started from zero. This means we need to know when the timer was started, when it was stopped and thus what the difference was. We can do this using HyperCard's 'seconds' function. This returns the number of seconds which have elapsed since some notional date far back in the Earth's history decided on by the Mac's engineers. The precise value isn't important, because we're only after the *difference* in elapsed time between when we start the timer and when we stop it. When we start the timer we store this 'seconds' value in a variable. When we stop the timer we get the latest 'seconds' value, subtract the one in our variable, and there's the difference, in seconds!

But to do this we need to share a variable between two different handlers - one in the button script and one in the background script. For this we need to define a 'global' variable, hence the cryptic first line in both handlers: 'global tm'.

The timer button does one more thing. When you stop the timer, it asks you if you want to record the outcome of your call. If you answer 'Yes', it sends a 'mouseUp' message to the 'call log' button. This is effectively the same as pressing the button yourself. This displays the scrolling 'call log' field. Finally, the timer button inserts today's date and the duration of

your call, leaving a space between this and the last entry. Then it selects the next, blank line ready for you to type.

## The call log

The 'call log' button simply toggles the scrolling 'call log' field on and off so that you can check the contents. All the real work is done by the timer button, above. This is just for examining your previous discussions with that contact.

## Next call

When you finish a call, you'll frequently want to set a date for the next one. You might be chasing a shipment, checking the progress of a project or simply enquiring after someone's health. If someone's said that he or she will finish a job by a certain date, then you can (a) store a record of that and (b) be reminded about it by your electronic phone book!

Here's the button's script:

```

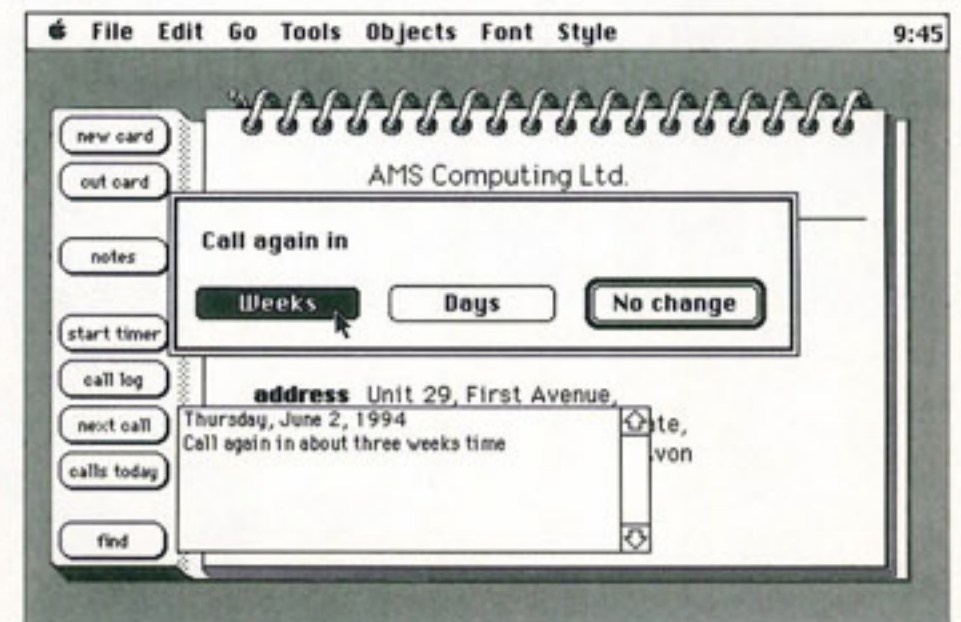
on mouseUp
  global factor
  if the hilite of me is false
  then
    set the hilite of me to true
    show field "next call"
    select line 2 of field "next call"
  else
    set the hilite of me to false
    answer "Call again in" with ~
    "Weeks" or "Days" or "No change"
    put it into unit
    if unit is "Days"
    then
      put 3600*24 into factor
      datecalc
    else if unit is "Weeks"
    then
      put 3600*24*7 into factor
      datecalc
    else
      end if
    hide field "next call"
  end if
end mouseUp

on datecalc
  global factor
  ask "How many"
  multiply factor by it
  get the date
  convert it to seconds
  add factor to it
  convert it to long date
  put it into line 1 of field "next call"
end datecalc

```

This script is interesting for a couple of reasons. The main one is the technique used to calculate a future date. There is no in-built system for working out the day and date, say, 40 days ahead (unless you've got a calendar).

The solution above is quick and dirty, but very effective. First it asks you whether you want to set a date days ahead or weeks ahead (the mouseUp handler). According to your answer, it then puts 3600\*24 (the number of seconds in a day), or 7\*3600\*24 (the number of seconds in a week) into the variable 'factor'.



Closing the 'next call' pop-up field gives you the option of setting a new date for your next telephone conversation.

Control then passes to the 'datecalc' sub-routine, which asks you how many days (or weeks) ahead you want to book the call. 'Datecalc' multiplies the 'factor' by your reply to get the number of seconds ahead you want to book the call. (Still with us?) 'Datecalc' then takes today's date, converts it to seconds, adds it to the value in the 'factor' and then converts the 'factor' back to a date.

Sneaky, yes, but oh so effective. You can go as far back or as far forward as you like this way. However, you can't add a 'months' option (or a 'years', for that matter) because, unlike days or weeks, they can be different lengths.

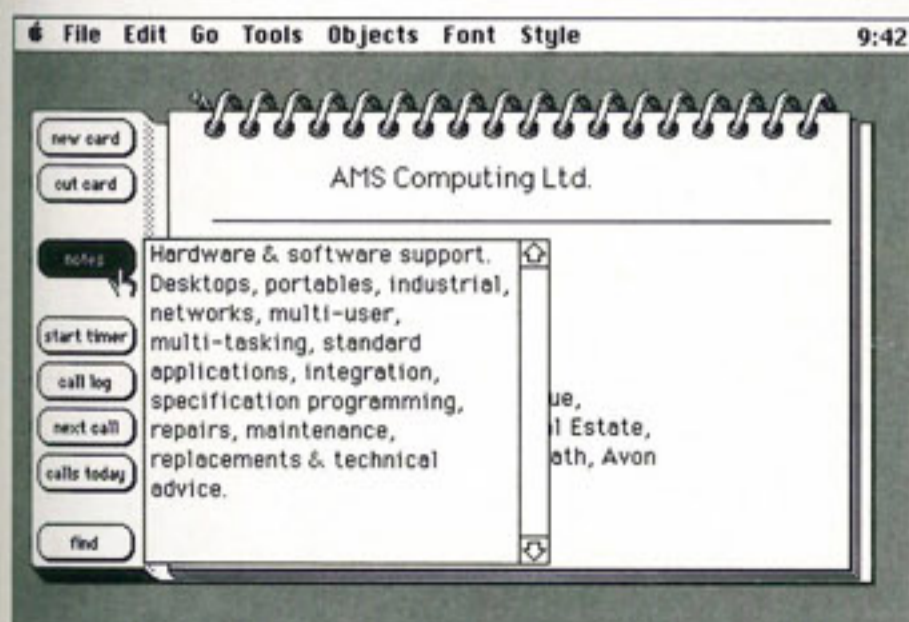
So why set up the 'datecalc' sub-routine? Why not incorporate it into the main handler? It could be taken outside the 'if... else' expression, surely?

Well it could, but we wanted a third, default option - 'no change'. This is because of the way the 'next call' button/field works. When you call up the field, the text entry below the date is highlighted so that you can update it if you wish. Maybe you don't want to? Maybe you just want to see what and when your next 'booked' call is? In which case, simply click on the 'next call' button again to hide the field.

This is when you're required to set a date for the call. If all you are doing is checking your arrangements, you'll be happy with the current date. So you need a 'no change' option to avoid going through all the rigmarole of clicking on 'days' or 'weeks' etc. Now there is probably a more elegant way of writing the button's main 'mouseUp' handler (above) so that we can incorporate the 'datecalc' routine into the main code, and keep the 'no change' option. But it was simpler just to create a separate sub-routine and call it when necessary. Besides, you never know when the 'datecalc' handler might come in useful again! By moving it to the background or stack script you make it available to lots of buttons, not just one. *Rod Lawton*

## NEXT MONTH

That's all we've got space for this month. There are a couple more buttons to explain, but we'll cover those next time. If you want to see how they work, take a look at the scripts in the cover disk stack. Also next month: more reader queries. So if you've got a HyperCard problem which needs to be resolved, drop us a line at: HyperCard, MACFORMAT, 30 Monmouth Street, Bath, Avon BA1 2BW.



This pop-up 'notes' field is displayed via a button script that uses the button's 'true' and 'false' properties.

# Shatter your Desktop

Fancy changing your Mac's alert sound from a beep into something more exciting? Thought so...

**S**ystem 7 brought us some more interesting alert sounds such as Wild Eep, Sosumi and who can forget the haunting melody of Quack? With *ResEdit* you can steal... er, borrow sounds from games or other applications to add to your own list of alert sounds. Actually, using this method you can swap sounds around from one application to another with abandon, but this is a good way to practise the technique.

Remember that sounds from commercial software are copyrighted, so don't use them for anything but personal use. Both of this month's tutorials come from Mike O'Brien in Hull, who gets a well deserved MACFORMAT T-shirt.

If you own *PGA Tour Golf*, then you might like to know that you can change the names of your opponents. This hack is very dangerous, so make sure you only do this to a copy of the game. Open *PGA Tour Golf* from within *ResEdit*, then open the Code resource. Open code num-

ber 8 and scroll down until you reach the names of the players. You can now edit these with one important restriction: you must not increase or decrease the number of characters in a name – and remember that a space is a character. Admittedly, this is not the most vital use of *ResEdit*, but we've always wanted to challenge Karl Marx to a round of golf – and give him a good thrashing.

Daniel Cressey from London suggests that you might like to try selecting **About ResEdit** from the **Apple** menu with **[option] [command]** pressed down. Then for something really silly, try selecting **About ResEdit** with **[option] [command]** and **[shift]** pressed down. Go on, try it!

If you have found some good uses for *ResEdit*, we'd like to hear about them. Get scribbling to: **ResEdit Capers, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW** and share your wisdom.  
*Derek Smith*

## WARNING!

Actually, you don't need to copy the sound file on to your desktop and then back again. You could alter an unwanted sound that is already in the System file by pasting the data directly into it, but the reason we have shown you the slightly longer way round is because our advice is to never use *ResEdit* anywhere near the System Folder. One wrong click near your System file and instead of seeing a happy Mac when you start up, you may see a grumpy Mac telling you to call an engineer. Remember, kids: *ResEdit* is very powerful indeed and can seriously harm your Mac, so don't take risks – it's not big and it's not clever! We make no warranty as to the safety or usefulness of any techniques described. MACFORMAT cannot be held responsible for any damage caused by your use of *ResEdit*, nor can we answer queries on it.

## A SOUND SWAP

Twelve easy steps to copying your favourite sound to use as your alert warning.



1

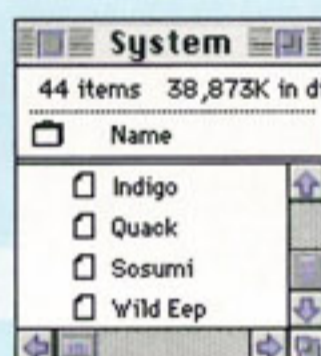
clicking the System Folder icon to open it up.

Make sure you have no programs running (other than the Finder). Begin by double



2

Find the System File – it looks like a suitcase. Open it up by double clicking the icon.



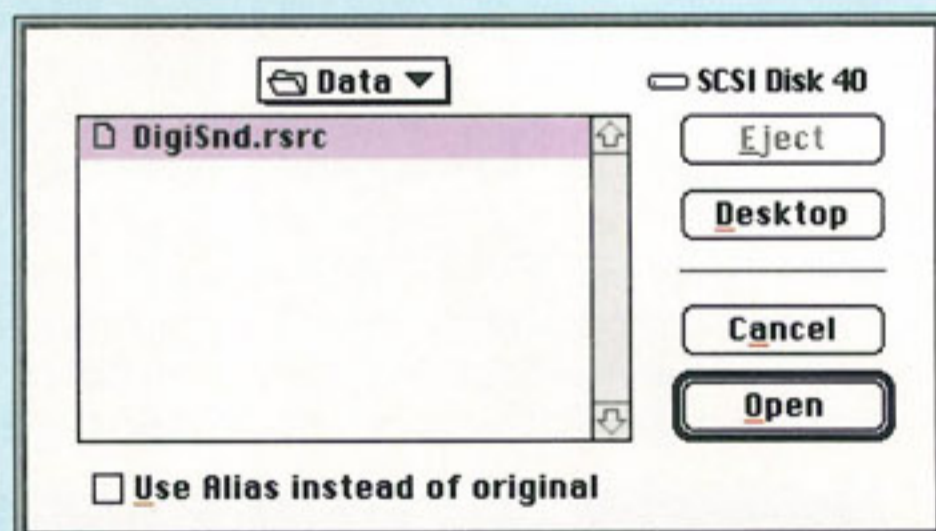
3

Scroll to the bottom of the list, where you will find the sounds that appear in the Sound Control Panel.



4

Hold down **[Option]** and drag one of the sounds onto your desktop. A copy of the original is created.



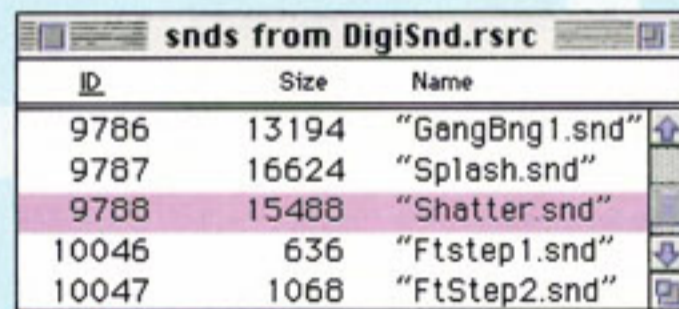
5

Open *ResEdit*, then open the file – it can be a game or another application – that contains the sounds that you want to copy



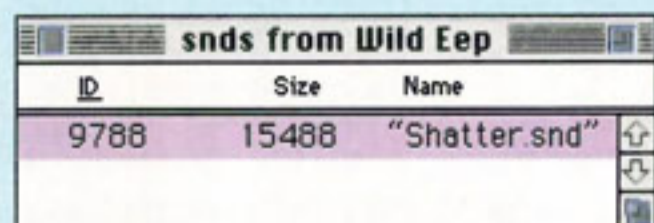
6

Open the **snd** resource. Note: some programs may have their sounds in a separate file, in the main application, or hidden where you can't access them.



7

Click once on the sound you want to copy (if you'd like to hear it, select **Try Sound** from the **snd** menu). Then select **Copy** from the **File** menu.



9

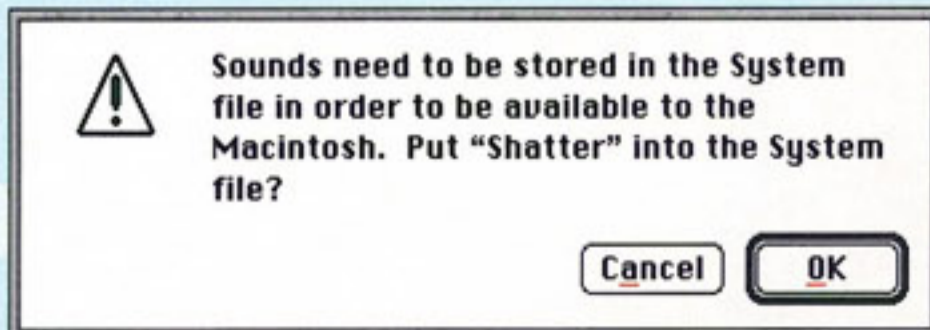
Choose **Clear** from the **Edit** menu to delete the old sound, and then choose **Paste** to enter your new sound.



10

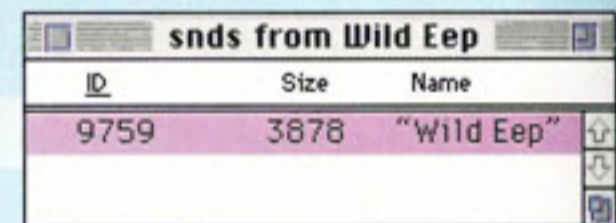
You should rename your new sound icon to something appropriate.

The job is done, so save and quit from *ResEdit*.



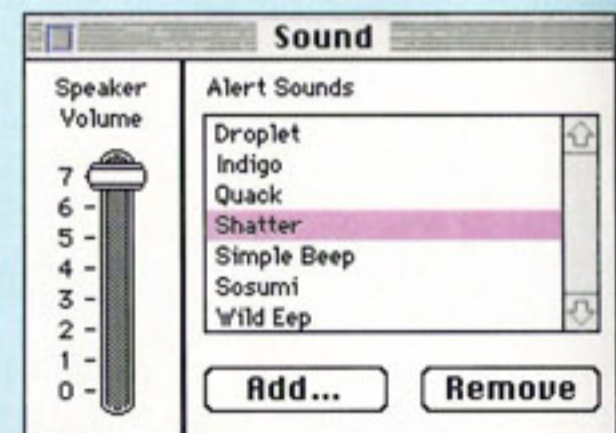
11

Drag your sound icon on to the System Folder. Your Mac will ask if you want to put this sound into the System file, so confirm that you do.



8

Select **Open** from the **File** menu and open the *copy* of the sound file you've made on your desktop. Again, open the **snd** resource so you can see the name of your sound.



12

You should find that this is now your selected alert sound, but if it isn't, bring up the **Sound Control Panel** and set it from there.

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# MIDI and the Mac

**A**fter messing around with *Sound Trecker*, which was on last month's MACFORMAT cover disk, you may find the music bug is starting to bite. Using the Mac's internal sound system is great fun, but for serious music making there's really no substitute for a synthesizer.

You don't need a massive amount of musical skill or money. What you do need are three things: a MIDI interface, a sequencer and a sound module. If you want to record music on your Mac, you'll also need a keyboard.

Communication between the Mac and a musical instrument takes place via MIDI, which is actually a communications protocol rather like the Hayes command set used by comms programs. MIDI is an acronym for Musical Instrument Digital Interface, but note that we call the box which connects the Mac to a keyboard a MIDI interface and not just a 'MIDI'.

Whenever you press a key on a keyboard, twiddle the pitch bend wheel, put your foot on the sustain pedal or press a button to change the sound, a MIDI message flies down the MIDI cable. These messages, being digital, can be stored in your Mac using a sequencer program,

**The Mac's internal sound system is fun, but if you want to create some serious sounds, you need to get to grips with synths, MIDI and sequencers.**

then transmitted back out again to the keyboard. The latter will replay the events just as if someone was physically pressing the buttons. And that's basically MIDI.

All Mac MIDI interfaces plug into the printer or modem port and have at least one In and one Out socket. Most users won't need any more, but if you have a couple of synths or sound modules it's worth buying a model with two or three Outs, which saves connecting instruments together using their Thru sockets.

The main thing to remember is that MIDI messages carry instructions and not sounds. That is, they

say which key was pressed and how hard it was pressed, but not what sound is being played. This is actually very useful, because you can record a music line and decide later what sound you would like to use - try doing that with a tape recorder!

To play back a MIDI recording, you need a sound module or a synthesizer. If you mainly want to listen to MIDI files and do the odd bit

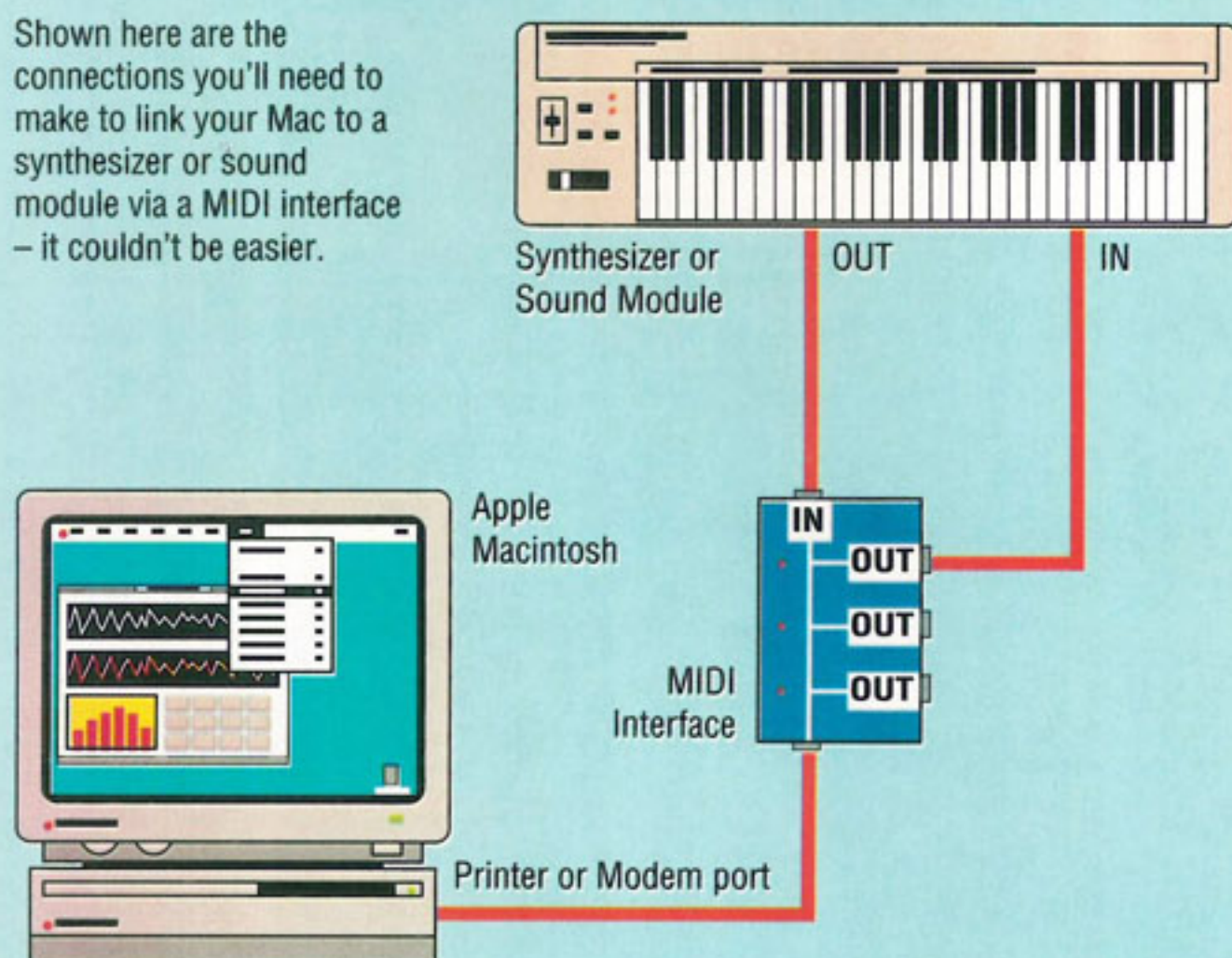
## MIDI INS AND OUTS

There are three MIDI sockets you will commonly see on a MIDI instrument:

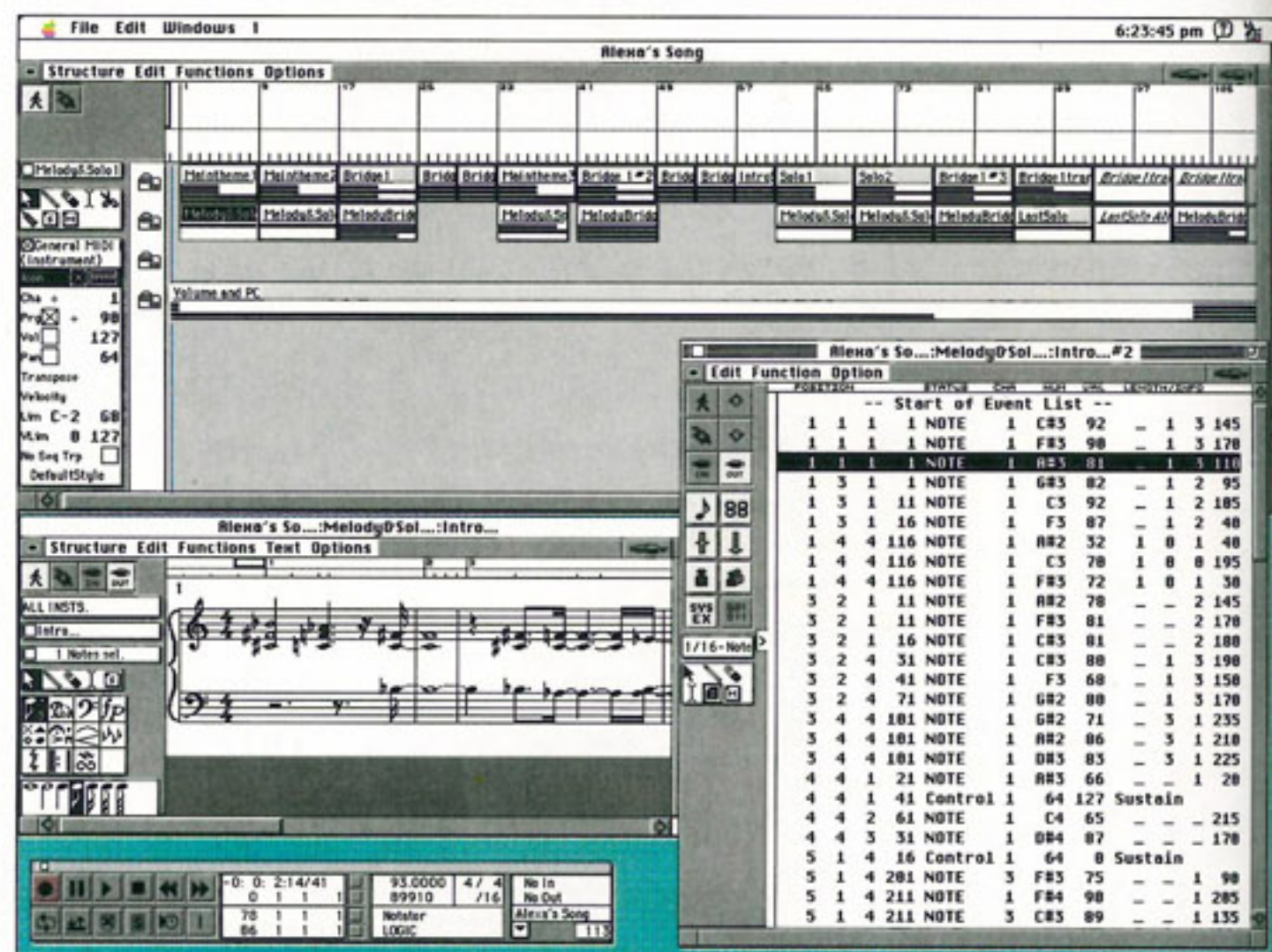
- In is used to receive MIDI data.
- Out is used to transmit MIDI data.
- Thru passes on a copy of whatever MIDI messages are arriving at the MIDI In socket. Unlike the Out socket, it does not transmit data generated by the instrument. Thru is used to link several instruments together.

## GET CONNECTED

Shown here are the connections you'll need to make to link your Mac to a synthesizer or sound module via a MIDI interface - it couldn't be easier.



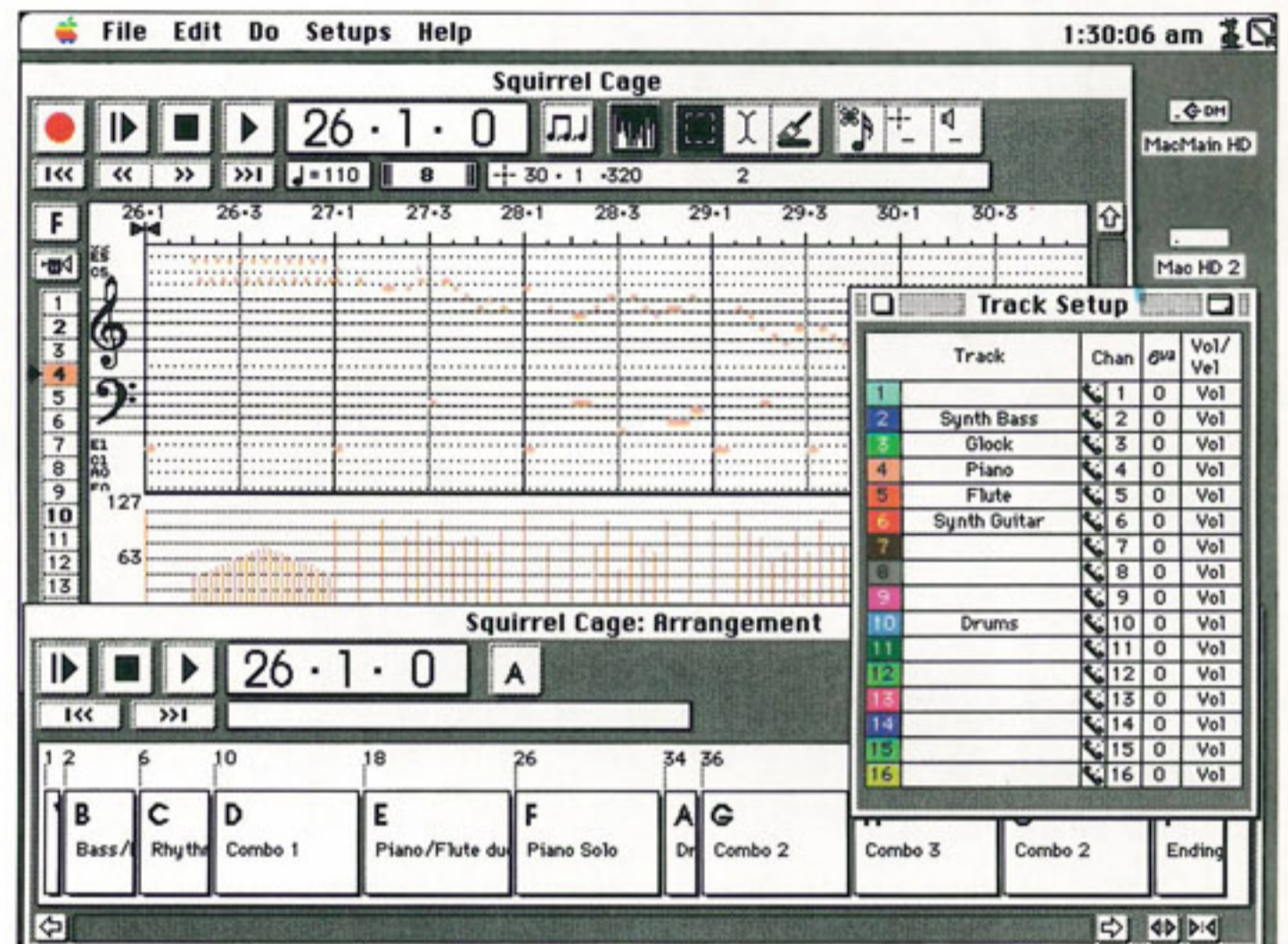
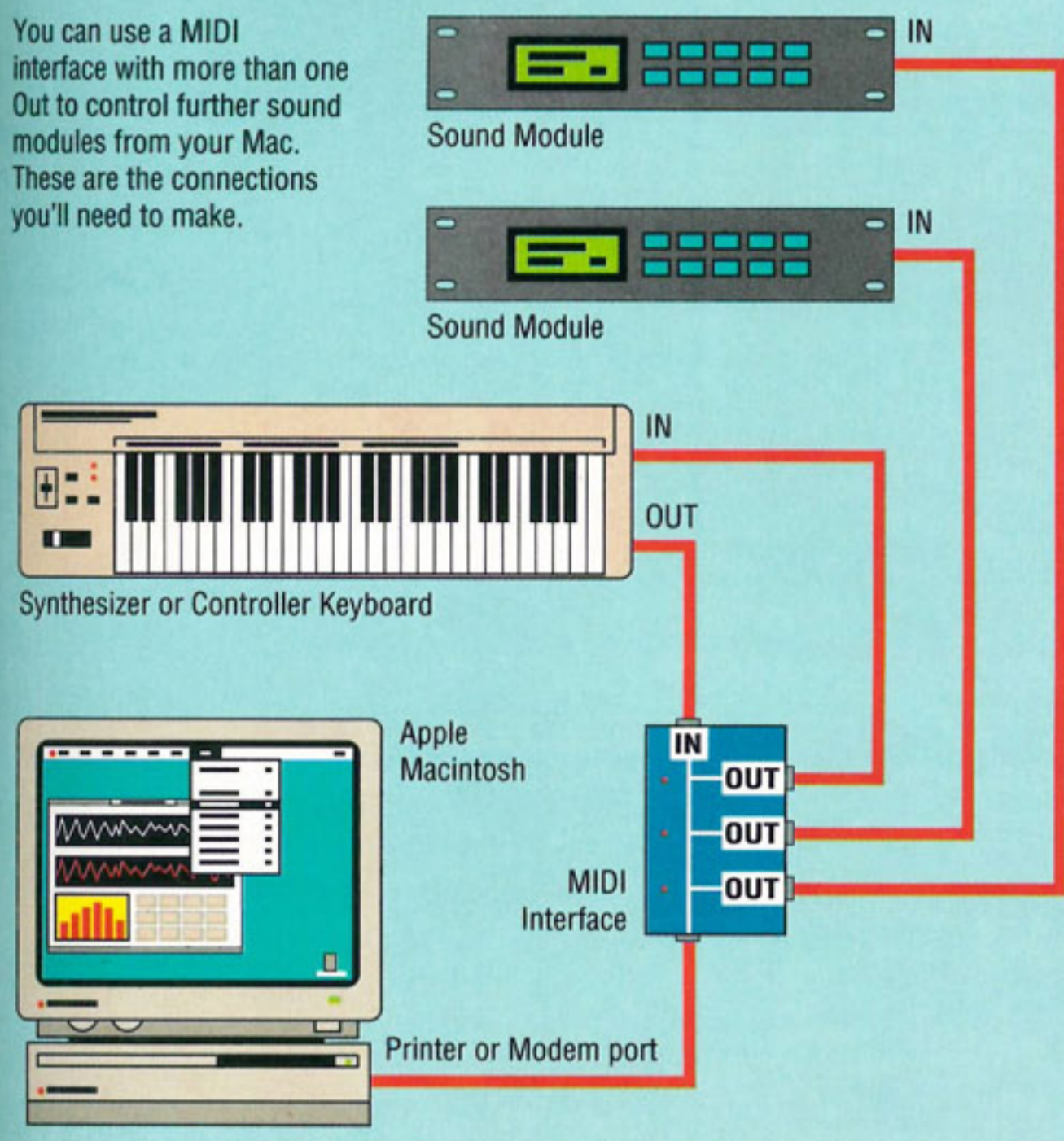
Play music on MIDI instruments with sequencer software (this is *Cubase Score*).



Notator Logic has the Arrange page we love, plus notation and loads of other goodies.

## SOUND MODULE CONTROL

You can use a MIDI interface with more than one Out to control further sound modules from your Mac. These are the connections you'll need to make.



Opcode's *EZ Vision* is a good budget sequencer with simple arrange facilities and a grid editor.

### MIDI INTERFACE TIP

The Outs on interfaces with more than one Out all carry identical data, which still limits your output to 16 MIDI channels. A cheap way to get another 16 channels is to add a very cheap interface to the other Mac port – printer or modem. But make sure your sequencer can access both ports first.

of editing, a sound module will be fine. However, if you want to record music too you need a keyboard, although guitarists can also buy MIDI-equipped guitars.

MIDI supports 16 different channels, which means it can handle music information for 16 different music lines at the same time. It's a bit like having a 16-piece band or orchestra at your disposal, but to make the most of it, you need an instrument which is 16-part multi-timbral – that is, one which can play 16 different sounds at once. Most modern ones are, but not all, so check before buying.

Another feature to check is the instrument's polyphony. Most modern instruments are 24, 28 or 32-note polyphonic, perhaps more. That's quite adequate for most users but bear in mind

that the polyphony has to be shared between the music parts, so if you do use all 16 music lines, each would only have one-and-a-half or two notes each.

At this point, it's worth saying a few words about General MIDI (GM). This is a worldwide standard which specifies that all GM instruments contain a certain set of sounds, so a MIDI file played on any GM instrument will sound roughly the same.

GM instruments contain a reasonable selection of workaday acoustic and synthy sounds, but are mainly of interest to people who want to play third-party MIDI files, of which there are thousands (see our February and March issues for a list of MIDI file suppliers). If you never want to play a third-party file and prefer

to do your own thing, you'll probably prefer the flexibility of a non-GM instrument.

A synthesizer will give you sounds plus a set of keys to play, but if you already have a sound module or if you don't want to spend a fortune on a synth, several small controller keyboards are available.

Recent models include the Goldstar GMK-49 (around £189) with 49 full-size keys, pitch bend wheels, modulation wheels and buttons to access 128 program changes. The Kawai MDK 61 II (£349) has 61 keys, Program Change buttons and good support for General MIDI modules. The Kawai Data Cat (£149) is a more compact unit with 37 keys. Yamaha and Roland also have controller keyboards to complement their sound modules. There's Roland's

## WHAT IS A SEQUENCER?

A sequencer is a device which can receive and store MIDI data, then transmit it again. As MIDI data is digital, it's easy for a computer program to do this. However, modern sequencers are far more powerful than mere recording and playback devices.

Most sequencers work on multi-track tape recorder principles, which gives most users a point of reference. They have a certain number of tracks, and record, playback, stop and fast forward buttons, but that's where the similarities end.

As MIDI data is simply a list of numbers, it is easy to edit. You can home in on the smallest aspect of a performance, change a single note among a cluster of many, alter the playback speed, change the pitch and perform many other functions which would be physically impossible to do with tape.

For example, the quantisation function

can pull sloppy playing back into time. If you can't play very well, you can create pieces in step-time by recording one note at a time. Sequencers with an Arrange page enable you to record lots of small patterns and link them together by dragging them around the screen. This is an extremely intuitive way of working.

Some sequencers have a score function, so musicians who are familiar with notation can edit on the staff. But don't worry if you can't read music, because there are other editors commonly known as grid or piano roll editors (so named because they look like the punched piano rolls used by old player pianos). These editors show notes as oblong bars on a grid. Information is fairly friendly because the event list will translate MIDI messages into English.

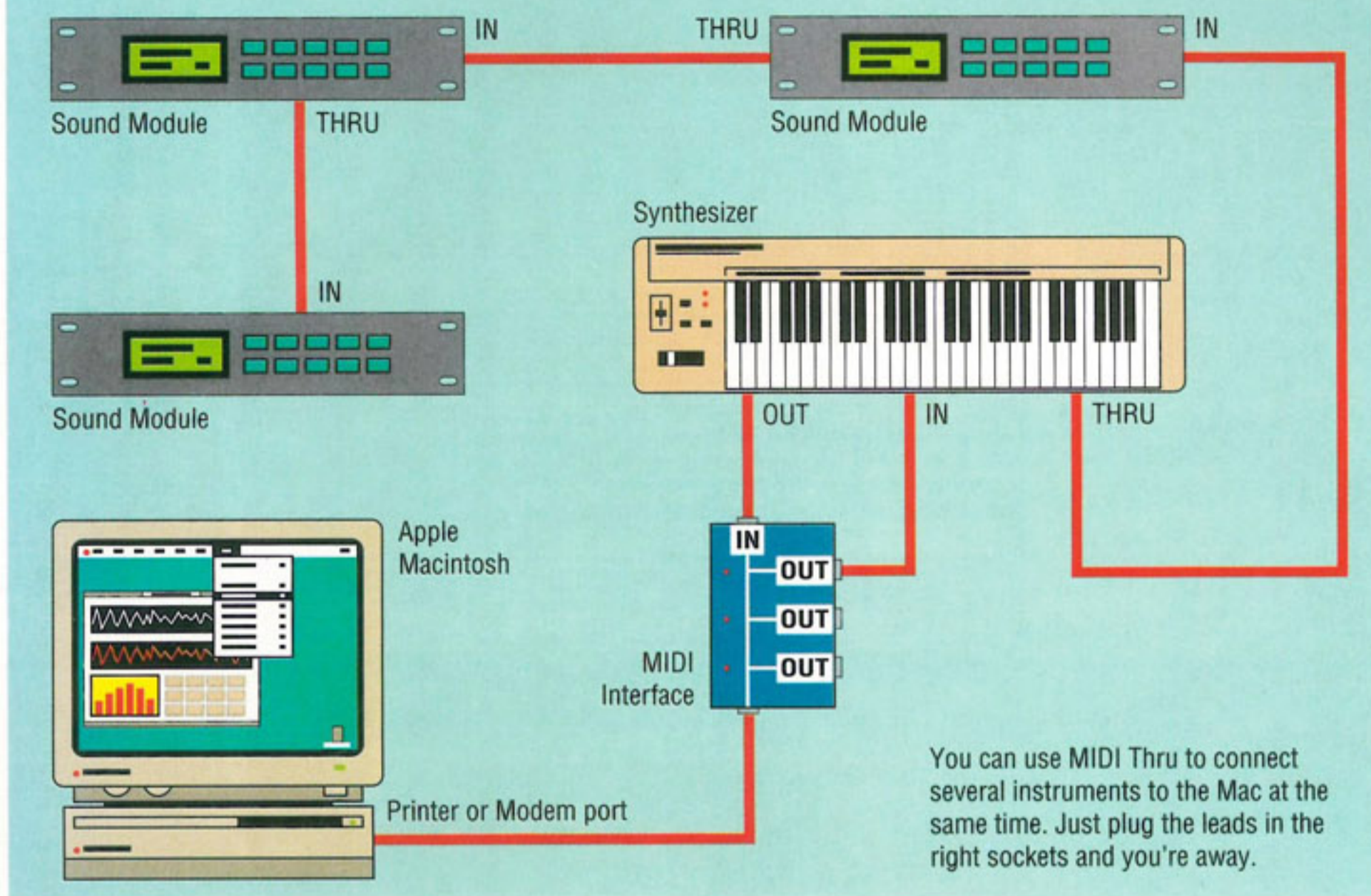
Budget buys include Steinberg's *Cubase*

*Lite* (£99 from Harman). This program has a superb Arrange page and notation, but lacks any other form of editing, which could be a drawback as you advance. Opcode's *EZ Vision* (£129 from MCMXCIX) is a good budget buy, while *MusicShop* at £149 is essentially *EZ Vision* with notation.

If you don't want to spend any money at all, phone Oscar Music and ask for the *Lime* demo disk. *Lime* is a very well-featured scorewriter and we looked at it in detail in *MACFORMAT* issue 11.

If you want to start off with an up-market sequencer which you can grow into, there are various versions of *Cubase* (from £449), Emagic's *Notator Logic* (£499 from Sound Technology), Passport's *Master Tracks Pro* (£199 from Arbitrator), Opcode's *Vision* (£399) and Mark of the Unicorn's *Performer* (£499 from Sound Technology).

CONNECTING MODULES WITH MIDI THRU



PC-200mkII (£205) and PC-150 (£139) and Yamaha's CBX-K3 (£299).

Connecting everything together is fairly easy. The MIDI Outs go to the Ins and vice versa. You can connect several modules using MIDI Thru. As you add instruments you can use MIDI Thru boxes or a MIDI Switcher.

The cheapest interface is the MIDIFace LX from Altech Systems (£41 from MacWarehouse), but a better option is Opcode's MIDI Translator II (around £70 from MCMXCIX). It has one In, three Outs and LEDs which show In and Out activity. It also has a thru switch (not to be confused with MIDI Thru) which enables you to use your printer or modem without having to reconnect everything.

If you want to synchronise to tape or video via SMPTE, then MIDIman's Mac Syncman (£229 from Key Audio) is good value.

You can even get a MIDI interface for nothing. Well, almost. Many current sound modules have a To Host connector, which plugs directly

into the Mac. We check out some of these next month. We'll also be looking at some Mac music bundles consisting of a GM sound module and music software and cables - everything you need to get started for as little as £369!

Jan Waugh

CONTACTS

- Arbiter tel: 081 202 1199
- Goldstar tel: 0296 720787
- Harman tel: 081 2075050
- Kawai tel: 0202 296629
- Key Audio tel: 0245 344001
- MacWarehouse tel: 0800 181 332
- MCMXCIX tel: 081 963 0663
- Oscar Music tel: 071 377 6294
- Roland tel: 0252 816181
- Sound Technology tel: 0462 480000
- Yamaha tel: 0908 249194

JARGON BUSTERS

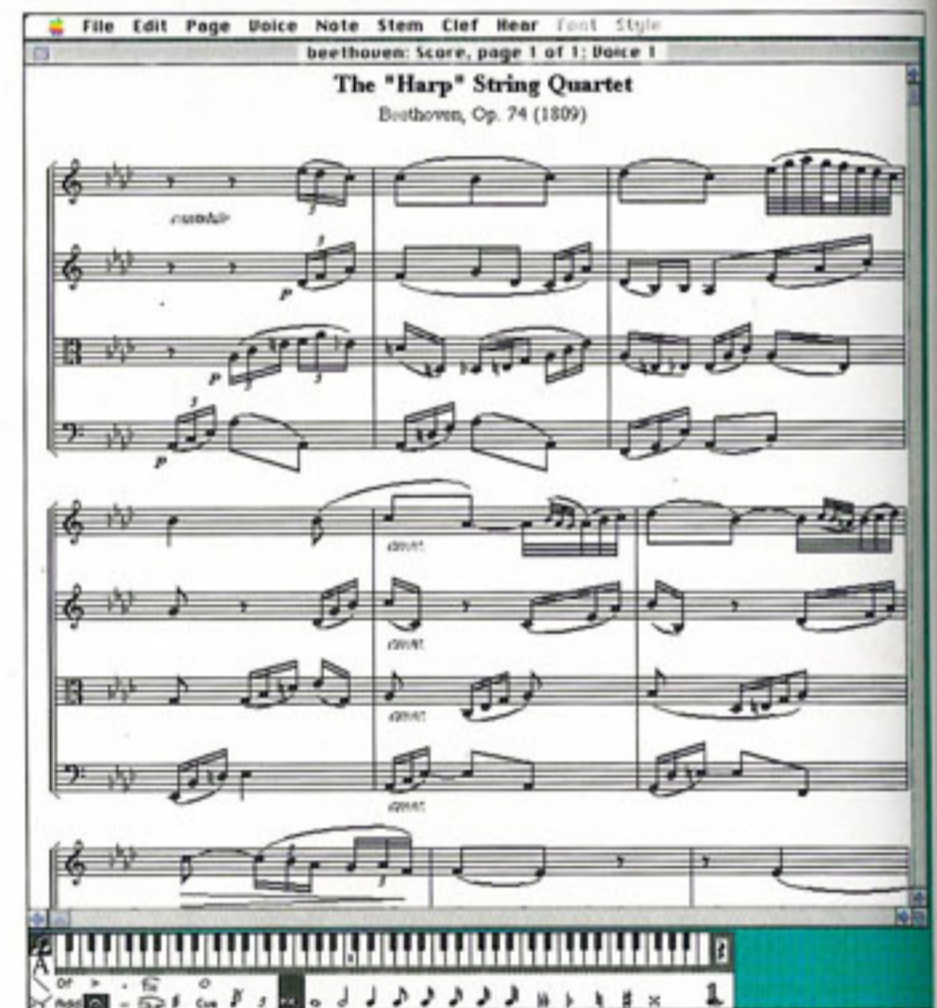
**GM (General MIDI):** this is a standard which specifies that all GM instruments contain a certain set of sounds, so a MIDI file played on any GM instrument will sound roughly the same.

**Multi-timbral:** when an instrument can play several sounds at once via MIDI.

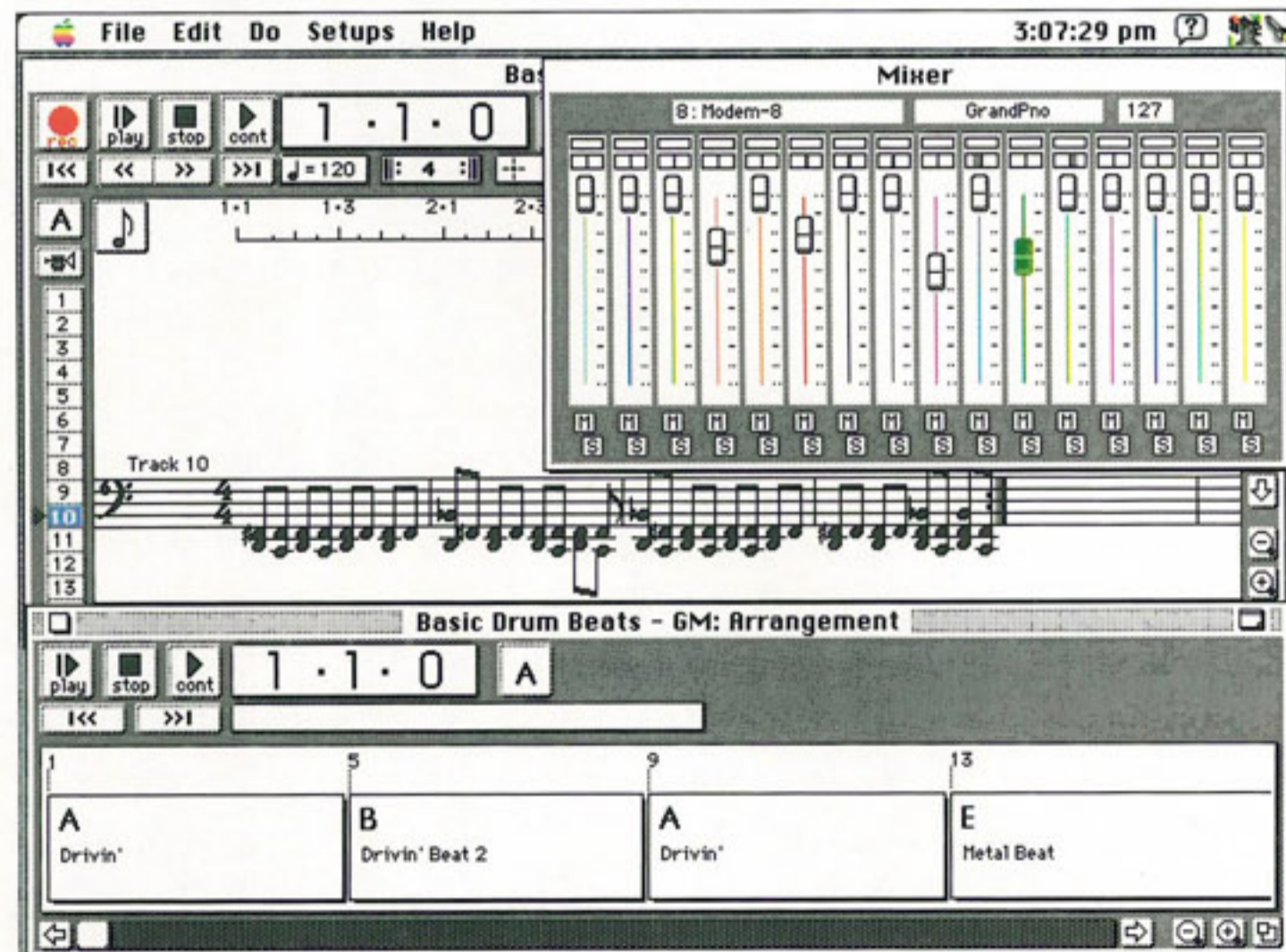
**Polyphony:** the number of notes an instrument can play at the same time.

**SMPTE:** Society of Motion Picture and Television Engineers. SMPTE code is a professional synchronisation standard used in the pro-audio industry.

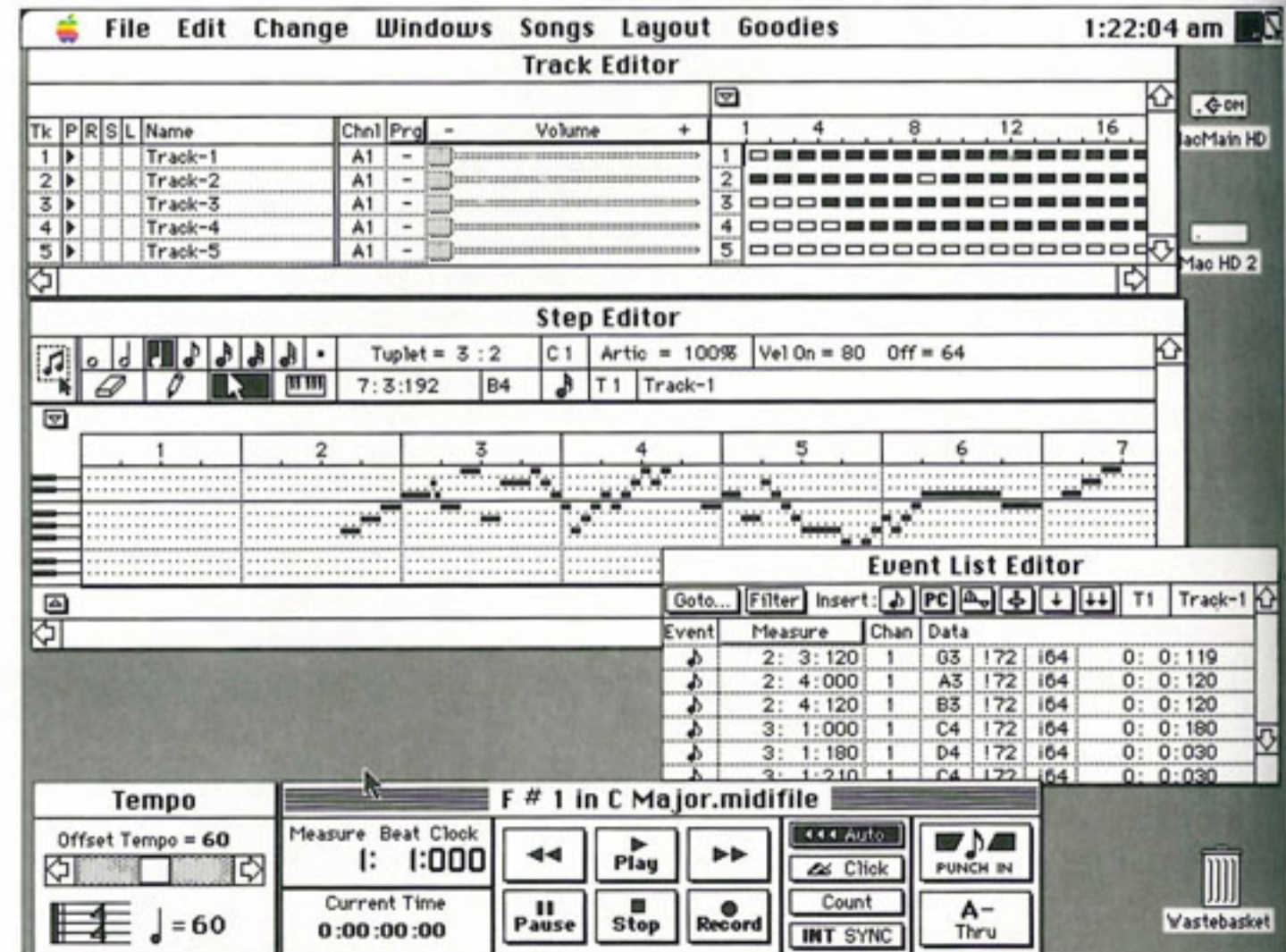
**Sound module:** essentially a synthesizer without the keyboard. If you already have a keyboard, you probably don't want another set of physical keys, so sound modules are a more cost-effective way of adding more sounds to your setup.



Lime is a comprehensive notation-based sequencer which you can try before you buy.



MusicShop is EZ Vision with a few more frills including a notation editor with printout facilities.



Passport's Master Tracks is a comprehensive pro-level sequencer which is very easy to use.



# ClarissWorks 2.1

*— should you upgrade?*

**ClarissWorks**, one of the most popular integrated packages ever, has undergone two upgrades during the last year. The question is do the new versions really merit the upgrade price?

Next time you sit down in front of your Performa or LC, ask yourself if you're facing the *ClarissWorks* dilemma. Let me explain: Claris has upgraded its spunky little do-it-all package twice in the past year, and while version 2.1 has been on the market for several months now, Performas are still sold with version 1 pre-installed on their hard disks. Some retailers are continuing to offer version 1 with their LC packages, and versions 1, 2 and 2.1 are all now commonly used. Amid the confusion and sales hype, the dilemma you may be facing is whether or not you should upgrade.

## Where to begin?

Several factors will undoubtedly influence your decision, but the first must be which version of the program you're currently running. Upgrading from *ClarissWorks 2* to 2.1 is just a small step — version 2.1 only contains two extra features: electronic mail and hyphenation.

The hyphenation function is the most useful new feature, especially if you want to tidy up the distribution of text in your word processing documents, text frames and database fields. *ClarissWorks* will automatically hyphenate words of six or more letters if they fall at the end of a line. You can set discretionary hyphens as you type in the text, and you can also customise or prevent the hyphenation of particular words by editing the hyphenation file. It would be better,

however, if you could specify the minimum word length before the hyphenation. This would save you entering all sorts of short words which make people look stupid when split into the hyphenation file.

The electronic mailing feature in *ClarissWorks 2.1* is probably less useful to the average user. It requires System 7.1.1 along with Apple's PowerTalk and 4Mb of RAM. Basically, it enables you to turn *ClarissWorks* documents into 'mailer' documents which you can then send to other users on your network. You can add notes to received 'letters' for reply or forwarding. You can also set up default text styles which will differentiate your reply text from that of the received letter. If you don't want to put an e-mail note into an important document, you can 'enclose' up to 50 documents within the mailer, add a separate note, and mail them off in a cluster.

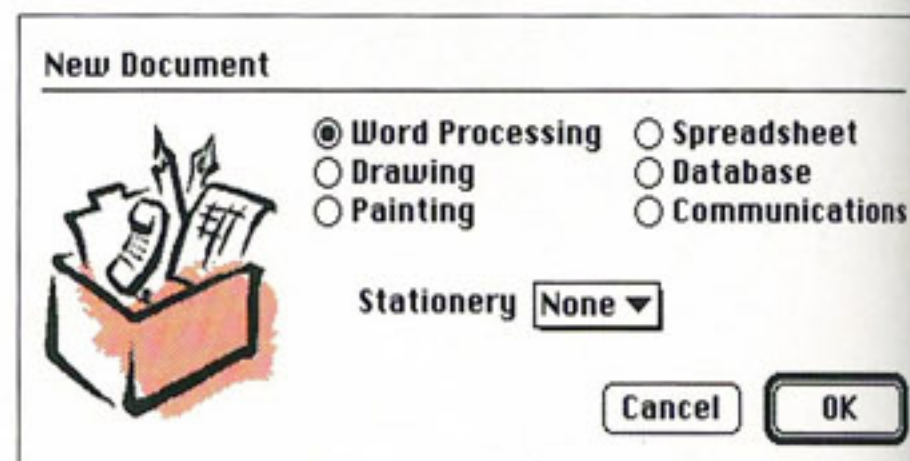
The e-mail function also enables you to send documents in several file formats including *ClarissWorks*, *MacWrite*, *MS Word*, *Word Perfect*, *RTF* and in multiple formats. You can even send screen snapshots.

The trouble with the e-mail function is that it's useless unless you have the new System with PowerTalk installed. It eats memory like nobody's business, and, the chances are, if you can afford to buy a Mac network where all the machines have PowerTalk and enough spare memory to run e-mail, you can also afford the more powerful and feature-laden dedicated e-mail software.

## From version 1 to 2.1

If it's a small step from *ClarissWorks 2* to 2.1, it's a giant leap from version 1 to 2.1. In addition to the e-mail and hyphenation features, the latest upgrade offers you everything previously found in version 2.

As far as version 1 users are concerned, the best new feature is the paint module. Documents and frames created in the paint mode give that extra bit of zip to any presentation material you design. You can also add them to word processing, drawing, spreadsheet and database layouts. The regular drawing tools like line, rectangle and circle are bolstered by a



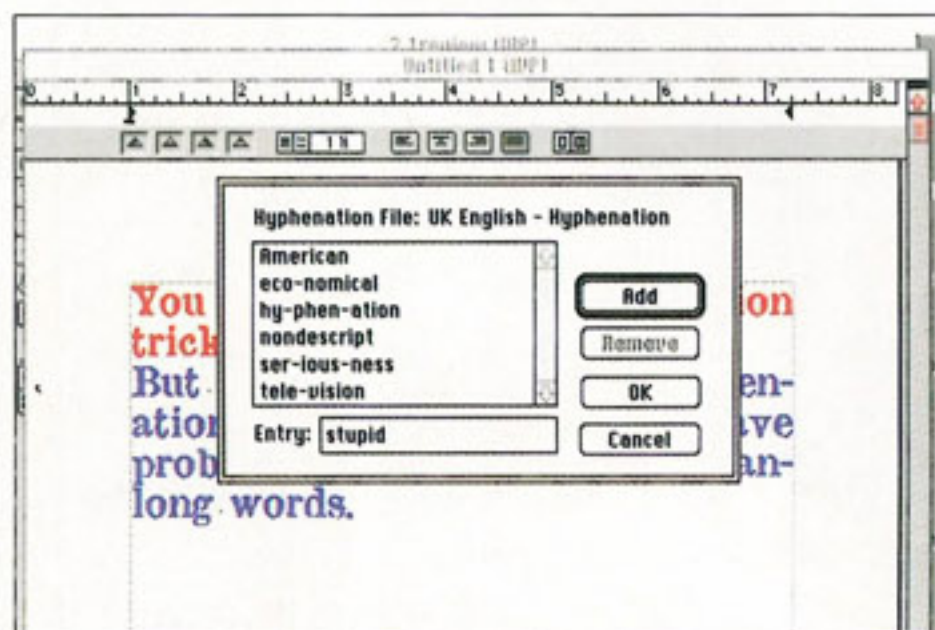
When you select a new document in *ClarissWorks*, this screen comes up with no fewer than six modules to pick from.

spray can, paint brush, single pixel pen and eraser tools. You can customise the spray area and intensity, tune the paint brush shape right down to a dot, and define the 64 fill patterns and 32 editable colour gradients.

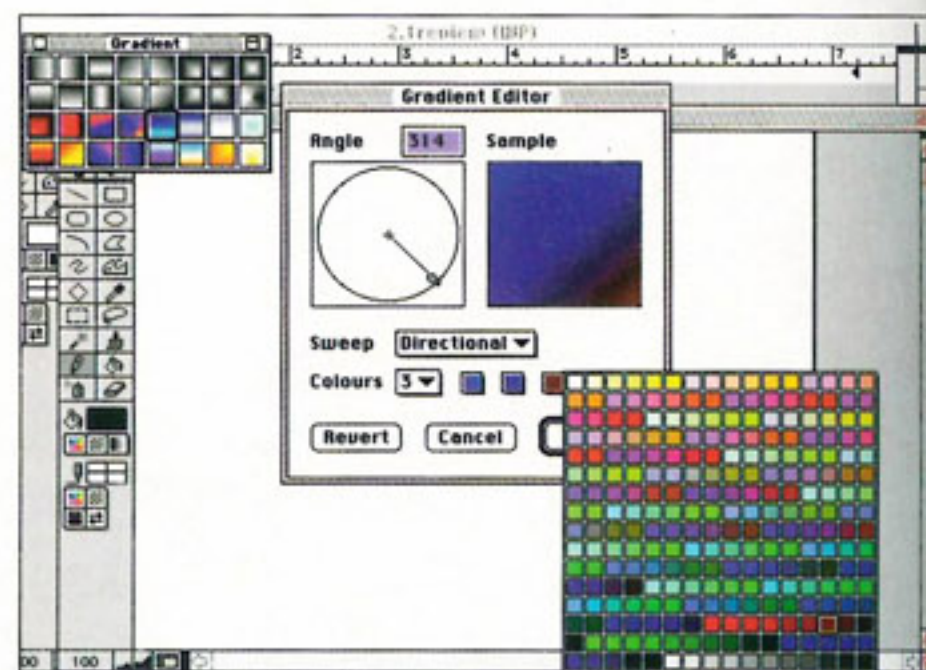
If you often work with colours, you'll find the editable 256-colour palette is the most inspiring feature of *ClarissWorks*'s second generation. Millions of colours are available for editing, but you can only use up to 256 on any one palette. You can load one of five preset palettes via the **Preferences** menu. Customised palettes can be saved, and substituted for the default palette in all environments, thus replacing the standard 81 text and graphic colours.

Once you've painted something, you can try out the special effects. It's these that really set the paint mode apart from the drawing mode (called 'graphics' in the original *ClarissWorks* application). Using the lasso, rectangle or magic wand select tools, you can choose an area of the canvas, and then shear (tilt), distort, resize, flip or rotate it. By blending, tinting, darkening and lightening, you can add feeling and atmosphere to your artwork. You can also experiment with alternative colour schemes by 'inverting' the colours.

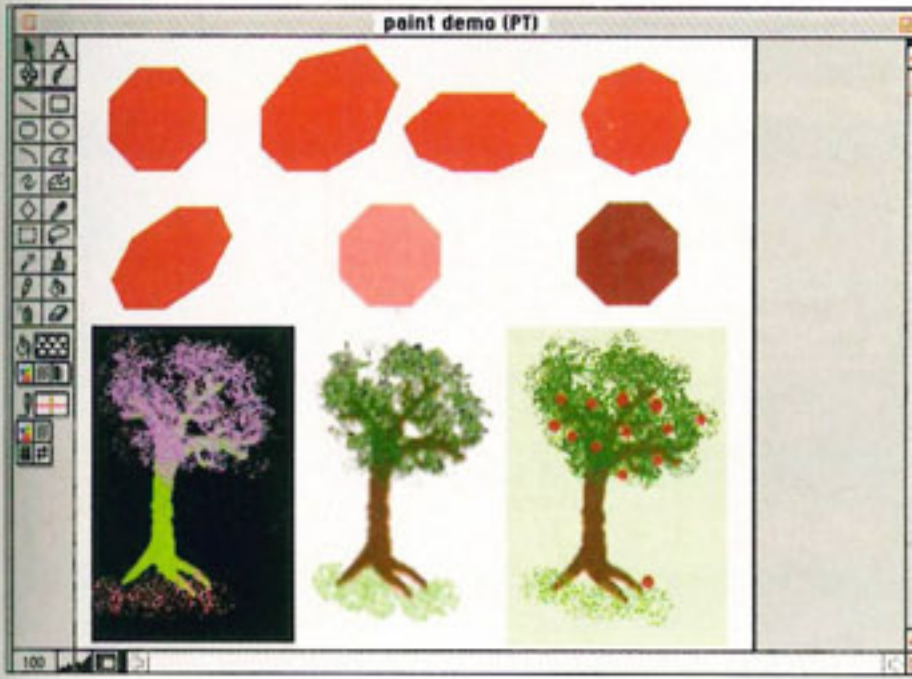
The drawing mode shares three new tools with the painting one. The bezigon tool enables you to create shapes with curved and square



*ClarissWorks 2.1*'s word processor will automatically split words of six or more letters which fall at the end of a line. You can, however, specify how you prefer certain words to split via the hyphenation dictionary.



The end of the rainbow? Fill gradients which blend up to four colours can be edited by effect, focal point and angle using the comprehensive 256-colour palette.



The octagon above has been distorted, perspective-altered, rotated, sheared, lightened and darkened. The first tree is in inverted colour, the second is blended and the third is tinted.

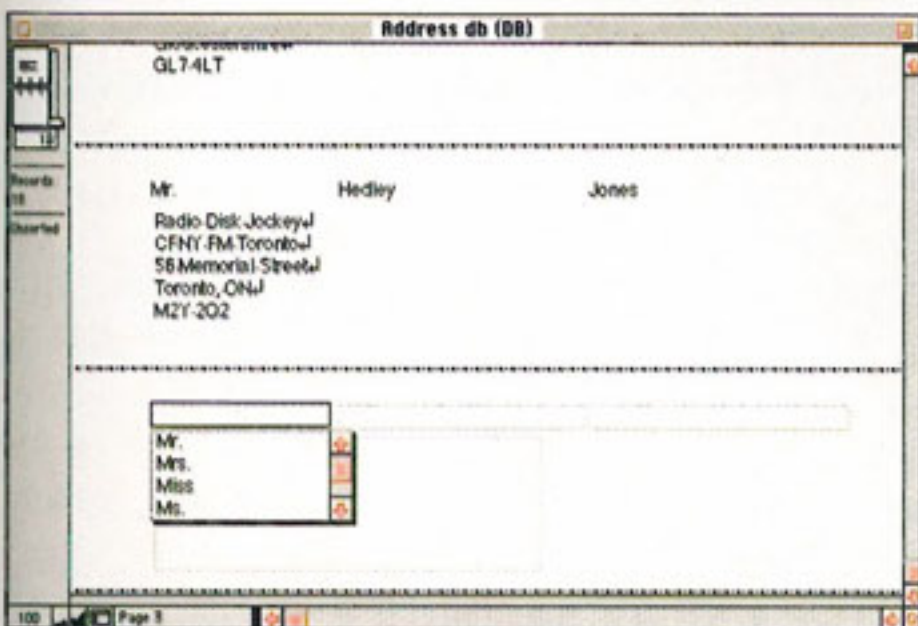
corners, while the regular polygon tool draws equilateral shapes with up to 40 sides. The pipette tool will enable you to define Fill colours, patterns and gradients by sampling those on existing objects. I can't help thinking it would have been better if it also picked up the pen thickness, colour and pattern for the border of your shape, but it is nevertheless still quite handy.

The drawing mode now enables you to style up a master page which sits unalterably behind each page of a document. You can, for instance, design a constant background pattern for your document. The only trouble is that you can't see the master page while you're working on a document, so you risk covering up anything you've put on it.

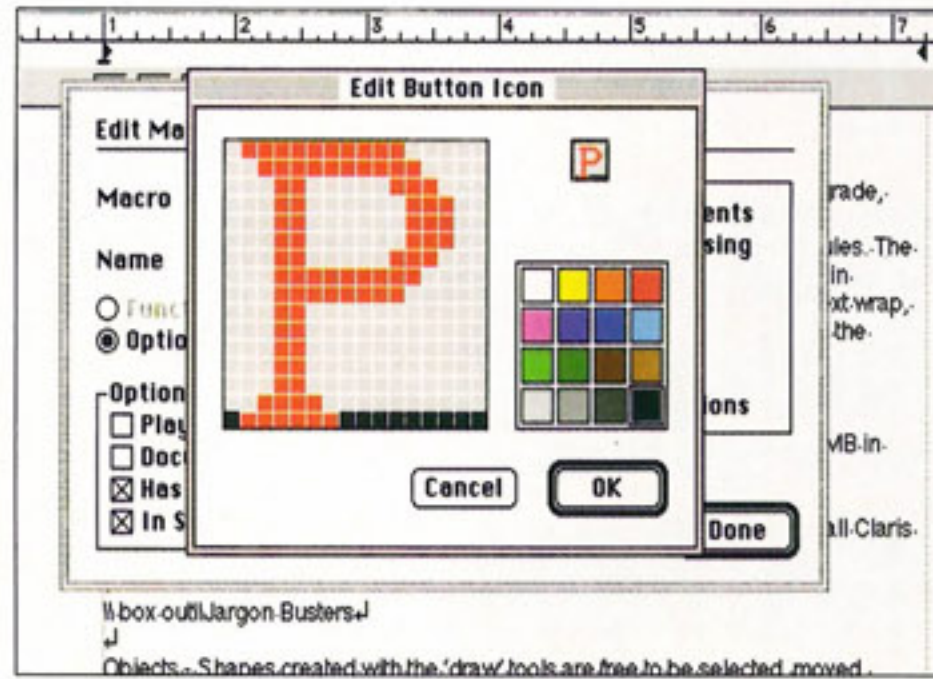
The new paint and graphic functions offered in *ClarisWorks* give it some very versatile design and presentation capabilities.

## Text and shortcuts

The text environment used in *ClarisWorks 1* was pretty good at emulating all the most frequently used features of any reputable word processor, as it was. The Outline feature in versions 2 and 2.1, however, helps you structure your work by enabling you to expand or collapse it according to sections and subsections. Sections can employ bullet points with symbols of your choice (number, letter, Roman numeral or shape). *ClarisWorks* has a series of preset outline formats. These offer different ways of organising your sections, subsections and sub-subsections, or you can, if you prefer, design your own. You can enter section headers and create subsections as you go, or you can name all the sections beforehand, and go through typing your information under each one. Outline is a



Here, our drop menu gives us the most common personal title options. So instead of typing in Mr, Mrs or Miss, you just double-click and tab to the next field.



Who needs *QuickKeys* when *ClarisWorks* enables you to record macros, then design shortcut buttons for them – all in glorious full colour? Not me, that's for sure.

marvellous function if you're nervous about organising written work, because it forces you into a logical approach. It's great for reducing work to summaries and expanding it again into fully detailed reports.

Adding frames or objects to a word processing document is easier with versions 2 and 2.1 because of the new text wrap feature. Text is shaped automatically around any graphics or frames in your document.

Macros in versions 2 and 2.1 are incorporated into the shortcuts option. Shortcuts is a panel of buttons which enables you to change the size and style of your text, open frames and new documents, cut, copy and paste, change alignment and so on. Any recorded macros can be added to the shortcut palette, and you design the button. In version 2.1, shortcuts can be set to run automatically when you launch *ClarisWorks* or open a document, and there is balloon help for the shortcut pad.

Publish and Subscribe, which was made possible under System 7, is another useful feature of the second generation of *ClarisWorks*. This enables you to share information between a number of documents, so that each time you update the information in a publisher document, all the documents subscribing to that information are updated automatically. So if you set up a spreadsheet and make a chart, you can send that chart to any number of other documents. Then, when you alter the spreadsheet and the chart changes, *ClarisWorks* will automatically update the chart in all the documents subscribing to it.

## And the rest...

The best improvements in the spreadsheet part of the application are the new charting options. You can now paint pictures which represent the subject of your graph, and then stack them up in colourful pictograms.

The database in *ClarisWorks 2* and 2.1 includes an extremely useful new feature for automatic data input. So that when you define a field, you can tell *ClarisWorks* to enter the date or time of the entry, or give each of your records a serial number. If you like, you can even set up a drop menu of possible entries to save you from repeatedly typing in the most common ones.

The communications environment handles incoming data a little better than it used to, enabling you to store screen-overflow in a scroll-back panel. Perhaps the most significant im-



Extremely useful for designing page layouts and reports, the text wrap function puts text neatly around picture frames and other free objects – a very handy feature.

provement in this area, though, comms documents can now be printed directly without the need to copy and paste them into another environment. And a new custom phone book enables you to store frequently used numbers.

## Dilemma solved

The resounding advice from any *ClarisWorks 2.1* user would be to upgrade, and we can only repeat that here. If you're still using version 1, the leap forward is incredible; what's more, there's no sacrifice in terms of either ease of use or fluid transition between modules. The improvements, particularly with the paint, graphics and colour options, are irresistible in themselves, and when coupled with the shortcuts, publish and subscribe, outline and text wrap features, the second generation versions really do overshadow *ClarisWorks 1*. It's not such a great leap from 2 to 2.1, but the upgrade is fairly inexpensive – and that's what makes *ClarisWorks 2.1* the most fun. *Garrick Webster*

## WHERE TO GET IT

- Price: £195 (upgrade from version 1 costs £60, and £20 from version 2).
- Requires: System 6.0.5 or later with 1Mb of RAM in System 6 and 2Mb in System 7. (You need 4Mb of RAM and System 7.1.1 with PowerTalk to run electronic mail.)
- For more details about a full package contact Claris on 081 756 0101. For upgrade details contact the Claris Upgrade Service on 0800 929005.

## JARGON BUSTERS

**Frames:** graphic objects which can contain text, paintings, or spreadsheets. Frames give you access to other tools from other modules. These frames are introduced via the tools bar, and behave as free objects on the screen.

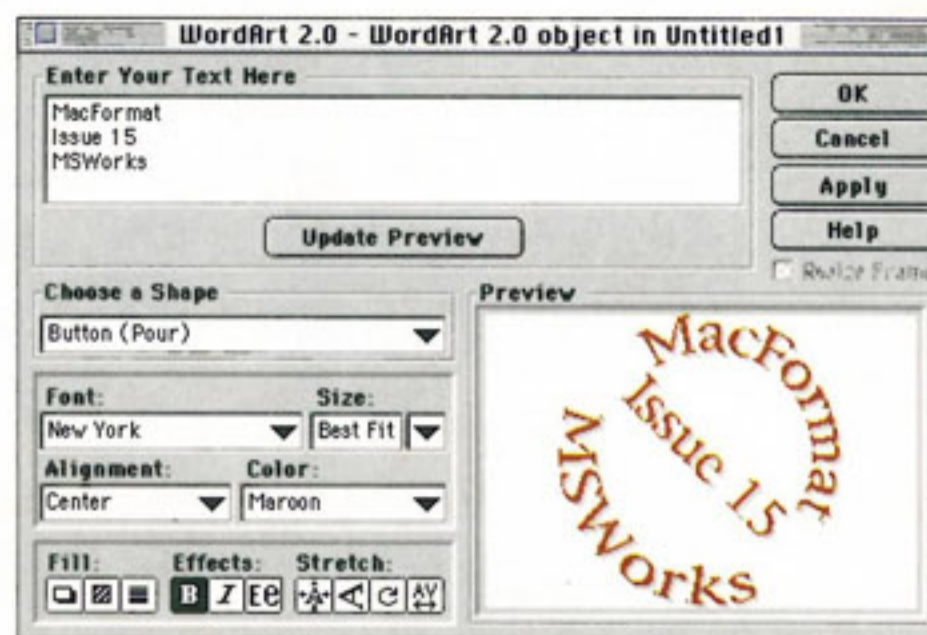
**Inverting:** changes colours on screen to photo-negative.

**Objects:** shapes created with the draw tools which can be selected, moved, edited, layered and deleted by clicking on them and then picking them up by their corner or side handles.

## WORKS UPGRADES



An excellent little utility to organise your days from morning till night – and remind you of impending birthdays.



An excellent utility to create a plethora of text effects to make your works simply glow with professionalism.



Liven up boring uninspiring data with pretty layouts, especially using the new range of gradient fills.

# Microsoft Works 4.0

Claris did have the integrated package market pretty much sewn up – until now, that is. Microsoft has responded with its own new improved version – this is how it measures up...

It's not so long ago that Microsoft had the integrated works market all to itself. Then *ClarisWorks* was launched and kicked sand in Microsoft's face, becoming a runaway success by offering a clearly superior product. At last, Microsoft has retaliated with the launch of *Microsoft Works 4.0*, which has been on a body-building course and is not prepared to eat sand any longer. It is heavy on features, but not at the expense of becoming too complicated, and much effort has been made to ensure that the day-to-day jobs are simple and intuitive.

The program includes a word processor, database, spreadsheet and drawing layer, which are all standard for an integrated package, but it now includes a paint layer to match *ClarisWorks* feature for feature. To go one better, *Microsoft Works 4.0* now also boasts a Calendar module, which is really a diary to keep track of your appointments. I have always resisted using a diary program because it's too much bother to open it up to enter your appointments, but this one is so easy and powerful that I would actually use it.

Entering an appointment is as simple as clicking on the appropriate day and time, then typing in the information. You can set an alarm reminder to go off any length of time before the event to jog your memory. You can also define how often an event happens; for example, that you must phone your mother-in-law every Thursday evening at 6.55pm, just before her favourite telly program starts, to keep the conversation short. One click of the button will show you how the week or even the month is shaping up, and there is a Find function to help you when you forget which day you're having the poodle shampooed. There is also a To Do list, where you type in a job that needs to be done, select how urgent it is from a pop-up menu, and finally choose what day it needs to be completed by. The list of jobs is sorted by urgency and date, so a quick glance will remind you of the most critical items.

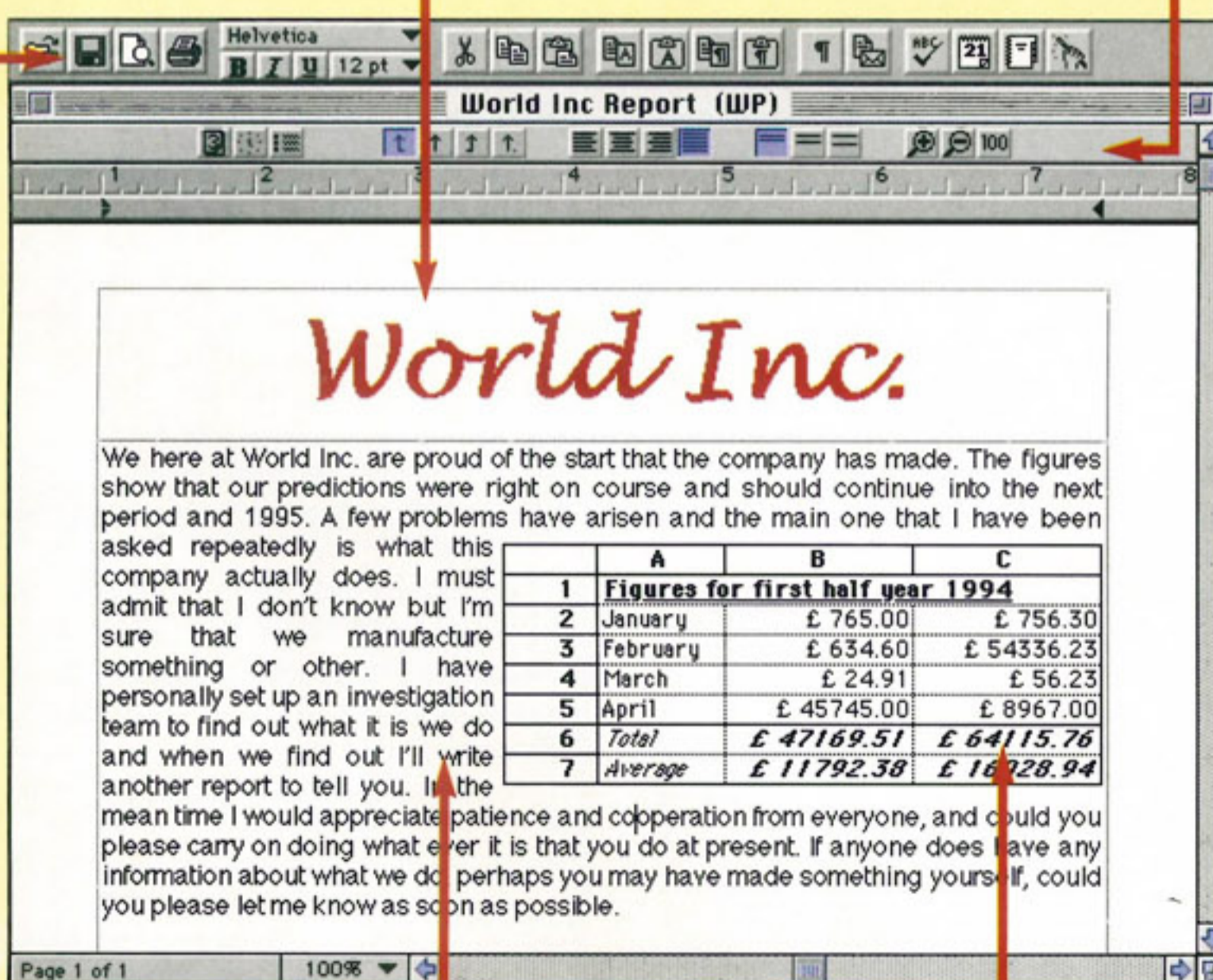
It may not be as sophisticated a professional organiser as *Datebook Pro*, reviewed in *MACFORMAT* issue 14, but it isn't too far off. And what it lacks in high-end features – which you never

## MS WORKS' WORD PROCESSOR IN ACTION

Tool bar with short-cuts for saving, printing and spell checking, among other things.

Headers are typed directly into the top margin of the document which is shown on screen.

Ruler with tools for zooming, formatting, and inserting the date or time.



Excellent text-wrapping features enable you to automatically flow your text around any object or picture on the page.

Spreadsheets can be placed into your word processing documents with all the functions of the spreadsheet module.

use anyway – it makes up for in simplicity and ease of use.

One thing you will want to remember is to write to your mum, which brings me to the word processor. (I learnt about linking from watching Ann and Nick.) Since most users of a Works package will spend the majority of their time typing, this is the most important module of the program. Thankfully, rather than changing everything around, Microsoft recognised that they had a good word processor and just added a few tools and functions. There is now a tool bar along the top of the screen with buttons to carry out the most common tasks such as printing, saving or spell checking, and these short-cuts change depending on which module you are using. The tool bar includes a pop-up menu to select the font and size of your text, but the **Size** menu doesn't have an **Other size** option – pity. At least you can now have text at any size up to 512 points, which is all you need unless you have incredibly bad eyesight.

### Floating tools

The floating tools palette has, again thankfully, not been redesigned; it just has a few extra items, such as a selection of painting tools. All the usual painting items are here, such as brushes, rubbers, a fill tool and spray can for budding vandals. Other new tools include a table generator, equation maker and the ability to embed a spreadsheet in a word processing document. I never needed this last feature when using *ClarisWorks*, but I guess it's a case of keeping up with the Joneses. There is only one new drawing feature: a pop-up menu of useful ready-made shapes such as triangles, cubes, speech bubbles and – wait for it – palm trees.

When you have finished playing with all these toys and start writing, you will find an excellent word processor with every feature you need. When low-end word processors are this good, there is little need to buy a professional package, unless you need something extremely specialised. One great feature is a word counter that not only counts the words in the whole document, but also counts just a highlighted selection, which is something I genuinely need. Another powerful feature is the ability to cut and paste by highlighting text, placing the mouse on the selection, and then just dragging it to a different location. You can copy and paste by holding **[Option]** when you drag the text, with no need to use pull-down menus. In fact I liked the word processor so much that I wrote this review in Microsoft *Works*.

The ruler holds the alignment and spacing

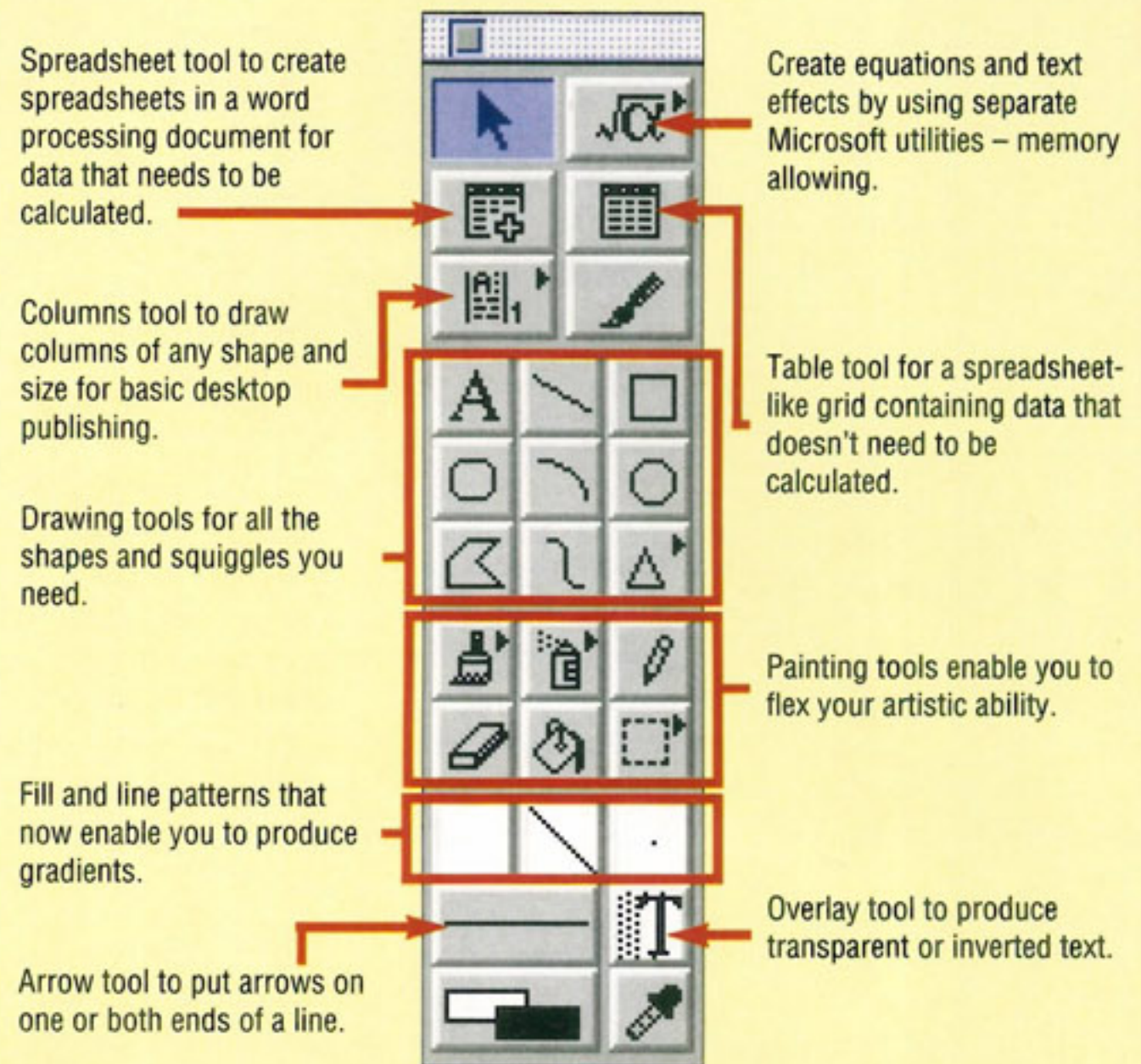
tools, tabs, and indents, with the new ability to move the left indent while leaving the first line indent where it was. The tabs are limited in that there is no option to automatically create a line from one tab to another, to give the effect (found in an index or table of contents) which leads the eye from text to associated numbers. Although there is a decimal point tab, there is no tab that can line up characters like dashes or colons.

There is a new tool for automatically creating bullets at the start of each paragraph, and on the subject of paragraphs (thanks, Ann and Nick), you can copy paragraph formats, for example tabs and indents, and paste them on to other paragraphs. You can also now copy and paste the format of characters, but you can't actually create styles for use across different documents.

### Formatting made simple

The margins that you set for the top and bottom of the page are shown on screen, and you can type your headers and footers directly in to them, so you can see on screen how the document will look when printed. Selecting **Columns** from the **Format** menu brings up a dialogue box that enables you to put your whole document into two, three or four columns. If you want a more complex layout, a newsletter for instance, then you can draw any size columns and link them in whatever order you want. Users of *Works 3.0* will be delighted to know that Microsoft has greatly improved the ease of use of this feature. Select whether you want two, three or four columns, drag the mouse to draw a rectangle on the screen, and the program automatically draws equally sized columns to fill the rectangle and links them from left to right for you. If you want a photo in your newsletter, it's no problem – the program can import most popular graphic formats and indeed *Works 4.0* comes with 34 clip art

## THE FLOATING TOOLS PALETTE



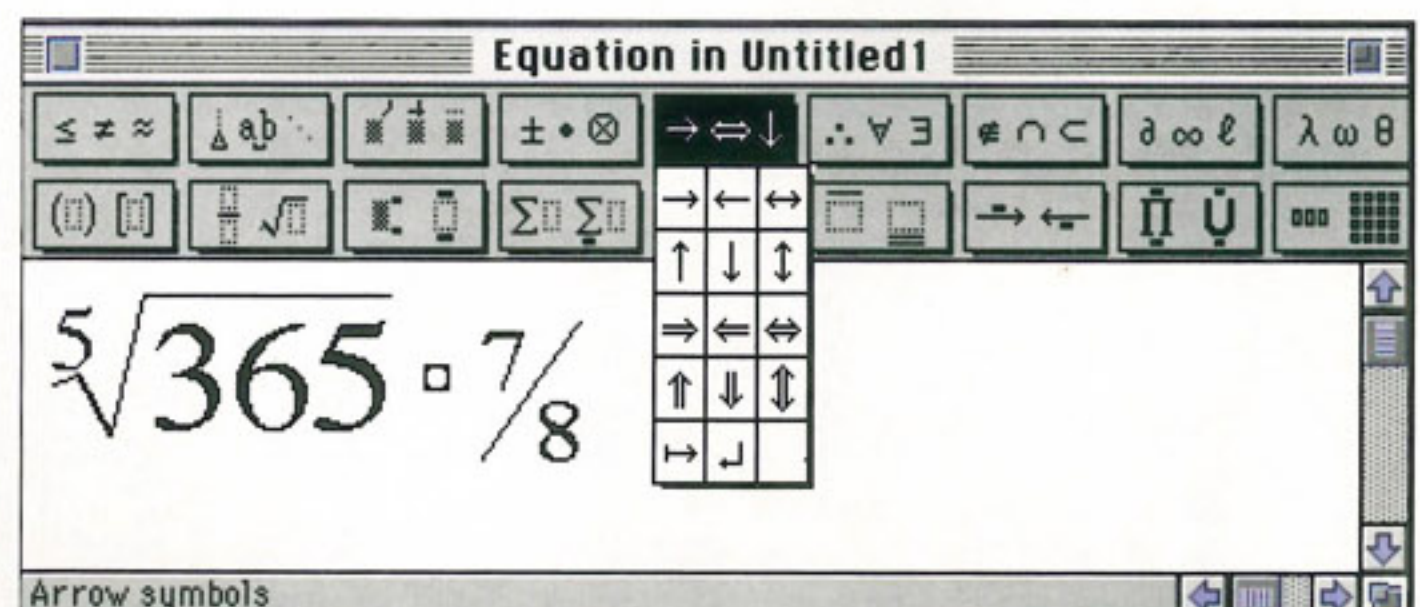
pictures in EPS format, which means that they can be resized without loss of quality.

When Claris created the database in its *Works* package, it had the advantage of having already created *FileMaker Pro*, and so just produced a cut-down version for *ClarisWorks*. Microsoft had to write its database from scratch, and it has taken it a while to get it up to a good standard. You can view your data in one of two ways, the first being to create custom forms where you decide which fields you want on a layout, and how you would like them arranged. It's easy to draw graphics and place logos to produce very good-looking layouts and there is no limit to the number of forms you can have. A typical scenario would be a database with a form containing all the fields for inputting data, a form containing most fields in a convenient order to read, and another form with just the address fields laid out to print envelopes. The second way to view data is the **List View** option. This looks identical to a spreadsheet grid and is great for browsing lots of data quickly. Entering data is often easiest on this screen, unless you have a lot of fields making it too wide to be practical.

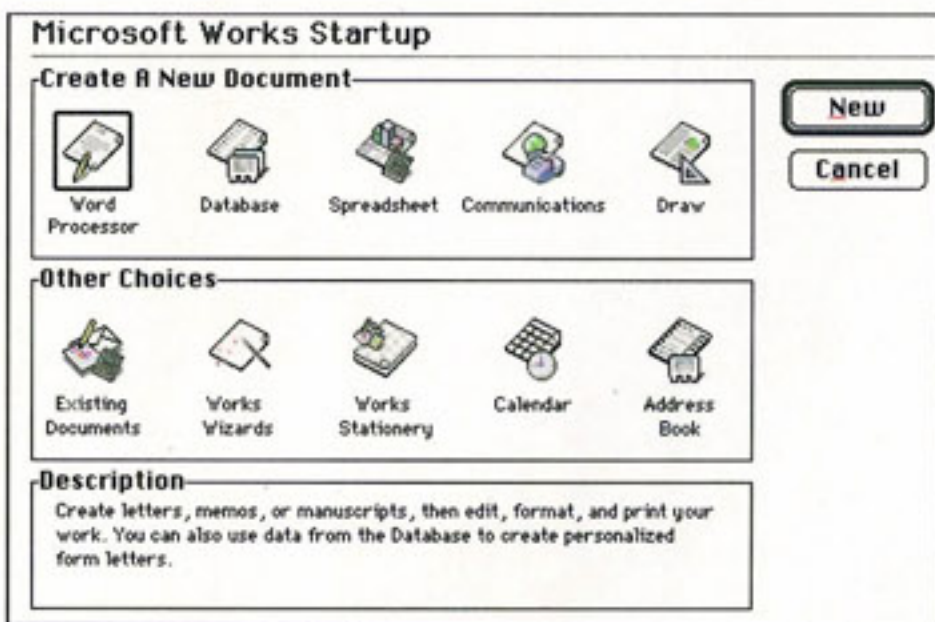
If you wish to find fields containing specific data, then the filter tool is very powerful. You can request all the records of males who are not due holiday, and are either over 50 or

Mac	Price	Hard Disk Size	Keyboard
CIII	£499	80Mb	Yes
LC475	£599 to £659	160Mb	No
660 AV	£999	230Mb	No
6100/60	£1195	180Mb	No

Tables are excellent for putting data into simple grids when you don't need the power of a spreadsheet, and are also very easy to produce.



It's now simplicity itself to produce equations in Microsoft *Works 4.0* – from the most complex mathematical problems to simple fractions.



The Open dialogue box appears when you first open the application and whenever you close all of your windows.

under 20. Microsoft recognises that often you just want to perform a much more simple search, such as for the name of a company, and rather than having to use the powerful filter tool, there is a Match Records feature which works like the **Find** command on the desktop. Simply type in a word, click OK, and the program finds all records that contain that word in any field.

One of the things that integrated packages are particularly good at is mail merging. This is where you bring data across from a database and place it in to a word processing document. It's how you get those exciting letters saying, 'Dear Mr H Dobbs, you are one of just 365,000 people in the Doncaster area to be offered our limited edition nasal care kit'. Because *Works 4.0* does this within the same program, it's much easier than using a separate word processor and database designed by completely different companies. All you need to do is have the database open in the background, with your word processing document in front, and select Insert Database Field. This causes *Works 4.0* to place a label on the page where the data will appear when printed.

The distinction between databases and spreadsheets is becoming increasingly blurred, and this is demonstrated by the ability to create a calculation field which can calculate a value based on fields within a single record of a data-

base. For instance, you could enter someone's date of birth and the program would calculate that person's age today. Another useful case would be entering the price of an item along with the number of such items, and the computer would calculate the total cost. Microsoft *Works 4.0* can also handle summary fields. These are fields that can calculate totals throughout the whole database. For example, you could calculate the total or average age of a group of people in your database.

### Clever calculating

It is when you need to do complex calculations, particularly financial ones, that you will need the spreadsheet. Most spreadsheets that you encounter generate the same excitement as getting a letter offering you a nasal care kit, and *Works 4.0* is no exception. You type in the data and calculate totals with thrilling commands such as '=Sum(A1:B10)'. Averages, standard deviation and lots more calculations to stimulate accounts are provided, and there is also a function to calculate Pmt. Sadly, it doesn't do something useful like telling you when to avoid criticising the wife's cooking, but instead tells you how much you need to repay on a loan.

The only interesting part of a spreadsheet is the charting tools, and this is one area where *Works 4.0* is unimpressive - no improvements have been made from version 3.0. You have a limited number of options with nothing as sexy as 3D charts. Using a spreadsheet is basically the same from a shareware program to *Excel*, so companies have to work on the frilly bits to prod the apathetic. Microsoft has created a good, simple spreadsheet and seems content to leave it alone rather than improving it through new versions, which seems a shame - it lets the rest of the program down.

One area where *Works 4.0* really comes together is the slide show feature. This enables you to show a series of graphics, including spreadsheet charts, as a presentation show. However, this is a very limited slide show and

anyone who wants to give commercial demonstrations will not be satisfied with the power. You get the impression that Microsoft was only intent on saying that *Works 4.0* can do everything *ClarisWorks* can. If a job's worth doing, it's worth doing well, so my grandfather always said - mind you, he was an executioner.

Microsoft *Works 4.0* has addressed the complaints that I had with version 3.0, and seems to have solved just about all of them and come up with a great product. However, there is always a price to pay for quality, and in this case, it's hard disk space, RAM and speed. The full installation will take 16Mb of your hard disk, which could be especially difficult if you want to keep an earlier version on your disk during a change-over period. *Works 4.0* is very memory hungry, and although it will work on a 4Mb machine, you can forget multitasking with anything bigger than *TeachText*. That aside, this program has all the features I want, and personally, I like the pleasant look and feel of it. If you have an earlier version, then it is definitely worth upgrading.

Derek Smith

### MS WORKS 4.0

Price: £129 Upgrade: £55  
Requires: 68020 Mac with System 7, up to 16Mb hard disk space and 4Mb RAM. Available: mid July.  
For more details contact Microsoft on 0734 270001 or their upgrade hotline on 081 614 8000

<b>Ease of use</b> The tool bar makes things even easier.	<b>92%</b>
<b>Documentation</b> Very functional, but hardly gripping.	<b>85%</b>
<b>Features</b> Good with a particularly strong word processor.	<b>90%</b>
<b>Value for money</b> Has everything most people will need.	<b>95</b>
<b>MACFORMAT RATING</b>	<b>92%</b>

# Microsoft Works 4.0 vs ClarisWorks 2.1

**I**n a former life, I used to teach both Microsoft *Works* (versions 2 and 3) and *ClarisWorks 2.0*. Though I enjoyed using Microsoft *Works*, I found *ClarisWorks* was better - that is, until I reviewed Microsoft *Works 4.0* and found that the odds had been evened. At the end of the day, they are both excellent packages, but here are some factors to consider when making a purchasing decision.

#### Reasons to buy *ClarisWorks*

- On a low-end Mac, especially PowerBooks and Classics, it needs far less hard disk space, and less RAM, and runs faster.
- It has a much better slide show, suitable for commercial presentations.
- The spreadsheet has good charting tools.
- It has an outliner to organise notes, although it isn't very easy to use.

- More powerful tabs make it easier to create a table of contents.

#### Reasons to buy Microsoft *Works 4.0*

- Better columns make it more suitable for desktop publishing.
- It has a great range of advanced text effects.
- It enables you to create equations and fractions.
- It has an excellent diary.

I'm sure that fanatical devotees of either package can find features to boast that theirs is the better program. *ClarisWorks* fans might mention that their short-cuts feature is much more powerful and versatile, but ask them how many actually design their own short-cut buttons, and very few hands will go up. Microsoft *Works 4.0* users can claim a more

friendly look and feel to their program, but if someone is already used to another *Claris* product, they will feel more at home with *ClarisWorks*.

I know some people who changed from Microsoft *Works 3.0* to *ClarisWorks 2.0* because it was a superior product, and had to learn a whole new program. Now, they will be kicking themselves, because *Works 4.0* is at least as good as *ClarisWorks 2.1*, and they need not have changed. It's like when you're queuing to pay at a supermarket check out and you swap lanes to a shorter line. It goes without saying that the other queue will move more quickly, so the moral of the story is stay with what you have. I'm sure *ClarisWorks 3* will be better than Microsoft *Works 4.0*, Microsoft will respond, and so it goes on with us, the consumers, winning. I'm so happy I could cry.

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Table listing Apple on-site maintenance services, including Warranty Upgrade, Group 1, Group 2, Group 3, and Group 4.

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RAM HD CPU Screen

Table listing Apple Macintosh hardware specifications including RAM, HD, CPU, and Screen, including Powerbook 145B, Powerbook 520, etc.

Key: EM = Express Modem, GS = Graayscale, PM = Passive Matrix, Col = Colours, AM = Active Matrix, Thous = Thousands

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# Heaven sent?

**Astrology: superstitious claptrap or scientific fact? Two sure things: it's a popular pastime and it's on your Mac.**

Anyone who has read the small ads in magazines like *Horoscope* will know that by sending off a cheque for £15 or so, you can receive a 15 to 20 page personality profile. If you've ever stopped to think how these neatly printed reports are produced, you've probably already sussed that the people who sell them simply key in the date, time and place of your birth, and let a software package do all the work.

That's right: all you need to start up a sideline in selling personalised horoscopes is a computer (a Macintosh, obviously), a half-decent inkjet or laser printer, a few boxes of A4 paper, some stamps, envelopes... and the right software.

It may help if you're knowledgeable about how astrology 'works', and if you believe you're giving useful advice to your customers. There again, even if you're totally cynical about the whole idea, it doesn't matter. You can let the software do the believing for you.

Calculating a chart by hand requires looking up lots of numbers in books containing tables of latitude and longitude, and doing some pretty tiresome sums which are about as fiddly as long division. But with a computer, you only have to enter a handful of numbers: the latitude and longitude of your birthplace (use an atlas, it's easy); the time you were born, and the time zone you were in (compared with Greenwich Mean Time); and finally, your date of birth. The rest is automatic, and with the smart software on the market today, it's a matter of five seconds – or even less – before you're looking at a chart complete with planetary symbols, cusps, aspects and a lot more besides.

Once you've sat and admired your chart for a while, you might find yourself asking 'What's it all supposed to mean?' Never fear – the interpretation part is completely automatic,

too. The two best personality report programs, *Io Horoscope* and *ProNatal Report*, enable you to view the chart on-screen and generate the text which describes your character. This takes under a minute, and you can browse through this on-screen or send it straight to the printer.

cessing package. But you'll probably find the default settings highly acceptable – and if you start using either program commercially, it will be normal practice to print out the chart and the text report without any fiddling around. Straight into the envelope with it!

The printed reports start with an optional explanation of astrological jargon. Next comes an optional print-out of the chart and all its symbols, then a long string of titled paragraphs describing different facets of your character.

*ProNatal Report* dives straight in and informs you of your main problems. *Io Horoscope*, on the other hand, begins much more gently, offering you a broad-brush analysis before chancing its arm by mentioning anything nasty which you might not want to hear.

The style is very variable. *Io Horoscope* has a tendency to lapse into a kind of New Age jargon, which may or may not appeal to your customers. However, *ProNatal Report* takes a more direct approach: less verbiage, and no musings about Taurus being the second stage in the development of Man. Of the two, *ProNatal Report* is the harder hitting, and sounds more practical. But is that necessarily what you want?

People like to get what they pay for – and you don't send off for a 20-page horoscope if you've got no taste for astro-speak. Besides which, if you don't like the text, you can edit it or even rewrite it completely, in which case the software will use your edited version of the text instead of the default.

This is what a company called Magic Space Promotions has done with *Io Horoscope*. The text has been completely rewritten (by Tanya Obreza, who writes on astrological matters for *Company* magazine and *Slimmer*), and is available in a version that has no astrological references whatsoever.

Taking out all the astro-jargon won't suit



Both *Io Horoscope* and *ProNatal Report* take good advantage of the Mac's ability to handle graphics and to move data between applications, so you have a wide choice of designs for the chart, plus you can format the text to your own liking or export to a graphics or word pro-

IO SERIES



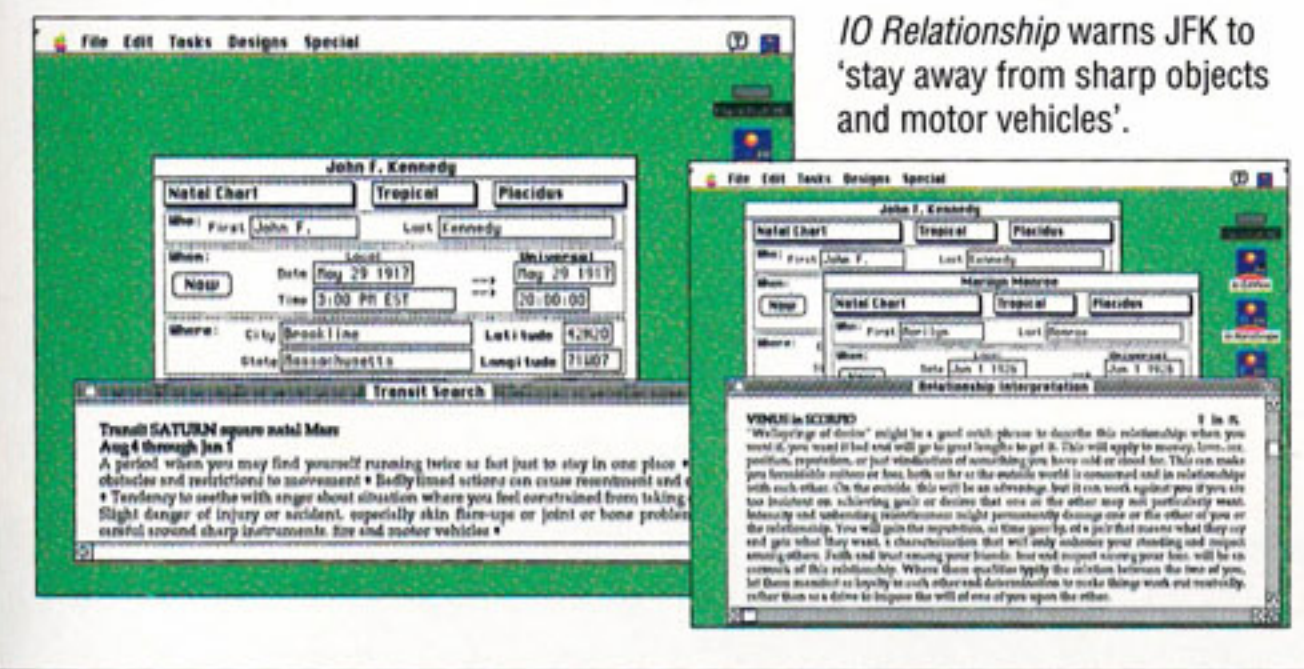
The Io Series is a set of packages with good screen presentation, intelligible menus and a wide range of options suitable for both novices and professionals alike.

It organises large numbers of charts easily, runs very smoothly and, all in all, has the best interface on the market.

*Io Edition* (£217) is a do-it-all calculation version that handles birth charts, relationships and forecasts, but doesn't have its own report text.

The other three Io Series programs do come with their own text for birth charts, relationships or forecasts: *Io Horoscope*, *Io Relationship* and *Io Forecast* (£185.50 each). The report text is on the Californian New Age side of normal, but can be edited to read any way you want. Magic Space (tel: 0276 22000) offers its own Anglicised, jargon-free text as an alternative, but check prices.

The Io Series add-ons include *Famous Charts* (£29 each), *Io Atlases* (£153 each), which find birth places and time zones, plus a range of Star Fonts (£92.50), and even Norse-style Runes (£46).



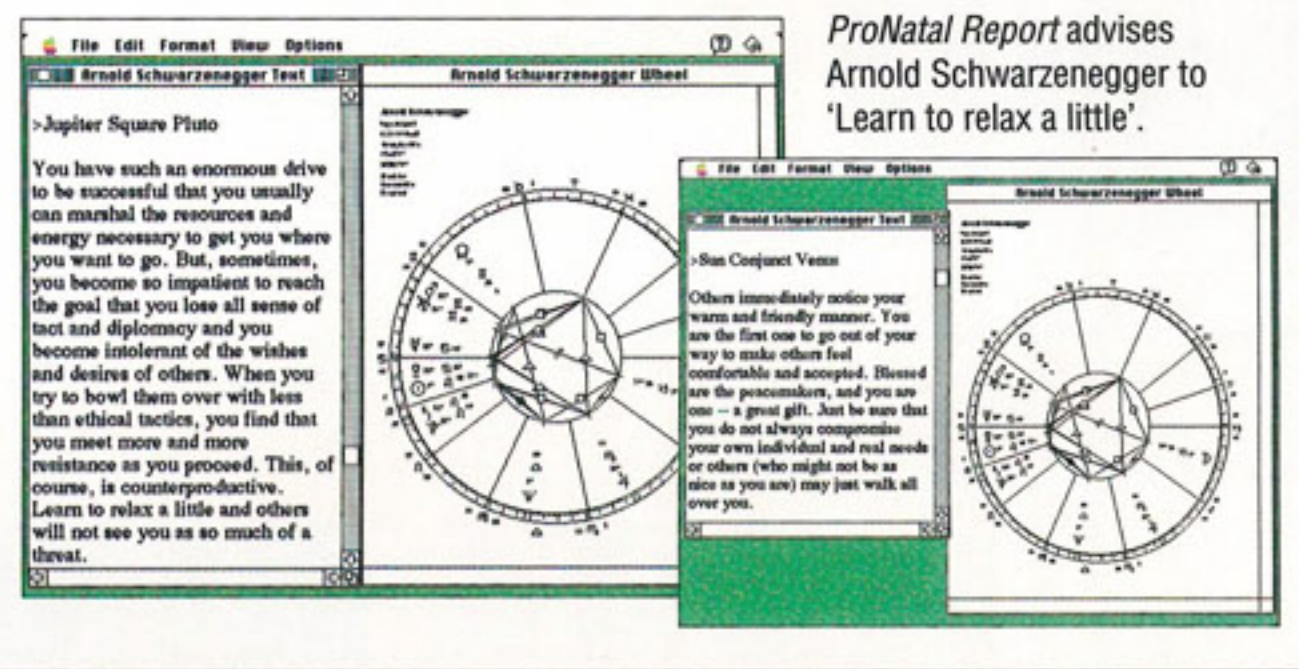
*Io Relationship* warns JFK to 'stay away from sharp objects and motor vehicles'.

PRONATAL REPORT



Lurking behind a disappointingly dull icon is a smart program. *ProNatal Report* is not as fast as the Io Series, but it does enable you to manipulate chart files more intuitively – in other words, you always go to Finder and drag them in and out of folders. The documentation is a minor let-down – readable, but photocopied.

*Celeste* (£59) gives the sharpest-looking charts on the market, with the widest range of options, but it only draws the birth chart. It's upgradable to *ProNatal Report* (£347), which comes with one of a selection of texts: Standard, Relationship, Electional and Keyword at £70.50 each. The reports are practical and direct, and retain the astrological trimmings. Text for individual reports can be edited on screen before printing. Other add-ons for *Celeste* and *ProNatal* are *Mackey-Saunders Data* (£59), a set of famous 20th Century Americans; *Blackwell Data* (£47), charts from the Emperor Augustus to the first test-tube baby; and *Expanded Ephemeris* (£41), for calculating charts from 1235 BC to 2377 AD.



*ProNatal Report* advises Arnold Schwarzenegger to 'Learn to relax a little'.

everybody, though. It's a matter of personal taste, but I found the absence of references to 'Jupiter in Libra' and 'Mercury opposite Neptune' rather spoil the fun of it. I missed the little curly symbols as well. You may prefer to sell a report that looks and sounds like it came from a personal astrologer who speaks in a strange and mystical tongue. The less astro-babble, the more it starts to read like it came out of a machine.

Star-crossed lovers

Once the Mac has run up the charts for two people, it's no great hardship for it to calculate

the different ways in which the two charts connect; it can then compose a description of the two people's relationship.

*Io Relationship* tries extremely hard not to give offence. Even so, the sparks can sometimes fly. To test its sensitivity, I tried running a relationship report for John F Kennedy and Marilyn Monroe which painted a convincing picture of one hell of a fling – 'wellsprings of desire' indeed.

Then I couldn't resist the temptation to try these reports out for myself, using my birthday and that of a few memorable lasses, and... well, I think I'd better stop before someone sees, or my trousers catch fire. A special commendation

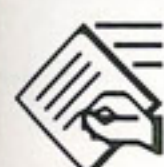
to *Io Relationship*, though, for the report that began with the words: 'Look, Ma! No brakes!'

The one consistent weakness of the relationship reports is the way they have to be written to take into account business partnerships and platonic friendships, as well, of course, as the duvet doubles. But you could edit the text yourself if you wanted the report style to be more focussed.

The finger of fate

The third type of report is the forecast – the one which actually produces the familiar 'Thursday is best for taking very long journeys' type of

DAILY ASTRO-REPORT



This set of old and creaking software has little to recommend it, unless you are an existing user who only wants to

pay for the occasional add-on. Screen input uses character-based menus, like an old PC, so charts and reports can't be seen on screen at all; you have to print them – and one slip can crash the program.

The calculations for transits and forecasts are actually rather good, so it's a pity it is let down by the awful interface. The basic version is *Astro-Scope Report* (£147), with a choice of forecast versions from £229 each.

SEX – ARE YOU GOOD AT IT?

One of the attractions of the otherwise drab *Daily Astro-Report* series is its *Sex-O-Scope Report* (£147), which, basically, describes what you are like in the sack. It's a safe enough document to send to strangers through the post, though. It pulls its punches, and avoids anything insulting or libellous.

None of your clients are going to read that they are a rapist or a paedophile, and no-one is impotent (at least, no-one whose chart we've calculated). Potentially sensitive points such as being a homosexual, transvestite or masochist are avoided altogether.

Here's a couple of examples: Madonna's reading said she has a very developed technique and is good for fetishy scenes with the right props, while Arnold Schwarzenegger lacks subtlety and finesse but has a large appetite!

A more fleshed-out and substantial set of text is *Sex Fantasy Report* for the Io Series from Magic Space (£95). This makes a much better package than *Sex-O-Scope Report*. Its printouts are much smarter-looking – and you can view them on screen.

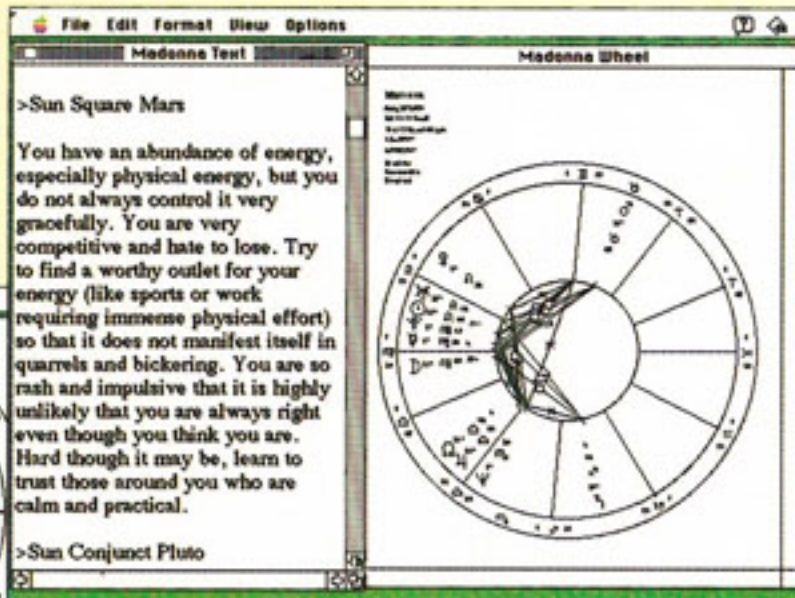
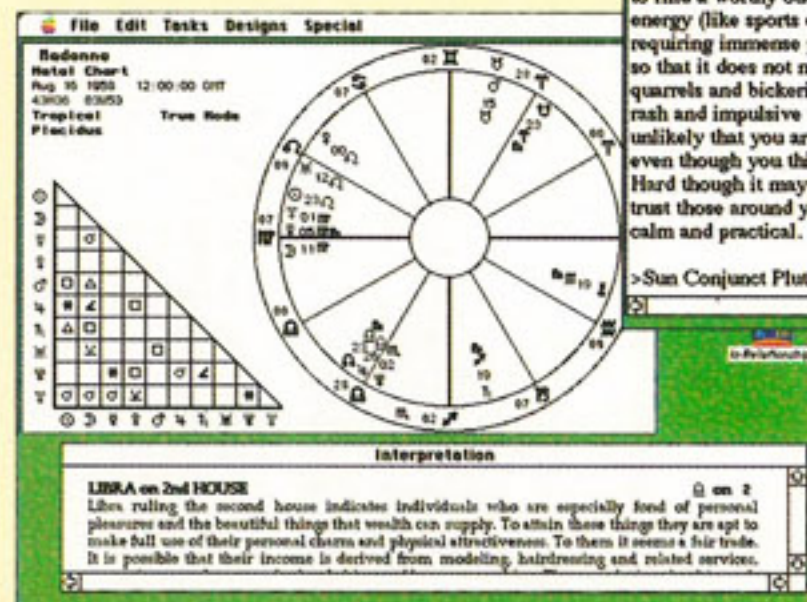
The text is more specific, too. Madonna came out as having a marked preference for fetishes, sex toys, special clothing, underwear and tattoos. Arnie was revealed as a serious and shy lover who needs reassurance, but has a light and skillful touch. At the same time, he exudes passion, is a calculating seducer, and can tantalise his lover to quivering submission. But that's our Arnie – a maze of contradictions!

# Stars of the screen: their secrets revealed

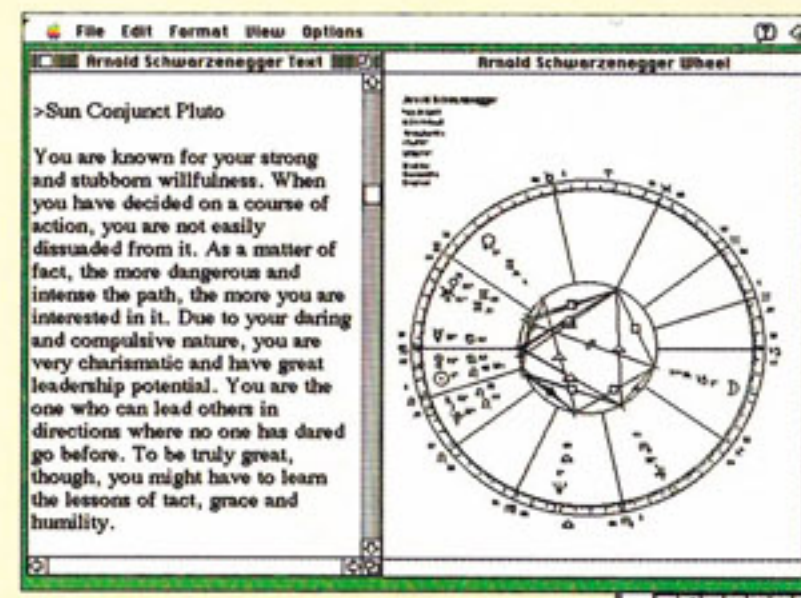
Both *Io Horoscope* and *ProNatal Report* offer a 'charts of the famous' option. Take Madonna, for example. Electric Ephemeris supplied us with her birth details, and it has to be said that when you read the report, her on-stage persona jumps off the page at you. In places it sounds very convincing, and before you know it, you've forgotten

you were cynical and you're reading it like it's actually true. However, Arnold Schwarzenegger's chart proved more of a challenge to credibility. But even then, in places it's hard not to be drawn into the game. And the point is, even when you're thinking it's way off the mark, the entertainment value can't be denied.

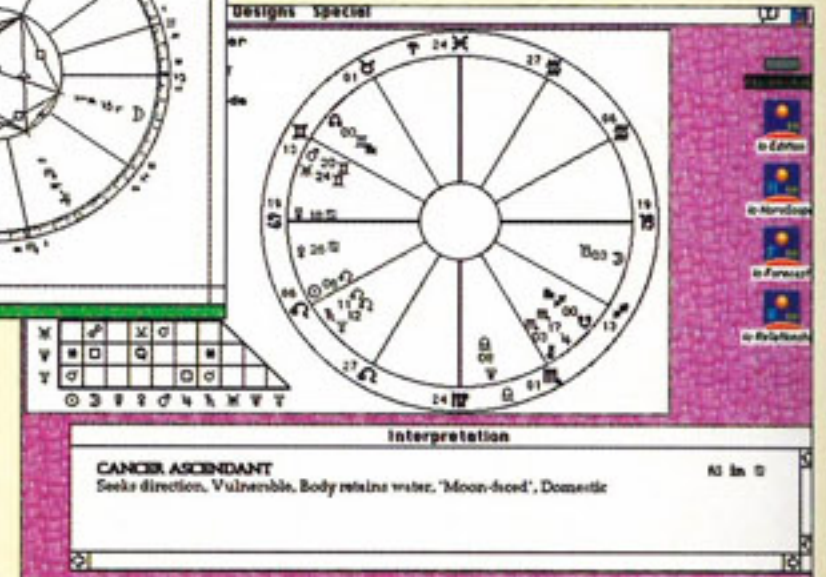
As a Libran, *Io Horoscope* reckons, Madonna makes use of her personal charm and attractiveness...



...While *ProNatal Report* calculates that Madonna has 'a bundle of energy, but does not control it very gracefully'.



Meanwhile *ProNatal Report* assesses Arnie as 'Strong and stubborn, and needs to learn some tact and grace'.



But as a Cancerian, Arnie is also 'vulnerable, moon-faced and domestic' according to *Io Horoscope*.

stuff. The *Io Forecast* and *ProNatal Report* text both give you a range of options; for example, you can select how long a period you want to forecast for, and which of the planets you want to take into consideration. I ran an *Io Forecast* report for the day John F Kennedy was shot, and fair enough, there's a general warning to beware sharp objects and motor vehicles, though this danger wasn't supposed to peak on that actual day.

From the commercial point of view, forecast reports probably rank as the third hardest to sell, but if you can attract a few regular customers who won't even take a walk down the road to buy a paper until they have read your monthly advice, the software could pay for itself pretty quickly.

## Your fortune in the stars

You should check carefully what options are in what package, and what prices are available for particular bundles. Buying it all piecemeal is a recipe for a thin wallet.

You won't get full value from your software if you're not familiar with the jargon, so buy an astrology basics book if you're not up to speed. This won't set you back more than a tenner. In fact, if you only want to produce one or two charts, for your own personal entertainment or enlightenment, the cheapest option is *Celeste* for the calculations and a paperback book for the interpretation of signs, houses, aspects, and so on. *Celeste* also offers you an upgrade path to *ProNatal Report*.

If you want to get into the business of selling reports through the post, you will need to advertise the services you are offering. Don't publish your telephone number, because crank callers can really be quite a pest. And as for your choice of software, a lot depends on your taste in text.

Bob Whitehouse

## SERIOUSLY SPEAKING

Definitely not for kiddies, *CCRS92* is a text-input BASIC program with few comfort factors. It's the most sophisticated of all the programs when it comes to calculating things, but it's about as user-friendly as a cornered rat.

The number of calculation features is truly enormous, making this a real option for anyone who's very seriously into astrology and wants to delve into its inner mysteries. If you don't know any astrological jargon, a list of *CCRS92* options reads like a Rumanian telephone directory. If all you want to do is peddle reports through the post, forget it. But if you are one of those astrological counsellors with a select list of private clients who consult you regularly, and you have £229 to spend, this might be for you.

If you're really that serious, check with Roy Gillett Consultants (0276 683898), who know the program well. But a word of warning: at the back of the manual, the author says he'll only be developing the next version for the most mainstream platform, so Mac buyers may lose out unless they run DOS emulation.

## STAR RATINGS

All the software listed works on a System 6 or System 7 Mac with a mono or colour monitor and a hard disk.

Roy Gillett Consultants on 0276 683898 supplies all the software reviewed. Electric Ephemeris on 071 700 0666 supplies the *Io Series* only with the original text. Magic Space Promotions on 0276 22000 also supplies the *Io Series*, but with its own texts.

	Graphics	Ease of use	Features	Texts	Value for money	Overall
<i>Io Series</i>	90%	85%	85%	80%	85%	85%
<i>ProNatal Report</i>	90%	80%	80%	85%	75%	82%
<i>Daily Astro-Report</i>	50%	60%	70%	60%	40%	56%

Special thanks to Roy for his tireless assistance, and to Bryan for trusting me to walk out of his shop with 20 disks in a plastic bag.

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### Civilization

(MACFORMAT June, 95%)

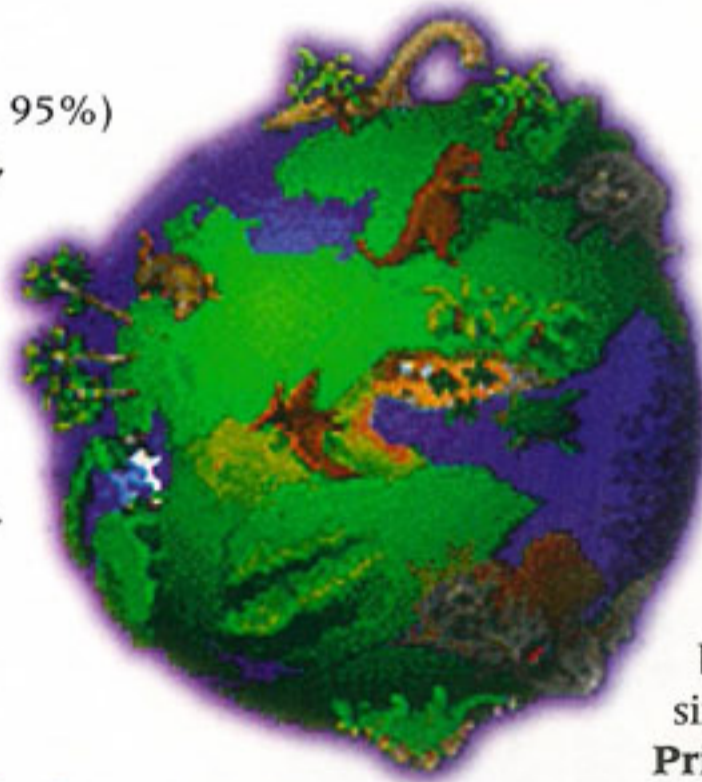
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### SimCity 2000

(MACFORMAT February, 95%)

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### Need help with ClarisWorks?

If you need to know more than the manual tells you, then try this Black Mouse guide to *ClarisWorks*. Inside you'll find pages of practical advice and worked examples to help you get the most from your software. Special MACFORMAT offer – £2 off RRP.

**ClarisWorks book**  
**Price: £7.95**  
**Order code: MFCWKB**



### Excel, Word and FileMaker help

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**Order code: MFFMPB**  
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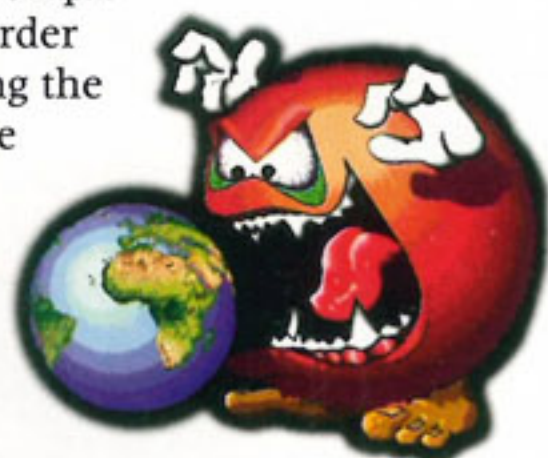
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You tried it for yourself on issue 13's cover disk, now upgrade to the full mission-packed game. *Syndicate* combines action with strategy to create a truly enthralling virtual world. We gave it 92% in the June issue, so why not try it for yourself?

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We were so impressed with *HyperStudio*, and its ability to enable any Mac user to create multimedia, that we've got together with the UK distributors TAG Developments to offer MACFORMAT readers an exclusive deal on the software. We can offer you *HyperStudio* at a special price of £117 – that's almost £50 less than the recommended retail price. For just £117 you can be creating multimedia masterpieces in moments (sorry).

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### Take up your sword

There's never been a game like this on the Mac; it definitely lies on the sword side of the 'Sword and Sorcery' equation. We rated it 80% last issue. *Deliverance* features graphics and gameplay similar to the classic *Shadow of the Beast*. If you are bored with strategies and shoot-'em-ups, try hacking and slashing your way through *Deliverance*.

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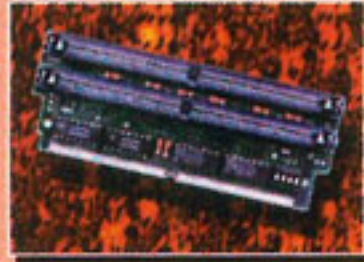
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## WHERE TO GET IT

Getting hold of shareware can be a right pain. That's why from this month we are starting two new reader services to make sure you can get hold of these insanely great programs.

For CD-ROM drive owners we're putting the programs on to our CD-ROM, and if you have a modem you can log on to our bulletin board (BBS) and get them directly from there.

Starting this month, we are planning to include as much as possible of the shareware we review in this section of the magazine on the regular covermounted CD-ROM disc.

You'll find the files in the 'This month's reviews' folder inside the 'Shareware' folder. The files in there might not quite match what you read here, because the disc and the magazine run to different deadlines (at least that's what the production people keep screaming at us), but we'll do our best.

As well as all the programs mentioned here, you will find hundreds of other shareware goodies hunted down, quite literally, from all over the planet. In fact, there's so much shareware on the CD (somewhere in the region of 6,000 files) that it'll take you until next month just to discover what's there!

If you haven't got a CD drive (and you really should, you know - they're great value and, better still, ownership means you can buy our CD-ROM edition every month!), then your next best bet is to get the files electronically.

If you have Internet access, the best British source is Imperial College Department of Computing at [src.doc.ic.ac.uk](http://src.doc.ic.ac.uk). Use ftp to connect (login: anonymous; password: your e-mail address) and "cd" to computing/systems/mac. You'll find lots of goodies in the umich and sumex directories.

Non-Internetters can find most of the files on BBSs like MacTel, which charge a subscription, or our own MACFORMAT BBS, which has no subscription fee.

You can log on to our BBS on 0891 615050, at speeds of up to 14,400baud. Follow the instructions when you get on-line and download any of the programs mentioned here. Calls are charged at 36p a minute off-peak, and 48p at peak rate.

If you don't have a CD-ROM or a modem, try one of the shareware libraries which advertise in our classified section, or join a local user group (see page 107) and swap files with your fellow members.

Shareware is freely distributable, so if you find something which is really good, give it to your friends and send us a copy!

Finally, wherever you get your shareware, beware of viruses. At the time of going to press, *Disinfectant 3.5* (on MACFORMAT 14's cover disk) was the best and cheapest way of staying safe.



## Andy Hutchinson and his rack-mounted modem go in search of all the latest cyber-software currently buzzing in the dark corners of the Net.

### Amy's Recipes 2.1

RECIPE BOOK

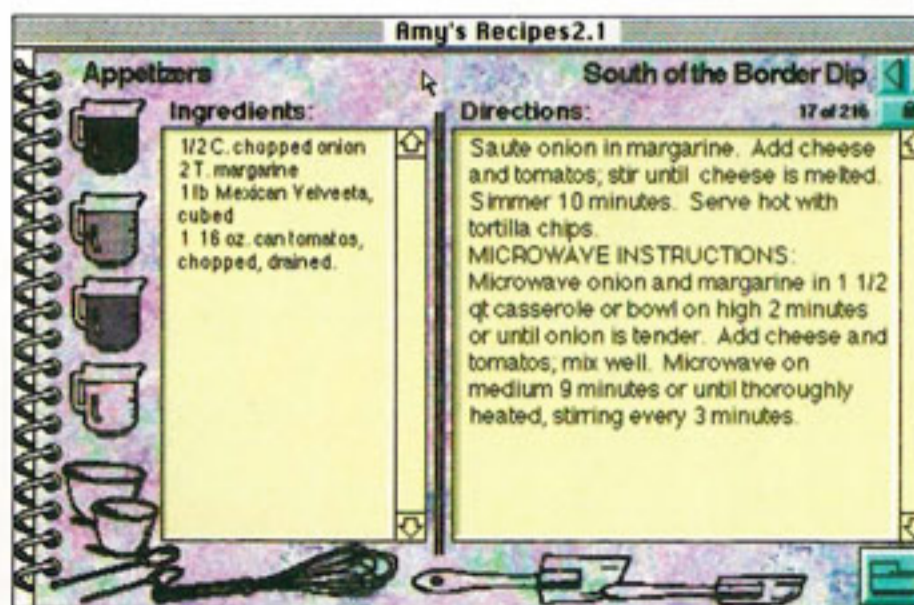
Shareware - \$3

Personally speaking, my culinary skills extend about as far as setting the microwave on full-power for four minutes. I didn't do Home Economics and I'm quite happy to live on a diet of explosively bad junk food. Actually, scratch that last bit; I'd like to eat well, but where does a klutz begin? Well, if you're anything like me, then you could do worse than checking out this multimedia recipe book - prepared earlier on gas mark five.

There are 216 recipes contained within this multimedia stack, although you can add your own if you desire. The recipes are split into nine categories, covering things like appetisers, bread, desserts, fish, seafood, meat, poultry, soup and vegetables. To view a recipe, you simply click on the appropriate category and the recipe appears in another window. If you're particularly together, you can print it out, but personally I left my PowerBook simmering on a low heat while I cooked.

As to the quality of the recipes - well, they're all very American: lots of dips and Mexican-influenced dishes, but then I like spicy food. None of the ingredients are particularly unusual, and I even ventured to try one of the recipes (Mexican Lasagne, if you must know). It tasted, erm, different.

I suspect that the main use of this program will be for storing your own specialities. But then, database programs which do things like catalogue your video collection seem like a



What a delightful-looking recipe that is. South of the Border Dip, for when you're South of the Border skint.

great idea until you actually sit down and start entering all that data. Still, this is a well designed program, which is very easy to use - it even has a mini-cookbook built-in, so you can store the recipes you use most often. Keith Floyd wouldn't use it, but Delia Smith would love it.

### Galactic Empire

SPACE STRATEGY GAME

Shareware - \$15

Imagine, if you will, that humankind finally gets its act together, that we all join forces and build some real spacecraft. These ships are then sent off to the stars to make new colonies on unspoilt planets, so that a new generation of Terrans can destroy yet more finely balanced ecosystems. After a vast search and quick snack at the Happy Eater in the sky, 20 planets, all within handy commuting distance of each other, are located and the Empire is born. Of course, with humans being humans, the new colonies soon fall out with each other - some even regress back to primitive ways - and the Empire seems to be well and truly stuffed.

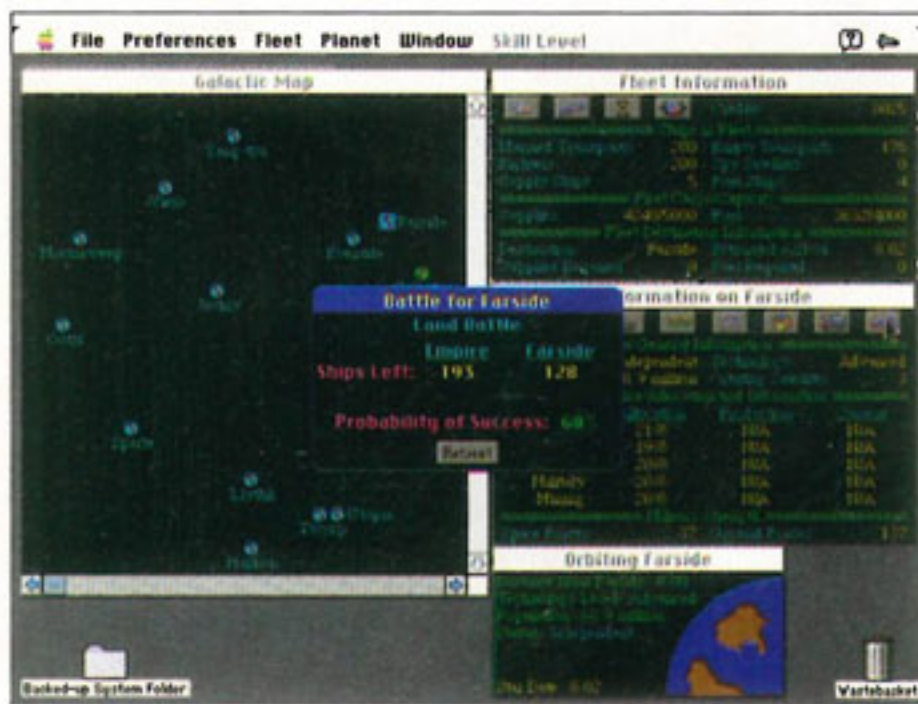
The object of this game is to re-unite the 20 planets. You're given a modest-sized fleet of ships, a base on Galactica and a battalion of 20 crack troops. It's then up to you to invade each of the planets, destroy the rebel forces and then tax the hell out of the poor souls down below who were all quite happy making quilts and raffia linen baskets.

Of course, you can't just warp around the galaxy blowing everyone up - even if you have seen *Star Wars* a zillion times. You'll need fuel, supplies and plenty of forward intelligence. You'll also need to be pretty damn quick, because there's a time limit in which to rebuild the Empire.

To take over a planet, you first have to dispatch at least three spy satellites to find out what you're up against. This will tell you how many spacecraft and ground troops you'll need. This in turn will indicate how much fuel you'll require and how many supplies you'll need to pack. Once you've got to the planet and won the war, you'll need to occupy it with plenty of troops or the locals might rebel. Finally, the planet might rejoin the Empire.

*Galactic Empire's* gameplay is finely tuned. It's

## SHAREWARE



You join us at a crucial moment in this space battle. Zargjaz Gfhyinter has launched his deadly meatball at the Pfrters.

one of those games which looks dead easy, but turns out to be tougher to crack than Nigel Mansell's PIN number.

I can also strongly recommend it to PowerBook owners who are saddled with a trackball, because you don't need to whiz a cursor all round the screen in order to win. What you will need is the mind of a chess Grand Champion and the inventive flair of a British Rail announcer. Either that, or you can set the game to level one, like I did. This one gets the Hutch seal of approval.

### McPoet 2.0

#### POETRY CREATOR

Public Domain

Stuck for inspiration? Hopeless at creating anything remotely arty? Well, you're not alone - *McPoet* is equal to even the worst excesses of Billy Bragg. It creates poems for you on any topic you like, using any subject you like. It's also extremely bad at it. By way of example here's a poem I asked it to create about me. You may notice the two female 'objects' which I added myself.

*Hutch splashes hopefully.  
Those dogmatic nubbins are like generous girls, they  
teach to us but not enough people brighten.  
Those carcasses are a reminder of too few winters of  
these escapisms.  
Hutch drinks, Cindy Crawford loves his prayer.  
Hutch adores joyfully - Hutch adores brutally.  
He sings hopefully and numbly.  
Erika Eleniak cuts just one ambitious occasional  
planet. Hutch rapidly worries for the devil.*

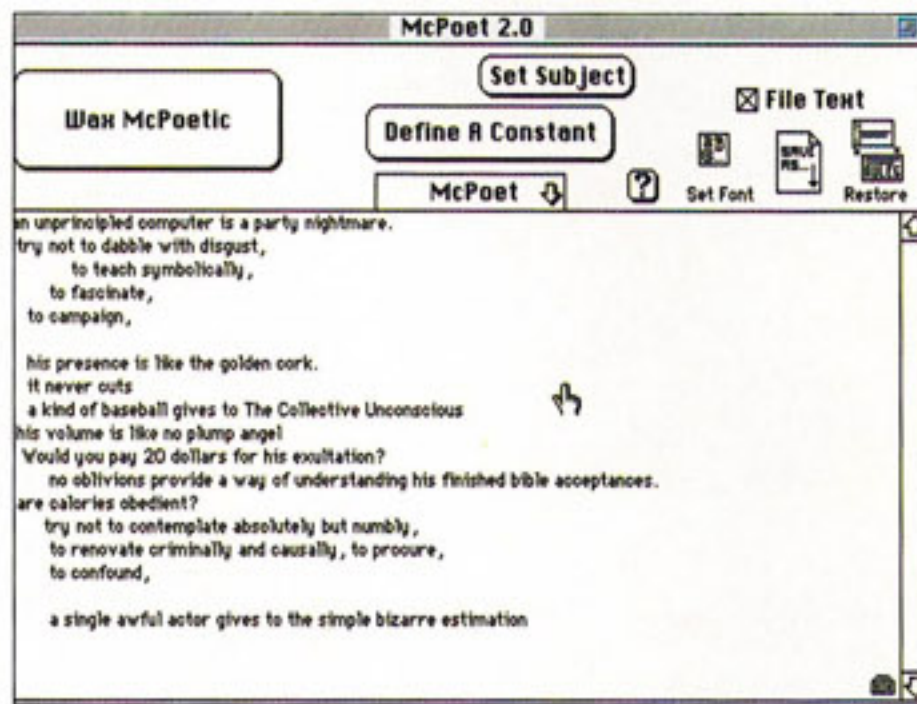
Now although that's spookily accurate on a couple of scores, I think you'll agree that Ted Hughes doesn't have much to worry about just yet. Still, this is a fun program which has its tongue firmly planted in its cheek. Not an earth-shattering programming development, but like it says when you launch *McPoet*, this is free verse in every sense.

### Flipper

#### MEMORY GAME

Shareware - \$5

Anyone remember those awful electronic Simon toys? You know, those things with four coloured pads which would perform a sequence, which you then had to repeat. Well, that's nothing at all like this game, but it was



Funnily enough, Pam Ayres allegedly uses this little program to compose all of her ditties. Another dream shattered.

just as annoying.

You're presented with a grid of squares, each of which is a different colour. The idea is to make all the squares the same colour within the allotted time-limit. Some squares require a lot of clicking as you cycle through all the colours, and others require only a single click.

Like all the best games, this is a very simple idea which works frustratingly well. As you complete more and more grids, so the number of squares increase. Then the Mac starts altering some of the squares you've completed, so you end up chasing round the screen cursing man, beast and Mac - especially Mac. If Apple had provided this program as a desk accessory rather than that stupid puzzle, productivity would have slumped.

### TrashMan

#### FILE DELETION TOOL

Shareware - \$10

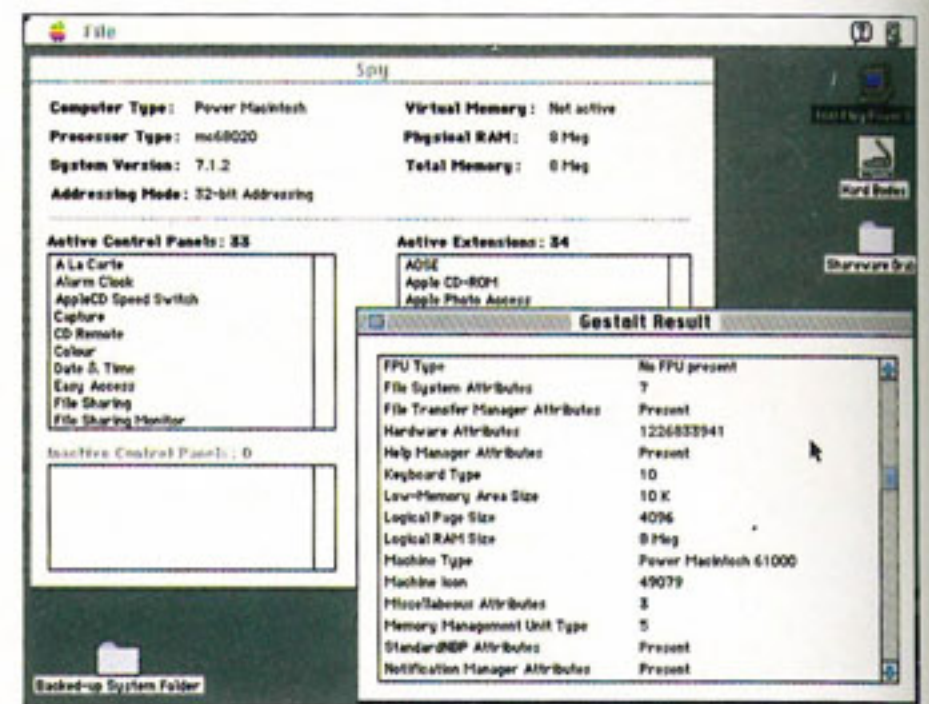
Do you regard yourself as a power user? Are you confident that you can find your way around a Mac quickly and efficiently? Yeah? Well, I bet you've still deleted a file and then wished you hadn't. Everybody's done it - it's one of the constants of the universe - every six months you will plonk a file in the trash can, click on the **Empty Wastebasket** option and then suddenly realise that you've binned the wrong file.

Help is at hand though, with this nifty file deletion/recovery program. To quote from the help document which comes with the program: '*TrashMan* works like an electronic compost heap, deleting files from your trash after they have "aged" beyond a set point which you specify, in days, hours and minutes.'

This isn't actually a System Extension, but a



All right, so it looks deathly dull - but then you all thought that the first time you laid eyes on *Tetris*. Am I right?



Delve around inside your Mac's System and you'll come across all sorts of oddities. It's like a roll call for processors.

background program. It starts running when you switch on and monitors everything that you put in the trash. These files aren't actually binned, but are stored in an invisible folder on your hard drive. Then, when each file reaches the desired age, it is deleted forever. All of which means that if you bin something and then decide that you need it back, you can simply recover it with *TrashMan*.

### Spy 0.9

#### SYSTEM SETUP DOCUMENTER

Public Domain

Last month I told you about *MacCheck*, an Apple program which performs an exhaustive series of tests on your Mac. *Spy* is kind of like a *MacCheck Lite* - it doesn't actually perform many in-depth tests, but it does provide you with all the System information you could ever want.

There are only two options within the program. You can either see a standard system information screen or a complete run-down. The principal use of this program will be for when you call a technical support line and they ask you all sorts of things about your Mac. This is the computer equivalent of a Swiss army knife - dead useful when you're in a tricky spot.

### A La Carte

#### FILE LAUNCHER

Shareware - \$20

Program launchers are like bums: everyone's got one. All of which raise the question, does the Mac community need another one? Given the quality of this program, I'd answer in the affirmative. This is a very well-designed launcher which makes life jolly easy and saves you ferreting around inside endless folders.

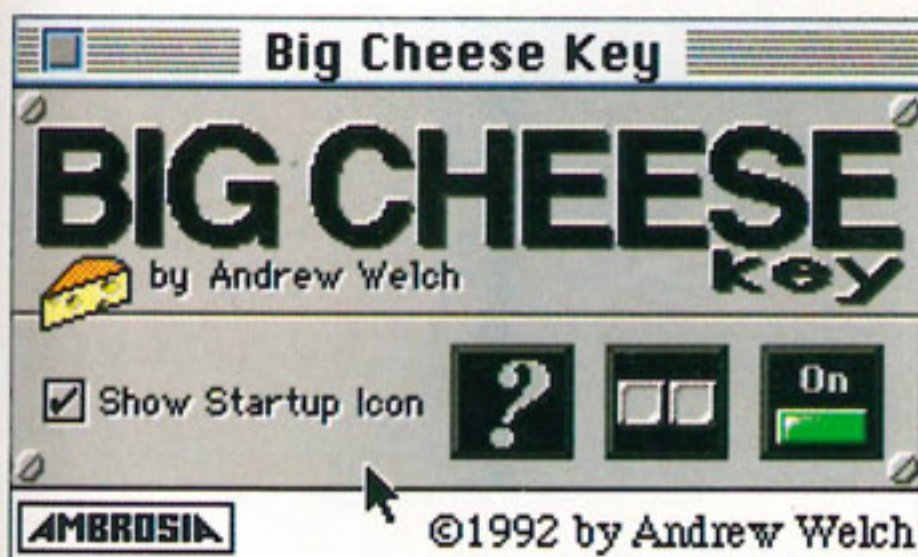
*A La Carte* installs a new menu at the top of your desktop screen. By clicking on this, you can access all the folders, files and applications that you used most recently. These are grouped into pop-up menus, meaning that it's very easy to get at a specific file. Moreover, you can configure the menu yourself so that it behaves like the **Apple Menu Items** folder - you can even lock items so that they don't drop off the menu.

### Big Cheese Key

#### SCREEN HIDER

Shareware - \$10

What do you do when you're getting a bit bored at work? If you're anything like me, then



Has your boss just caught playing games on company time for the fourth time this week? You need a Big Cheese Key.

you'll probably load a game up and have a play. The bad news is that bosses tend to look down on people who play Mac games when they should be dipping their nose to the grindstone.

So there you are, indulging in a round or two of *Tetris*, when the big cheese walks into the office. What are you going to do? If you had the foresight to install the *Big Cheese Key* on your Mac before playing the game, then you could hit a special combination of keys and transform your screen display from a game to a word processor.

Once you've hit the hot key, the screen will stay that way until you click the mouse, so if your boss is inquisitive, you could still be in the merde. The text which is displayed on the screen is actually about photography, but if you're equipped with *ResEdit* then you can alter it to anything you want. Personally, I didn't make much use of this program, but then I'm paid money to play games. Maybe they'll come up with a hot key to change my screen display from text to a game – it could get me out of a load of trouble.

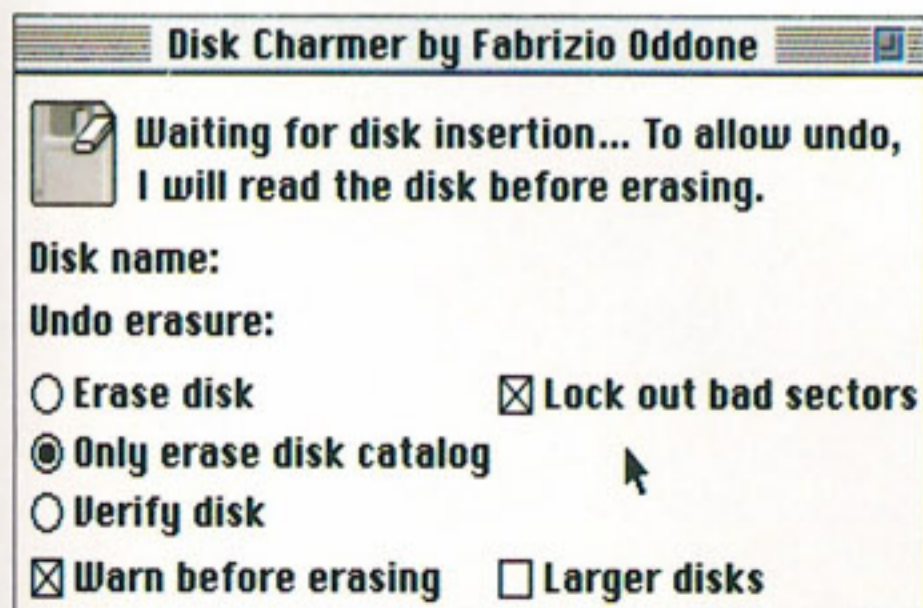
## Disk Charmer

MULTIPLE DISK ERASER

Shareware – \$10

This program was created because the author was given a tape drive on which he decided to store all the data that was currently on his floppy disks. He was then faced with the prospect of erasing 80 disks using the laborious desktop method. He was so frustrated by this process that he created *Disk Charmer*, which erases disks in the background.

Once you've run the program, you decide whether you want low or high density disks and what you want to call them. Then it's simply a case of inserting a new disk every time your Mac beeps. All of which is infinitely preferable to trawling through a load of disks and erasing them the hard way.



*Disk Charmer*: watch all the data disappear from your old disks quicker than a politician's promise.

*Disk Charmer* can detect dodgy sectors on a disk and lock them out. This makes them transparent to the desktop, and saves many a ropey disk from the bin. Not many people will need this kind of heavy duty disk-erasing program, but I bet that the proprietors of Public Domain libraries swear by it.

## Escape Dammit!

ESCAPE INIT

Public Domain

Have you ever been confronted with a dialogue box which gives you a cancel option, but which doesn't utilise the keyboard shortcut **[command] [period]**? *Escape Dammit!* enables you to use all your favourite shortcuts. It also gives you the option of dragging dialogue boxes around the screen, in case the box is obscuring what you want to see underneath. And, erm, that's about it. Incidentally, this is actually a FredWare program – if you don't like it, write a better one.

## Extensions Manager 2.0.1

SYSTEM EXTENSION MANAGER

Public Domain

There's no denying that Extensions and Control Panels are handy things. Simply by bunging one in your System Folder you can add any number of features to your Mac and alter the way that it runs. However, it's easy to go overboard and completely clog up your System. Besides, there are some Extensions which you'll only want to use occasionally. *Extensions Manager* has been designed to enable you to keep all your Extensions, but to only use the ones you need at a particular time.

The most useful feature of the program is its ability to clump Extensions together in groups. So, for instance, if you were using *Photoshop* you could enable those graphics Extensions which make graphics work easier. Then you could have a different set for word processing and another for standard desktop work.

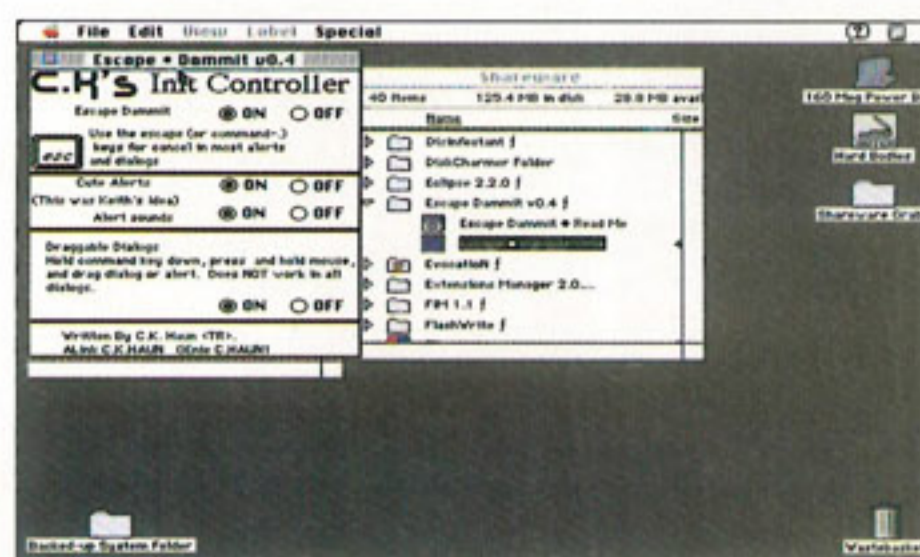
When you start up *Extensions Manager*, it displays a list of your System Extensions. Those that are highlighted are currently enabled. Before each set of Extensions is the name of the main folder where they belong. To enable an Extension, you simply click on its name so that it becomes highlighted; to disable it, just click on its name again. It's as simple as that.

You can instruct the program to appear on-screen every time you boot-up, which enables you to decide quickly which extensions you'll need. There are also PowerBook specific aids,



Avoid startup crashes and wasted System space by disabling all the Extensions you don't need with *Extensions Manager*.

## SHAREWARE



Besides adding the **[command] [period]** option to all dialogue boxes, you can now drag them all over the desktop.

such as a toggle which detects whether you're plugged into a network or not. This sort of program should come as standard with all Macs.

## Sav-O-Matic 1.1

AUTO-SAVING UTILITY

Shareware – \$20

This is actually quite an elderly program, but it's so useful that I thought it deserved a bit of coverage – especially for those of you who are new to the Mac. *Sav-O-Matic* adds a feature which many high-end programs already come equipped with: it will automatically save your work for you after a specified period of time has passed.

To install the program you simply place it in your Control Panels folder and restart. The program can then be configured to behave the way you want. It's important to let *Sav-O-Matic* know which programs you want it to work with. For example, you may not want to save your *Photoshop* doodles until you're happy with them, but you'll probably want your word processor to save as often as possible.

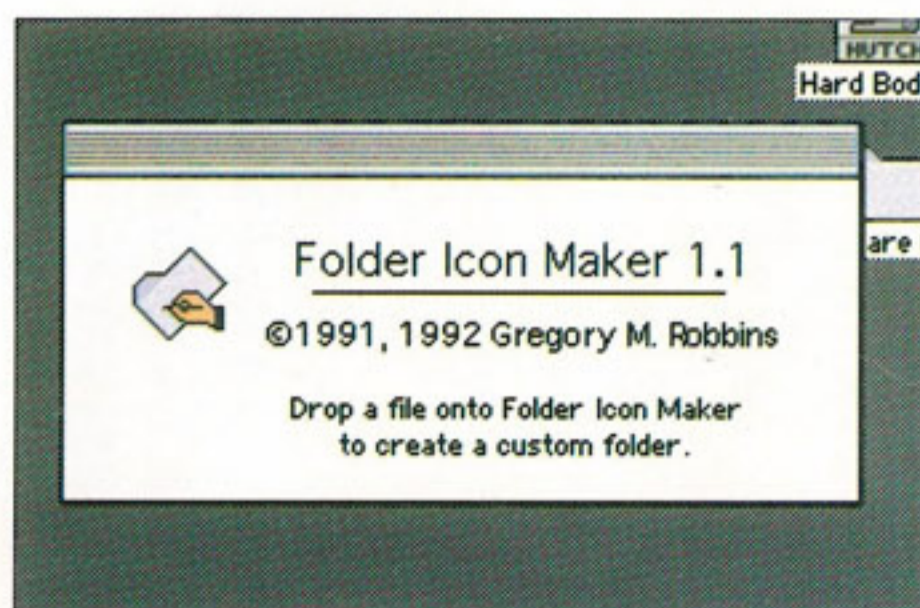
To add a program, you simply show *Sav-O-Matic* where it is on your hard drive. Then you've got to decide how often you want to save. The program can save to your hard drive every 2, 5, 10, 15, 20 or 30 minutes. You'll probably want to settle on a 10 minute timer, because two minutes seems slightly excessive. Once you have done all that, you can get on with your work, while *Sav-O-Matic* looks after the data.

## Folder Icon Maker 1.1

ICON CREATOR

Public Domain

How often have you installed a new program on your Mac's hard drive, opened the new folder and been impressed by the file's icon? There are certainly some jolly natty designs out



This month's thrilling caption award goes to *Folder Icon Maker*. It wins a subscription to *Embalmer's Monthly*.

there (even if the program's not as good as its icon suggests). More often than not, though, the folder's a bog standard grey model.

*Folder Icon Maker* is a death-defyingly simple program. It creates new folders for you by reading data from the file's icon. This will enable you to transform your grey-looking desktop into a riot of colour. (Sorry, thought I was commenting on the Chelsea Flower Show for a minute there.)

The program's exceptionally easy to use. You simply drag the file with the source icon on to *Folder Icon Maker's* icon and it creates the folder. If you hold down the **C** key during this process, the icon will be pasted on to the clipboard; if you hold the **F** key, the new folder icon will be placed on the file's parent folder; and if you hold the **T** key, the white portion of the file's icon will be treated as transparent.

The results which I've obtained from this program are excellent. This is due, in part, to its anti-aliasing feature which smooths out the image for its new shrunken format. Incidentally, the chap who wrote this program works for NASA – so now you know what they all get up to when they're supposed to be designing functioning satellites.

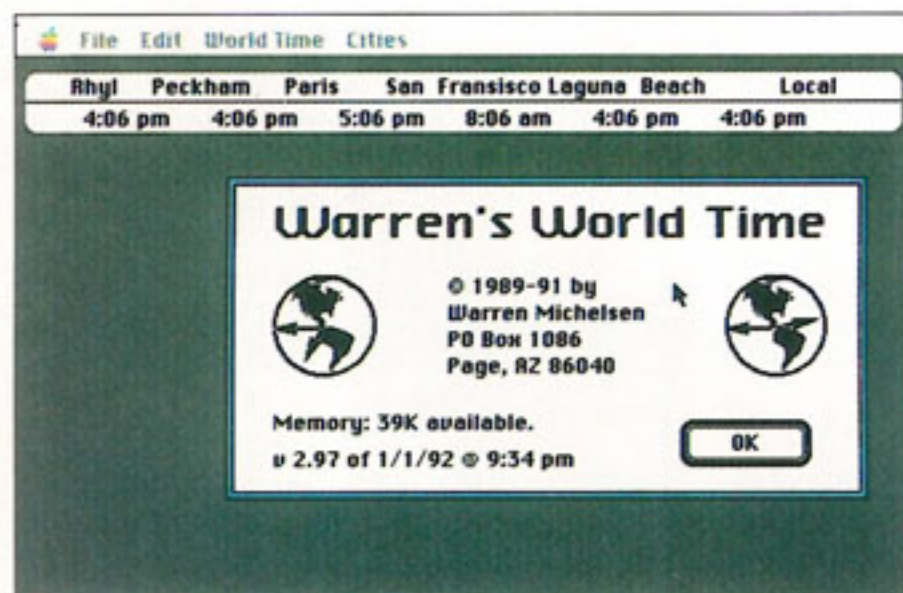
## Quill 2.2

TEXT VIEWER

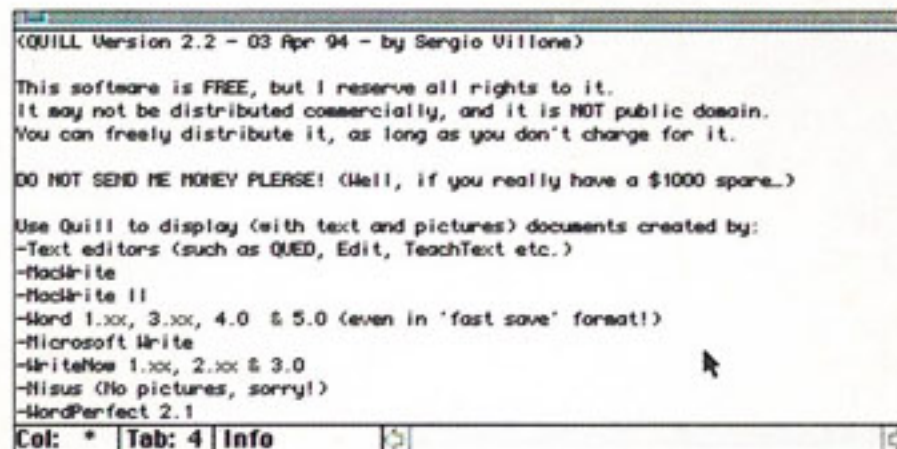
Freeware

*Quill* is a small text display program which can be run as either a desk accessory or a stand-alone application. It's modelled in the style of *BEdit* – that is, its primary use is simply for viewing a wide range of text files. So once you've loaded the text, you can't edit it, you can only save it out in *Quill* format (which takes up less space).

So why would you want to use this program? Well, first, it takes up very little space indeed (32K to be precise) and it's a lot easier on the eye than *TeachText*. Second, it can load



I'm an international businessman, so I always need to know the time in Laguna Beach, Rhyl, Paris... Peckham.



*Quill* will open virtually anything you care to mention – rumour has it that Ronnie Biggs has put his order in already.

in a plethora of files (everything from *WordPerfect* to Apple's *DocMaker*). And third, it can display pictures, too.

You'd use this program if you're often sent odd file types which need viewing. This is particularly true of anyone who gets on-line a lot – practically every program uses a different format for its ReadMe! file, so you can save yourself a lot of grief by simply bunging *Quill* in your Control Panels folder.

## Oracle

STARTUP QUOTATION PROGRAM

Shareware – \$10

Another frivolous program. *Oracle* simply plonks a quote on your screen each time you start up your Mac. They range from the funny to the bizarre, and should you particularly like an individual quote, you can print it out. It isn't going to shake the earth to its foundations, but it's a fun, well-designed program which relieves the boredom of a lengthy startup.

## World Time

TIME ZONE CLOCK

Public Domain

Not everyone has to phone exotic places. Few people need to keep a constant check on the exact time in Paris, Buenos Aries, New York, Milan and Peckham. And if you only need to look those times up occasionally, then the Apple Map Control Panel does a fabby job. However, let's assume for a minute that you're an investment banker, a rock star or a computer journalist who does need to know the time elsewhere. [Although not necessarily at 9.30 in the morning at their own place of work, eh Hutch? – Ed]

*World Time* enables you to display the time in any location you choose. However, it's better than Map, because it displays all these times at once in windows on your desktop. It works by calling the time that your System clock is set to 'local time'. Then, if you want to add a new city or country, you simply tell it how far ahead or

behind 'local time' the place is. Again, this is better than Map, because to add a location within that program, you have to give Map the exact longitude and latitude – which means consulting an atlas, a thing few people can be bothered to do.

## Colour Fractal Generator

GRAPHIC FRACTAL GENERATOR

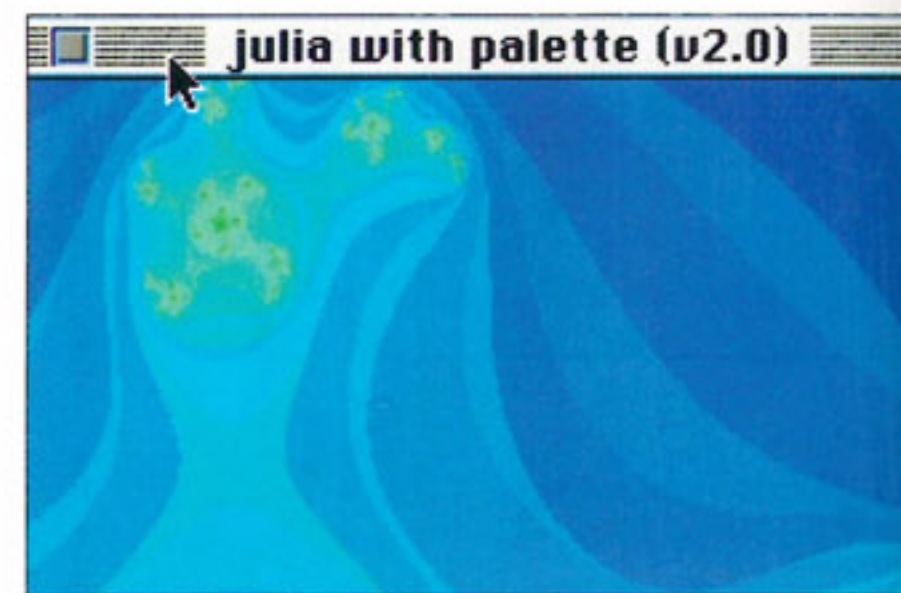
Shareware – \$15

This has got to be the bargain of the summer. The normal, run-of-the-mill graphic fractal generators which you find as you buzz around the Internet tend to cover one specific type of fractal. *Colour Fractal Generator*, on the other hand, is the start of the next generation. It's an extremely well-designed program which does just about everything.

*Colour Fractal Generator* enables you to generate Mandelbrot, Julia, Dragon and Random Walk fractals. These can be created in as many colours as you want. So, if you've got a quick 16.7 million-colour Mac, you'll be able to create stunning images. However, users of lower-end Macs with just two or four colours can also join in the fun; you simply specify how many colours you want to use and the program gets on with it.

It has three built-in palettes which you can use during fractal generation, or if you prefer, you can create your own. To set the program running, you first pick the type of fractal image you want, then enter the size of your screen and the number of colours you require. The program then quickly generates the image.

Once an image has been created, you can zoom in on it or save it as a *CFG* or *PICT* file. The whole package comes with a very good manual (complete with loads of diagrams), plenty of example images and AppleScript compatibility. Given that it costs just \$15 (about £10) it represents brilliant value for money – definitely one for the collection.



*Colour Fractal Generator* is the cream of chaos graphics creators – and you can check it out on this month's CD-ROM.

## PD & SHAREWARE – WHAT EXACTLY ARE THEY?

PD is short for 'public domain'; it's software that may be freely shared around among users – there is no fee to pay. It can be obtained from PD houses, user groups and bulletin boards.

Actually, most free software isn't PD – it's what's known as 'freeware'. This is because putting a piece of software into the public domain deprives the author of any rights to,

or control over, that software. Most programmers are not at all happy at that sort of thing, so the concept of 'freeware' was created. This is software which you can use for no charge, but which the author still retains rights over. For simplicity, though, most people still refer to this type of software as 'PD'.

Shareware is a form of 'try before you

buy' software selling. You can obtain the programs from the same sources as PD and freeware, but if you like the software, you send the author a contribution – normally somewhere between \$5 and \$40 (most shareware authors live in the States). In return for this 'registration fee', you often get upgrades or documentation, so it's well worth paying up.

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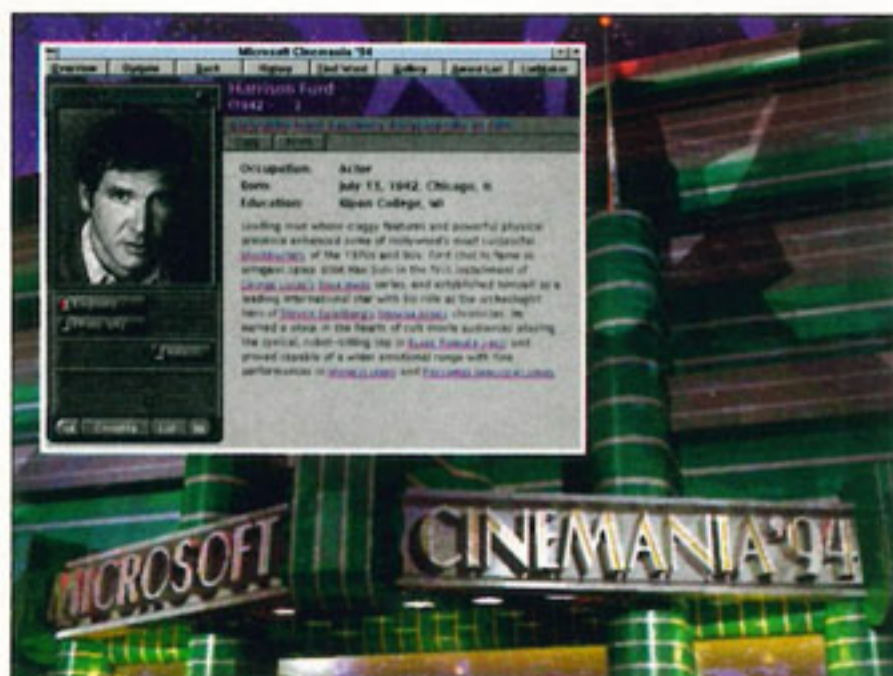
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Cinemaniamania '94

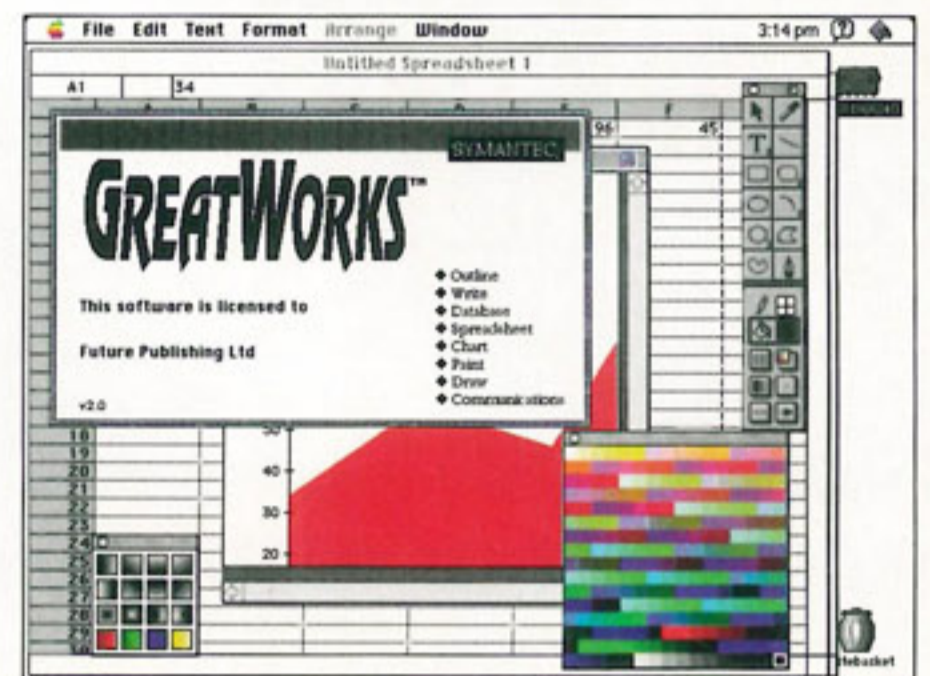
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# I think, therefore I play

**Thinkin' Things claims to teach essential learning skills, but is it really as good as it appears?**

**W**hy does all educational software seem to come from the US these days? Don't get me wrong, some of it has great potential. We are, however, two separate nations with differing ideas about a great many subjects – including learning, and the role of computers within that learning system. *Thinkin' Things* is one of those programs which does have great potential, but which is also flawed as far as a UK audience is concerned, because of our different approach to education. The packaging, for example, claims that *Thinkin' Things* 'will give your child a solid foundation for a lifetime of successful learning'. If Mac programs could really do that, we wouldn't need schools!

Aimed at kids aged between 4 and 8, *Thinkin' Things* provides opportunities to experiment with shapes and sound, to remember increasingly complex sequences through repetition, and to apply logic to the completion of patterns. The program is made up of six discrete sections:

## Toony Loony/Oranga Banga

Both of these activities encourage children to remember sequences of sounds and, as the difficulty level increases, to distinguish between different sounds and notes. To begin with, Oranga Banga uses a set of drums and other percussion instruments to play a sequence which you then have to repeat. At the easiest difficulty level, these sequences include a small selection of instruments which are each struck once or twice. Later on, the sequences become more complex and involve a larger number of instruments.

The Toony Loony character, on the other



Here's Oranga Banga. He's about to play you a sequence which you then have to copy. Pay attention at the back there!

hand, plays a xylophone which can be made of lengths of string, glasses or even – would you believe it – chickens. Again, Toony Loony performs a short tune which you have to repeat; this task becomes increasingly complex each time you succeed.

The Toony Loony and Oranga Banga activities offer two additional options. First, you can choose to play your own sequence which one of the characters will then play back faultlessly. The second option is only for the very brave, however: Oranga Banga or Toony Loony plays something in the dark – you can't actually see which instrument or xylophone bar they're playing. This makes the exercise extremely difficult, especially during the Toony Loony section, where you have to discriminate between individual notes.

If you do get the sequence wrong, though, Oranga Banga and Toony Loony don't just give up on you – they play it back endlessly (and increasingly slowly) until you get it right.

## Feathered Friends

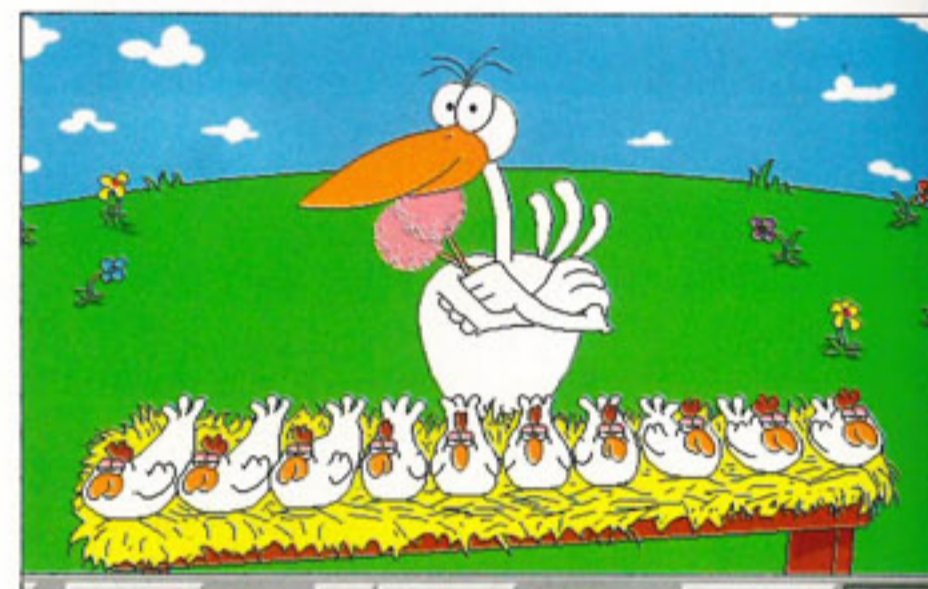
Now, this one I like. During the Question and Answer mode, you're presented with three different birds. It's then up to you to use the bird-making machine to make the next one in the series. Once you've done this correctly, the birds exit in one of a number of amusing cameo sequences – they either dance into the wings or are pulled off the side of the screen with a long hook, or occasionally fall through the trap door beneath them, leaving their hats floating behind them for a second or two.

In the Create mode, you can make as many birds as you like, although each group of four disappears in the same amusing manner.

## Flying Shapes and Spheres

These two are the most ambitious of all the activities. Coloured shapes or spheres can be manipulated in a range of ways to complement different sounds or musical accompaniments. Unlike the other activities, there are no correct answers here – you can do what you like, within the constraints of the tools provided.

With the Flying Spheres, coloured balls can be sent spinning across backgrounds filled with a pseudo 3D shape; as the ball moves, it becomes larger or smaller, thus giving the impres-

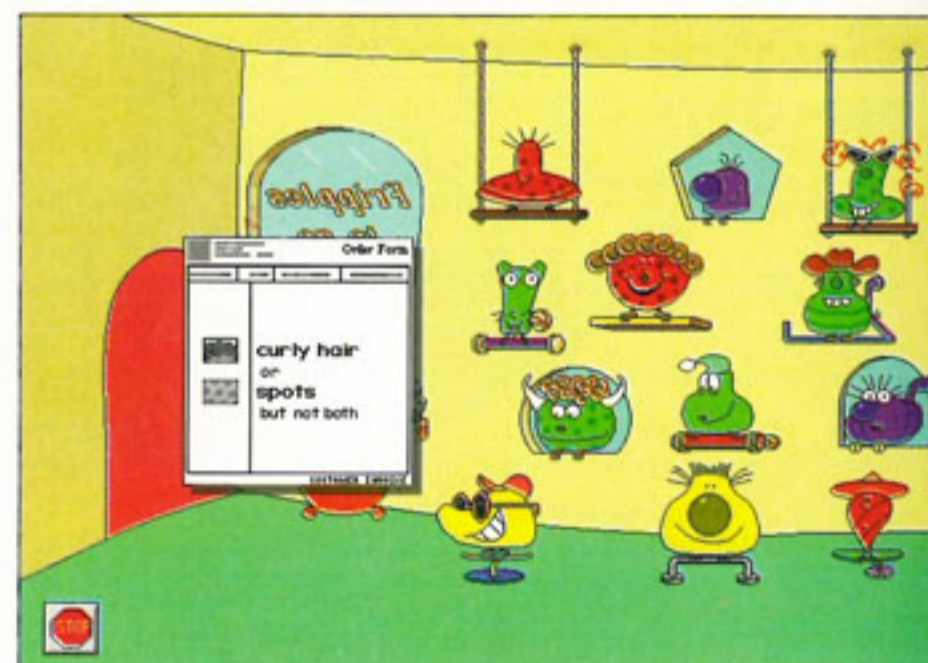


Don't tell the RSPCA, but if you tickle these chickens, each one will make a different note. Weirdos R Us.

sion that it is moving along the surface of the 3D shape. You can alter the speed and direction of the ball, as well as setting its movement to music. There's a selection of tuneful tracks ranging from soothing muzak to a rock-like throb – it all sounds very good through an AV monitor's speakers, anyway!

The program provides nine examples of perfectly coordinated spheres spinning in time with the music. Unfortunately, my efforts weren't quite as proficient as its – it does take some time to get used to setting the speed of the balls.

The Flying Shapes activity is based on a similar concept; the idea is to animate the geometric shapes, each of which has been assigned its own sound. One nice touch is the facility which enables you to add your own sound to any of the shapes via your Mac's microphone. You can then subsequently choose either the original sample or your own. You can resize and animate the shapes, which in turn affects the sound. So the larger the shape, the louder the sound; the faster it spins, the higher the pitch; the faster it travels across the screen, the quicker the rhythm.



This is a fax order, so you can only read the attributes. Still, at least the ink doesn't come off on your fingers.

Once you've set up an animation in either activity, you can get rid of the icons and tools, so you can devote the whole screen to showing what you have achieved. You can also save up to nine of your own creations, which you can cycle through alongside the examples provided by the program.

## Fripple Shop

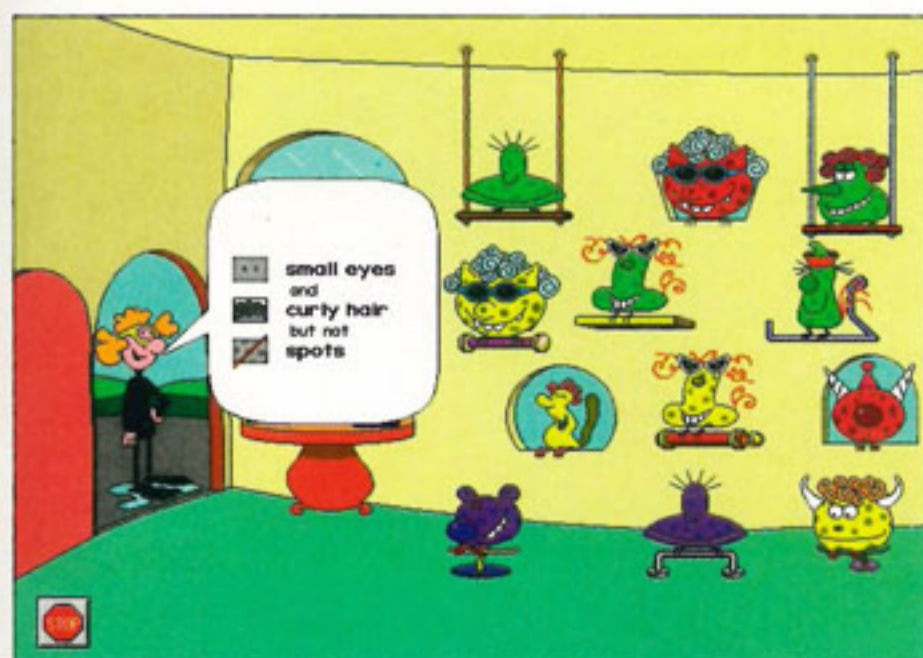
Dead simple, this one. Customers ask you for a specific type of Fripple, and it's up to you to match up the criteria which they identify with your current stock – small eyes, curly hair and so on. When you choose the right one, it hops off its perch and goes out of the door – you get a new set of Fripples after each order is fulfilled. This extremely simple idea is made more effective because customers can order in three different ways, each of which emphasises a different mode. When you click on the door, a customer arrives and asks for the type of Fripple she or he wants, so you hear the selection as well as seeing the request in words and pictures. When you click on the phone, however, you only hear the criteria, and when you click on the fax you only see them.

There are some amusing touches in here too – the customers range from a woman scuba-diver to a giant; and when you get the order via the phone or fax, a van draws up outside the shop – you can even hear it drive away when the selected Fripple trots outside. Unfortunately, the makers of the program have tried to give each character a distinctive accent, but they're all really appalling!

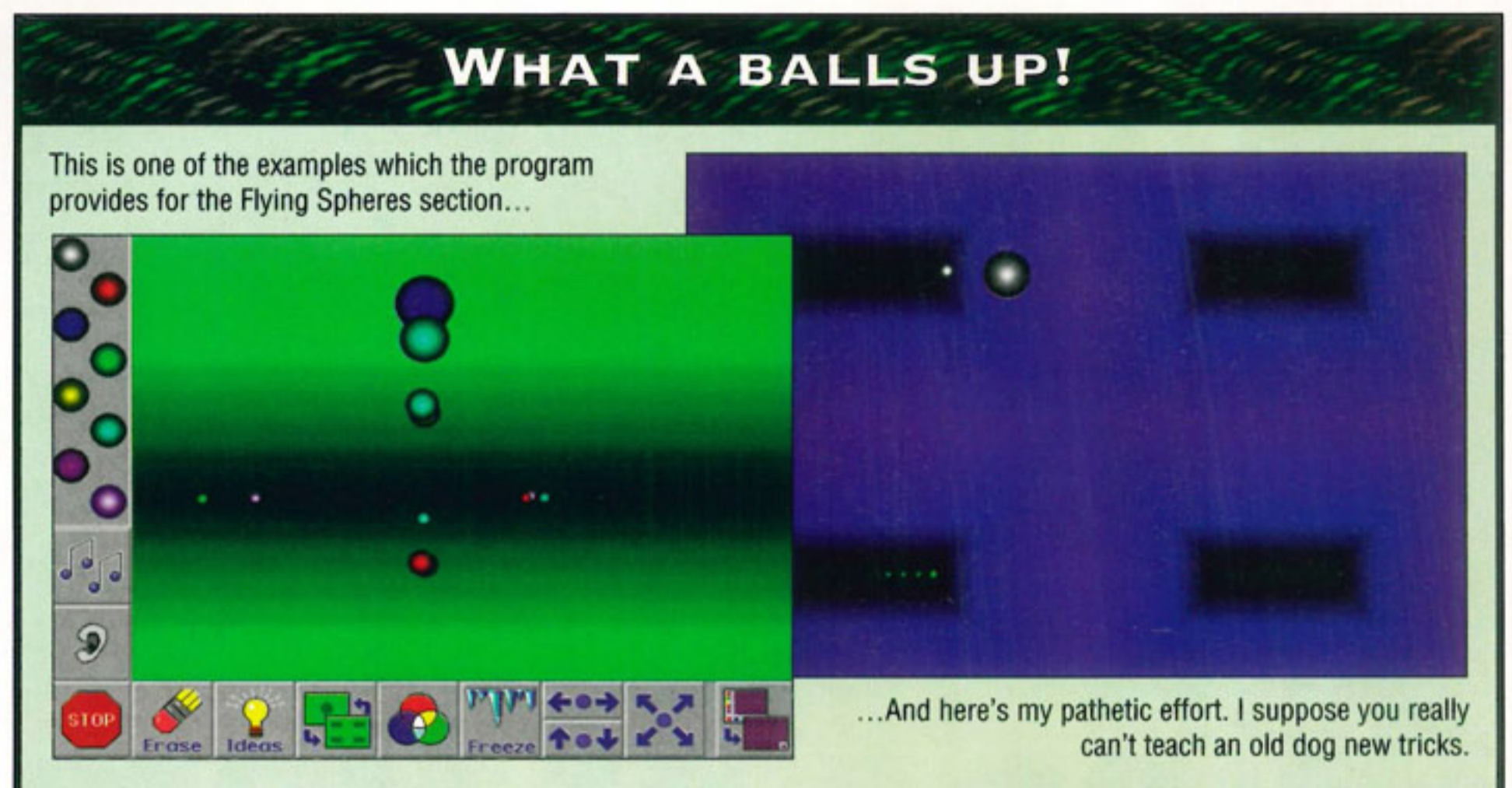
As the activity becomes more complex, the matching process can become quite taxing, with the various attributes of the Fripples being connected with the words 'or', 'and' or 'not' – or combinations of them. For example, 'curly hair and small eyes but not stripes' does take some working out. If you fail with your second attempt, however, some of the Fripples disappear to make the choice easier, and you can, in fact, never fail to select the right one.

If, having played with the six sets of activities, you can't understand what the point of it all is, it's time to have a look at the impressively slim handbook which comes with the package. Here there are explanations of what each activity is trying to achieve. For example, the Flying Spheres section offers 'a novel and challenging environment in which children can explore their artistic, musical, and scientifically inquisitive natures.'

Sadly, this is one example of the basic differ-



Now which Fripple matches this customer's order? And why does she want to buy one of these gross creatures, anyway?



ence between the UK and US view of learning: much of the documentation implies that the program will – by itself – teach children incredibly useful skills. This is a shame, because there is little doubt that the program can offer some excellent opportunities for learning – but it can't teach anything unless there is an adult or other children on hand to probe the child's understanding of what is going on, and to encourage him to reflect on his actions.



This is the Feathered Friends section – make the next bird using the machine on the right. Move over, Casanova!

Strangely, in other parts of the documentation, this fact is acknowledged by the provision of sections called Together Time Activities. These sections suggest related tasks which the child and his parent(s) can do away from the Mac. There are some real gems in here, including the type of activities which will send youngsters to school ready to read. How sad, therefore, that the authors didn't take the opportunity to suggest to parents how to use the program: parents understand how to read books with their children, but how many feel really comfortable using a computer program with their young child?

For me, another problem is that you can only set the difficulty level of the various sections through the 'adult panel', which is obtained by pressing [command] [option] A. It's a strange paradox: the program's all about encouraging children to actively experiment, yet it prevents them from controlling the difficulty level. A lot of US software is like this, but it doesn't sit well with our approach to education – we seek to put children in control of the technology, rather than vice versa.

The implicit message of the program and its documentation is that learning is all about a set of discrete skills, which can be taught or learned independently of any 'real-life' contexts. Our National Curriculum stresses the need for knowledge and understanding, as well as skills – and all within a context which is purposeful to the child. For many of the activities, there's no real reason for the child to persevere with the activities, and I would guess that without adult intervention some areas of the program will only be played with once.

Perhaps one day a US software house will demonstrate real commitment to its UK market by creating versions of its programs which are more in tune with the education system in this country. For most packages, this wouldn't be a huge investment. Don't get me wrong, though: I do like many things about *Thinkin' Things*. It has a lot of amusing touches, good documentation and facilities which enable children with 'special needs' to use touch-screen or switches with it. With parental participation it definitely has great educational potential. If, however, you tend to leave your child alone while he's playing on your Mac, then it will have only limited value.

*Phil Moore*

## THINKIN' THINGS

Price: £36.80.  
Requires: a 256-colour monitor, System 6.0.7 or later, 4Mb of RAM and a hard disk.  
For more details contact the publisher's, Iona Software on 081 241 8925, or retailers such as Macademic on 071 630 6844.

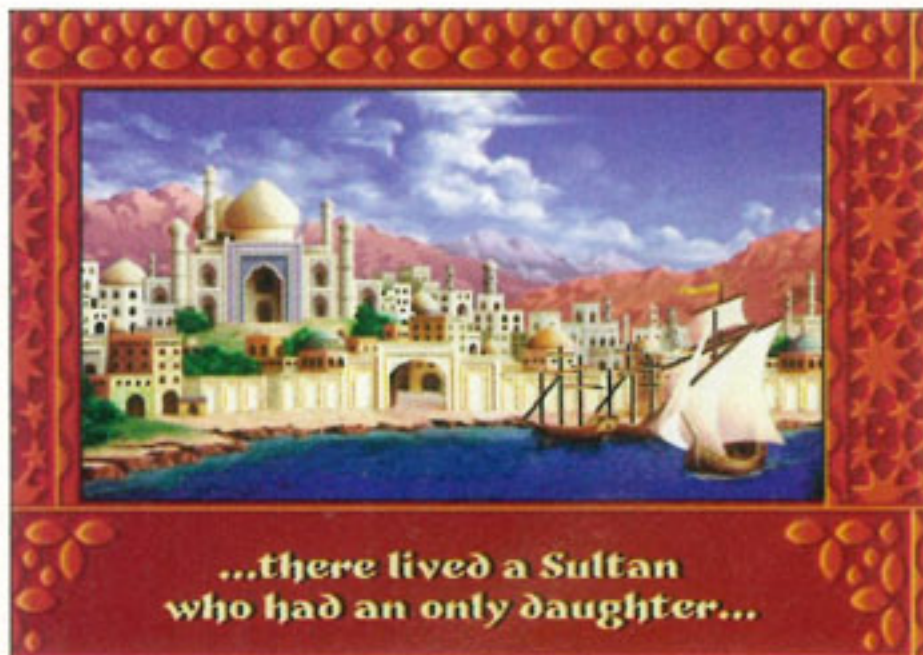
**Ease of use**  
An absolute doddle! **94%**

**Documentation**  
Impressively slim. **94%**

**Features**  
Some amusing touches, with lots of activities. **93%**

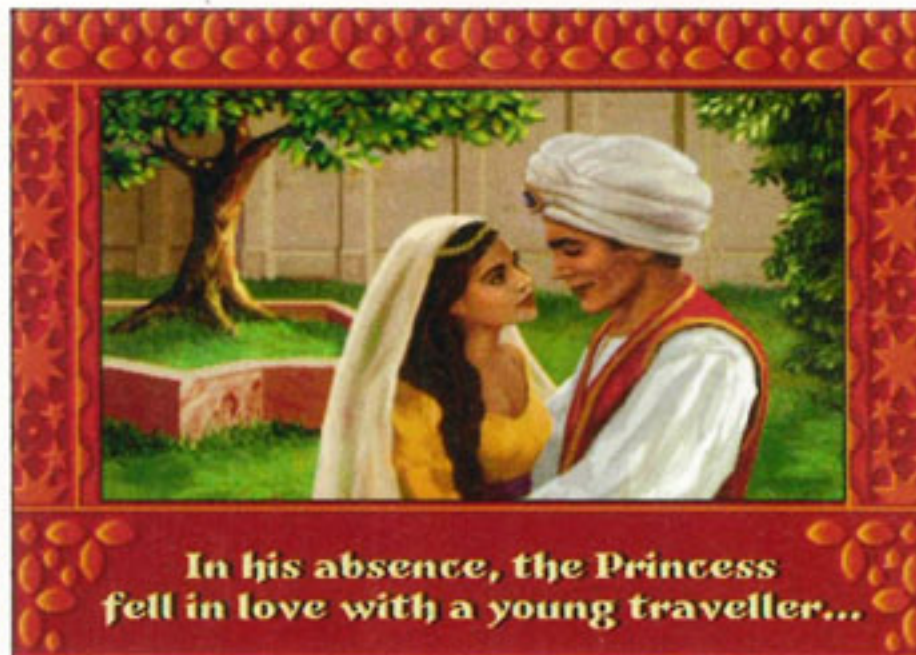
**Educational value**  
Plenty of potential, providing parents guide their child's learning. **88%**

**MACFORMAT RATING** **92%**



...there lived a Sultan who had an only daughter...

At the start of the game, there's a long sequence which fills in the storyline between *Prince of Persia 1* and the sequel.



In his absence, the Princess fell in love with a young traveller...

That's you on the right; the very attractive person on the left is your girlfriend. You meet and fall in love through Dateline.



Seizing power, Jaffar had his rival thrown into the dungeons...

But Jaffar, the evil vizier, fancies your missus himself, so he goes without a shave for a week and then seizes power.

# Prince of Persia 2

## — *The Shadow and The Flame*

**There's some stabbing, a few leaps, the odd 'running through', plenty of undead foot soldiers and death-defying encounters by the camel-load. Better get Andy Hutchinson in...**

**T**he Middle East has never been a particularly stable place. Ever since man crawled out of the primeval soup and into a pair of leopard skin Calvin Kleins, they've been at each other's gourds down there. But at least they didn't have nuclear weapons, oil and satellite TV in the old days. All they had then were some camels, a nice line in silk, some very sharp curved swords and a proclivity to marry lots and lots of women all at once. The perfect setting for a game then.

You're the Prince of Persia of the title. You've done plenty of sword fighting and lots of jumping and swigged copious amounts of

special potion. You've married the Sultan's lovely daughter and have settled back to a few months of procreation. But then... ah well, we need a plot for the sequel, don't we.

You wake up one morning and an imposter who looks disturbingly like you is by the Princess's side. None of the members of the royal court recognise you and they're a bit offended by your presence. In time honoured fashion you decide to do a runner and leap through the nearest plate glass window.

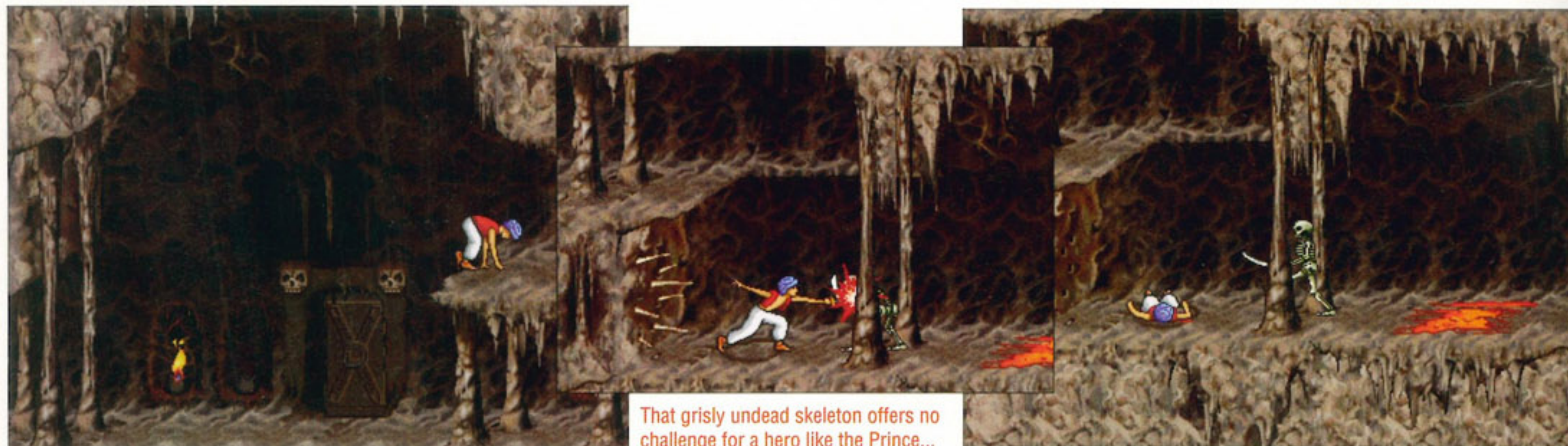
And so, dear reader, your mission in this game is to get your pantalooned bottom back to the palace, to reclaim your missus and then to dispatch the evil imposter. All of which is as

good an excuse for some swordplay, leaping and potion swigging as I've ever heard. Hurrah.

This game is primarily a test of your leaping skills. You've got to be able to judge jumps perfectly or you'll get nowhere. You are allowed a slight margin of error, but time your leap badly and you're more likely to plummet down a chasm on to some spikes than come to rest on a handy ledge.

The action starts at the palace. You leap out of the window and then have to dispatch the guards who have been sent to get you. Once you're out of the palace, you leg it down a jetty and hurl yourself at a boat which is just leaving port. This is where the adventure proper starts.

In order to make it through the levels, you've got to anticipate exactly what the programmers will throw at you. For instance, ledges may look safe, but stick around and they'll crumble to bits. Walls may look harmless enough, but get too close and you'll get aerated like Swiss cheese. The ground may look harmless enough, but step on the wrong stone and you'll get a stick up the tradesman's. That



That grisly undead skeleton offers no challenge for a hero like the Prince...

Down on the fourth level, and you've been set a time limit of 70 minutes within which to rescue your poisoned bride.

... Except when it's dead hard and manages to take you out with just one swipe. Oh well, back to the drawing board, I suppose.



Dotted around the levels are all sorts of potions. Some restore strength, some give you extra powers and some are poisoned.



He got the point, didn't he. Still, what'd you expect of someone called Spike?



That pile of bones on the right has just risen up and skewered our hero. And this bit's just two platforms from the end of the level too. Git!

pile of bones may look innocuous, but waft past them and they'll turn into an undead warrior with a lot of legitimate grievances.

Now, initially all this is fair enough, because you can gingerly step everywhere. But as the game progresses, you're set time limits to complete each level and that means legging it around the platforms performing death-defying jumps. Which inevitably means dying a lot.

Fortunately, this isn't a one life game – you get as many cracks at a particular level as you want. When you have done a level, it's a very wise idea to save the game or you might fall foul of the Regressive Platforming Syndrome. This occurs when you whizz right through a level at your first go one day, but the next time you load up the game you find yourself utterly incapable of doing even the easiest bits.

So what tools have you got in your armoury? Well, for starters there's your sword, which is one of the trickiest features of the game to master. To start off with, you'll be able to dispatch all the bad guys with considerable ease, but later on, they start slicing you up into Prince chunks. That means that instead of just hacking at your assailant, you'll have to learn to block, parry, advance, retreat and thrust. Couple that with the ticking clock, and you'll soon be screaming blue murder.

No game would be complete without a bit of magic to spice things up a bit. As you get through the game, you'll build up your energy levels by swigging potions. Get nine units and

you can turn into the Shadow Man. This enables you to flit past the guards without them noticing you. If you're lucky, you'll come across a fireball, too – this can take out anything, but it saps one unit of strength every time you use it.

As always, *Prince of Persia* is a treat to look at. The levels are all really well designed, particularly the first palace level. What makes this

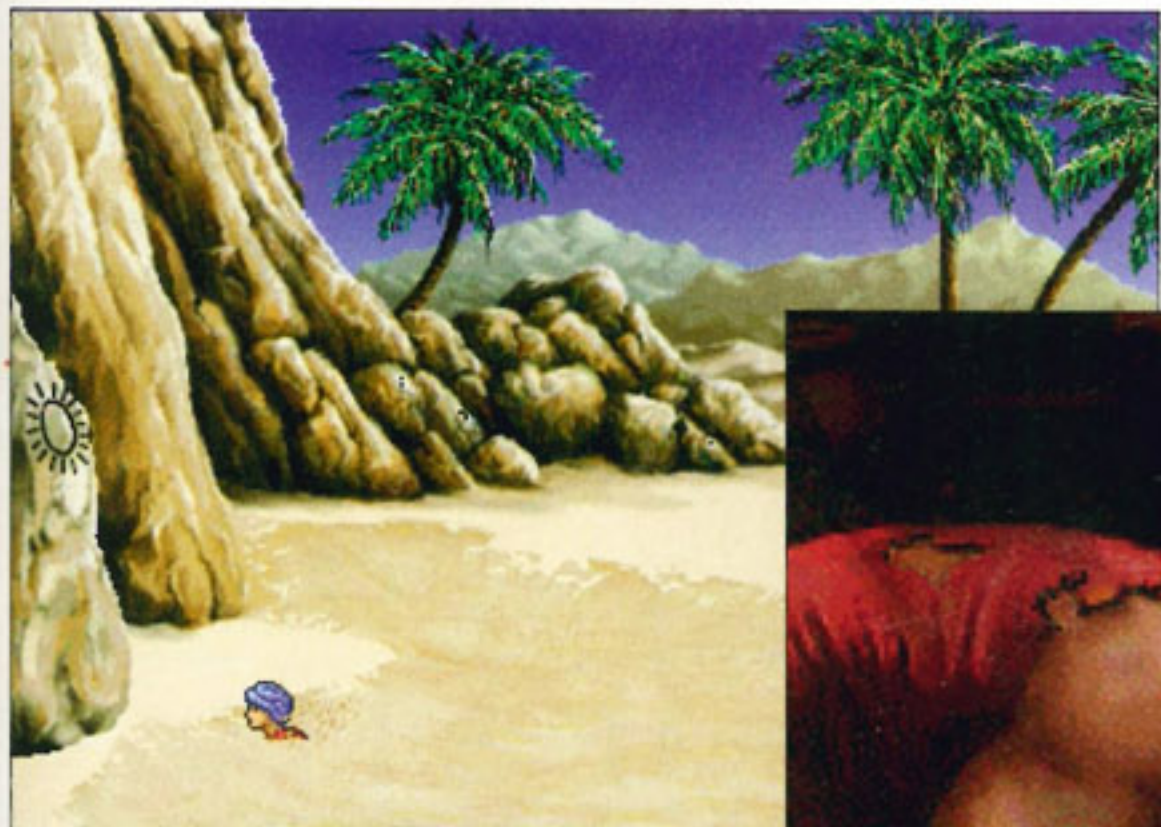


After you've tackled the palace and its guards, you have to make a quick exit down the jetty to the left.

game stand apart from the crowd, though, is its animation. The Prince walks, runs, jumps, grabs, fights and swings exactly as you'd expect a real person to. All of which adds greatly to the game.

The sound can be set to two levels. You can have just the spot effects switched on or the ambient music or both. The spot effects are great – plenty of 'oohs', 'aarghs', 'urghs' and 'aieees'. The ambient music is unobtrusive and peril sensitive. I left both sound options on throughout the game.

*Prince of Persia 2* is certainly a chal-



Poor chap hasn't got a leg to stand on. Still, if he can manage to wriggle free and get through that humongous rock, he might just be all right.



He could still end up looking like a character from a Caravaggio painting. Some people, eh!

lenge. There are enough levels to keep even the slickest of gamers busy for a few weeks. Mere mortals like myself will find this game haunts their every waking hour – it's almost impossible to stop yourself loading the game up for a quick bash when you've got a spare moment. With its brilliant animation, funky sound, carefully honed gameplay and odd-shaped box, *Prince of Persia 2*'s a must. Right, which of you skeletal warriors is first for a machete up the... (Snip! – Ed).

Andy Hutchinson



Jaffar really is a nasty piece of work – here, he sinks your boat by whipping up a huge storm. Git.

## PRINCE OF PERSIA 2

Price: £39.99. Out: Now.  
Requires: 256-colour Mac, 4Mb of RAM, System 6.0.7 or higher, 15Mb hard drive space.  
Controls: keyboard, GamePad.  
For more details contact: Electronic Arts on 0753 549442.

### Graphics

He walks, he runs, he leaps, he doesn't move like a robot. Excellent.

92%

### Sound

Atmospheric in parts, scary in others. You won't want to turn the volume down.

91%

### Gameplay

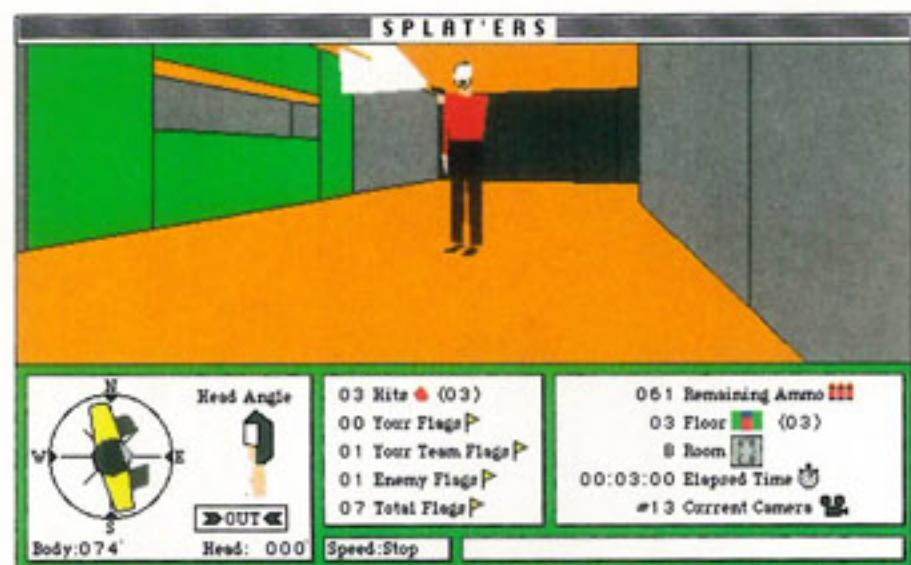
Plenty of twists to keep you interested and a damn handy save game option.

92%

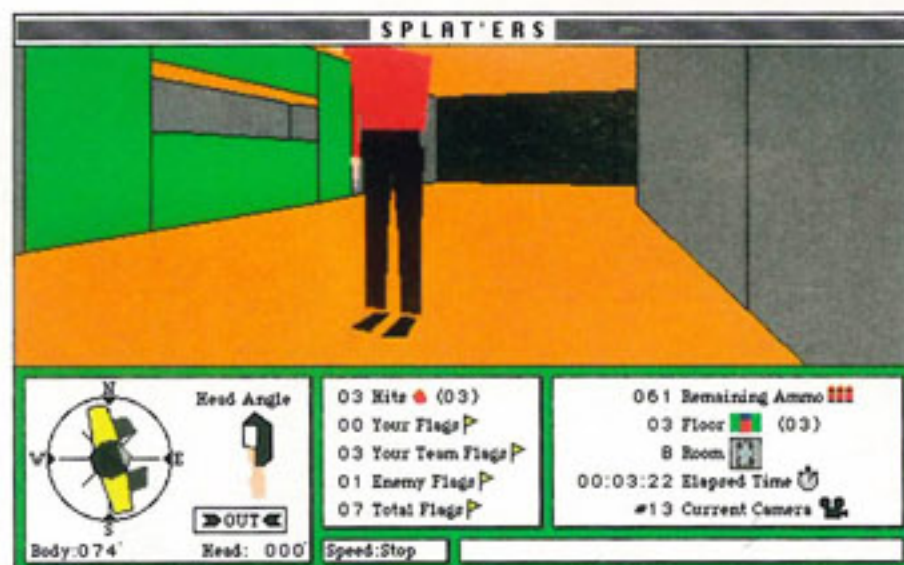
### MACFORMAT RATING

92%

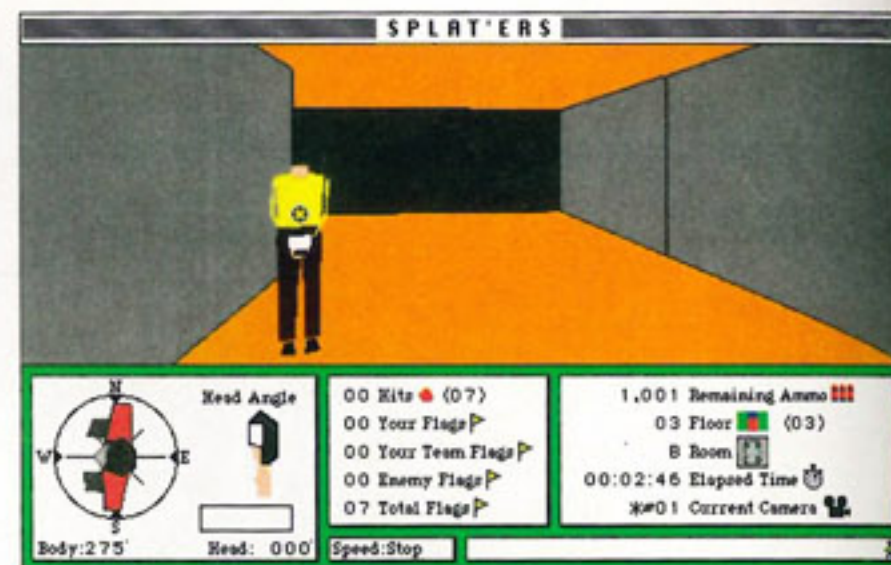
## GAMES



Oh dear, I've been shot. You can tell because I've lost the use of both legs and am now half the size I used to be.



Nope, half an hour later and I'm still dead. Once you get shot there's no re-entering the game, I'm afraid.



If you succeed in shooting one of the opposition, then his head flies in the air and comes to rest in his hands.

# Splat'ers

It's the caring sharing '90s (in case you hadn't noticed) and appropriately enough, Andy Hutchinson looks at a game in which nobody dies; they just get covered in paint...

Paint Ball games are very much an '80s phenomenon. You know the kind of thing: round up a few mates, put on a pair of combat fatigues, load some pellets in your gun and then run around a wood shooting each other. If it sounds like little boys playing soldiers then you'd be dead right; it's also a lot of fun. But a computer game based on Paint Ball? That couldn't possibly work, could it?

*Splat'ers* looks and plays more like a flight simulator than a shoot-'em-up. The idea of the game is to enter a maze of corridors and capture some flags without getting shot at by the computer-controlled characters. In order to survive, you've got to be aware, extremely careful and a bit nifty with the old trigger finger, because there are far more players on the enemy team than on yours. But then war's never fair, is it?

The most bizarre aspect to this game is the control system. Your character can creep, walk, jog and run. He can also point in any 360° di-

rection, while looking somewhere else entirely. And as if all that wasn't enough, you've got to aim your gun. Basically, you're given an incredible amount of control over your character – so much so in fact, that it's almightily confusing. To obtain even the most simple movement out of your character, you've got to have one hand on the keyboard and the other on the mouse. Even when you think you know what you're doing, you'll constantly be referring to the instruction manual, looking for an obscure key combination.

### Tipping the scales

The game starts with one team sprinting off into the maze and taking up positions. One minute later, the other side enters, and from there on it's a case of exploring the maze, looking for the flags and avoiding getting splattered. The computer-controlled characters most definitely have the advantage in the game because there are more of them than you and because

after getting shot they can rejoin the game. If you get hit, then it's game over. It is possible to change almost any aspect of the gameplay though – everything from the number of bullets each side has, to how long the computer-controlled characters take to react can be tweaked. All of which means that it's possible to even the scales a bit.

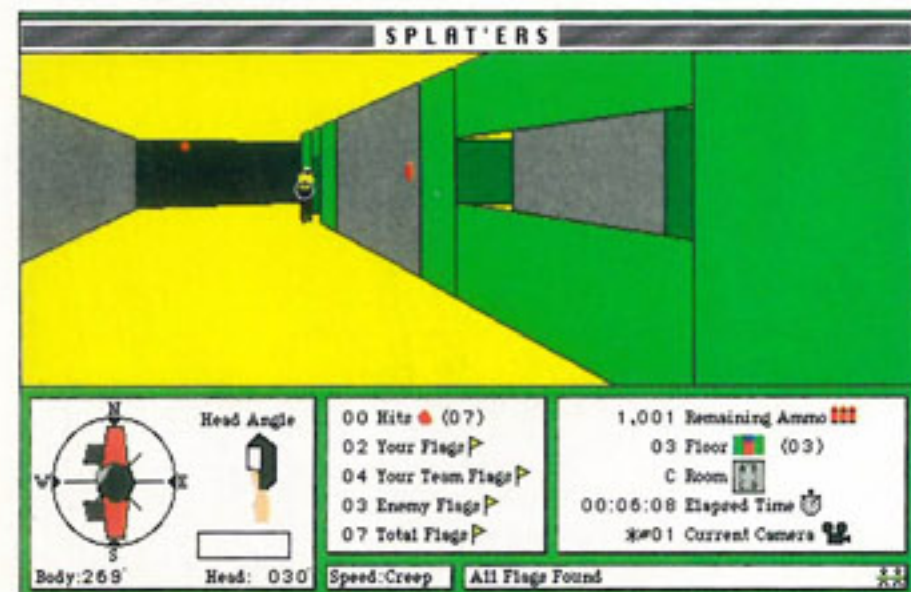
To be perfectly honest, I didn't expect much from this game. The graphics aren't terribly inspiring, the sound's crap and the control system's somewhat akin to flying a helicopter in a deep sea diving suit. But persevere and you'll discover an addictive game with lots of redeeming features. The plethora of options mean that you can have either strategic or action-based gameplay and if you turn everything up to full, then it gets truly mad. *Splat'ers* certainly isn't the future of video games, but it's an interesting plot twist along the way.

Andy Hutchinson

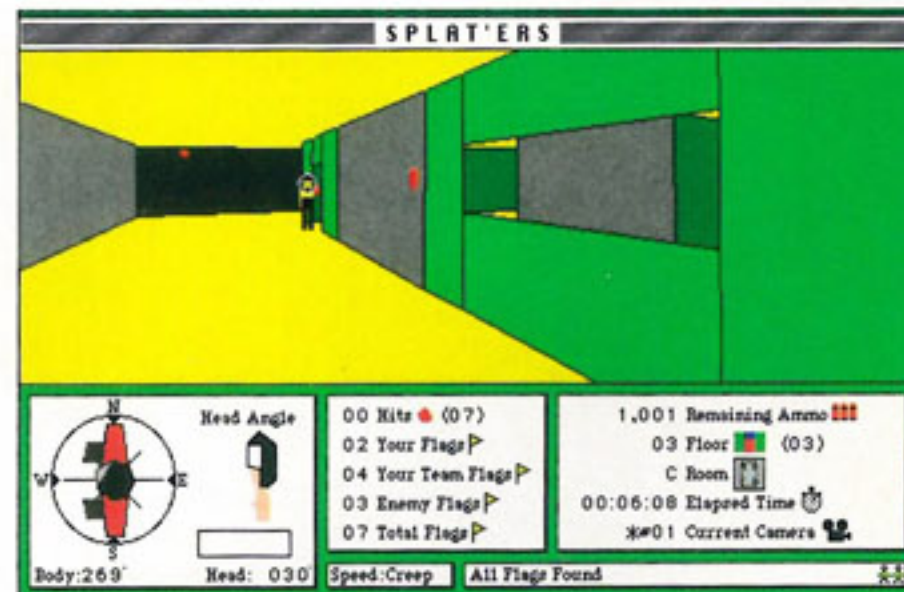
**SPLAT'ERS**

Price: £24.99. Out: Now.  
Requires: recent Macs with 16 or more colours running System 6.0.7 or later. Will not run on Mac Plus, Classic or SE. Controls: mouse, keyboard.  
For more details contact GameTek on 0753 553445.

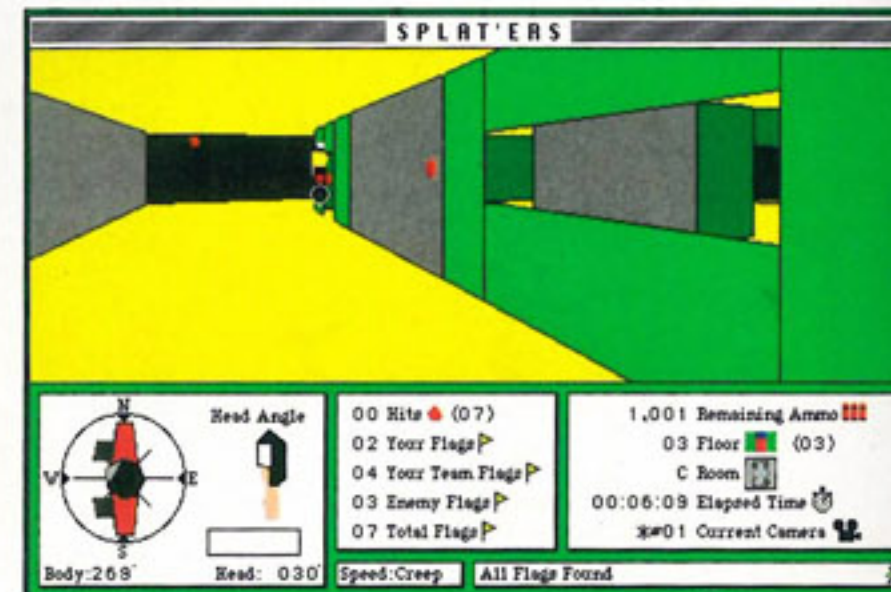
<b>Graphics</b> The characters are basically stick men, but it all moves smoothly and quickly.	<b>68%</b>
<b>Sound</b> The odd spot effect when you fire your gun and a surprising 'ouch' sample when you hit an enemy.	<b>65%</b>
<b>Gameplay</b> Despite that unwieldy control interface, after a bit of perseverance, this is surprisingly good fun.	<b>73%</b>
<b>MACFORMAT RATING</b>	
<b>71%</b>	



We've wandered into a firefight. Down the other end of this corridor is an enemy soldier, just waiting to pick me off.



We both draw our weapons and let off volley after volley. His shots land very wide of the mark, but I'm better than him.



Yes, he's bought it. Now let's see, I've taken out three men, which means that I've got 40 left to kill. Boll... (Snip! – Ed).



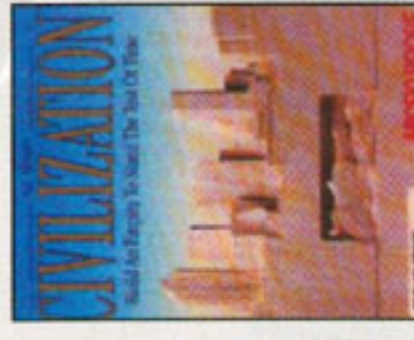
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M&C = Mono or Colour  
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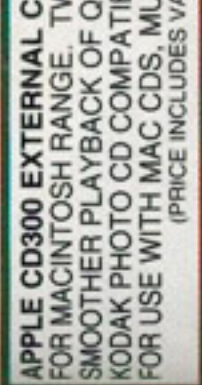
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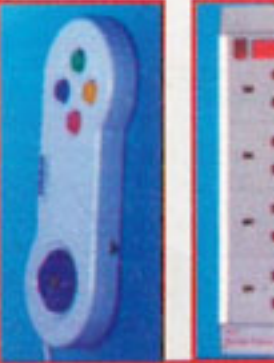
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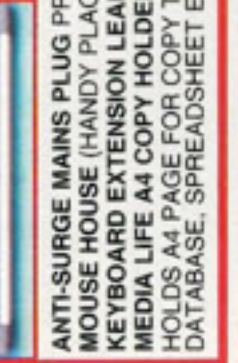
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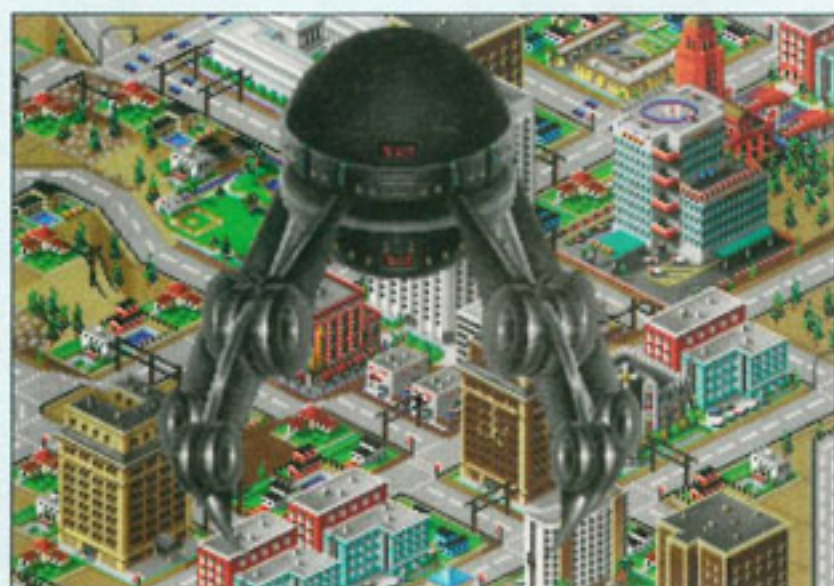
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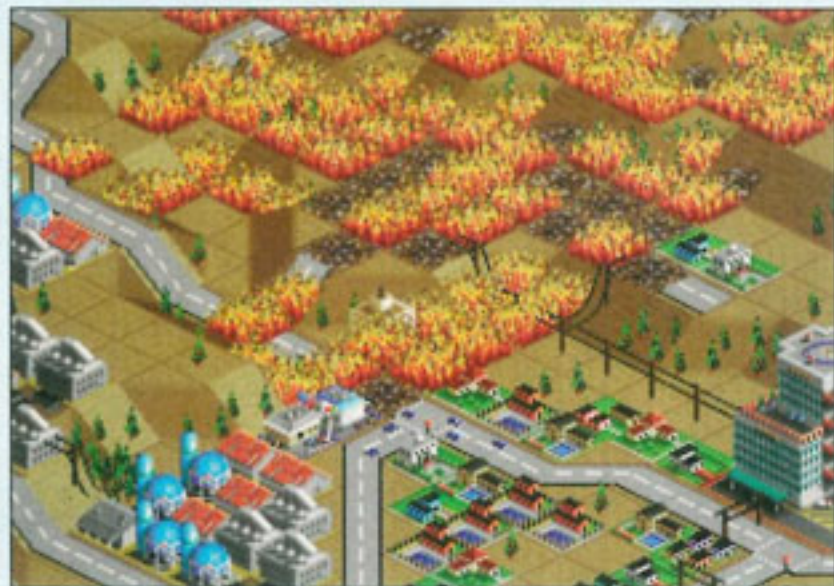
*SimCity 2000 Scenarios*: not just a complete disaster, but 15 of them.



SCREAM! as alien invaders devastate Atlanta.



GASP! as Homestead disappears beneath flood waters.



SWEAT! as Malibu is consumed by fire.



COUGH! as pollution brings Chicago to a standstill.



DIE! when a nuclear meltdown destroys Manhattan.

# SimCity 2000 Scenarios

## Volume 1: Great Disasters

If building your own cities sounds like hard work, here are some which Maxis prepared earlier.

**S**imCity 2000 is like Lego for grown-ups. You start off with a pile of bricks and an open space, and you build whatever you like. Then you smash it to pieces and build something else. Hours of fun. The thing about Lego, though, is that the things you make with it aren't half as enjoyable to play with as they are to build in the first place.

*SimCity 2000 Scenarios Volume 1* is a collection of 15 ready-made cities, each with its own built-in disaster. The idea is to load one of them into the game, watch the relevant disaster happen, and then try to clear up the mess by sending in the fire department, reconstructing damaged buildings, blocking flood waters or whatever. They're all set in real-life cities, which is nice, but the disasters aren't all strictly true to life. For example:

- Atlanta, 2050: a UFO hovers over the city, zapping buildings with its death ray. You've got to put out any fires it causes, and rebuild the things it knocks down, returning the population to a level of 72,000 within five years.
- Chicago, 1999: pollution has become so bad that people are starting to move out. You've got to redesign the city to bring pollution levels under control, aiming for a population of 44,000 after ten years.
- Charleston, 1989: strong winds and flooding have ravaged the city. Fight the floodwaters and revive the city, achieving a population of 45,000 within five years.
- Washington DC, 1995: after a protest march gets out of hand, the city's lawyers go on the rampage. Bring them under control and raise the population to blah, blah, etc, etc, etc.

*SimCity 2000* is a truly great game that everyone should own, but this disk misses the point. It's the building side of things in *SimCity* which is so absorbing – the way you start off with nothing and then gradually introduce a building at a time until you've got a village, then a town, then a city, then a bustling metropolis. If



Aren't UFOs supposed to be round? Or cigar-shaped? This one looks more like a huge, rectangular... Oh. Sorry.



Crikey. Michael Fish never mentioned this happening. It's a gigantic volcano, and is eating everything in its path.

anything goes wrong, you feel personally responsible, and you have no option but to do something about it. 'Disasters', meanwhile, are just something you use to smash down your city once you're bored with it – an amusing alternative to [Command] Q.

In each of these scenarios, someone else has already had all the fun – they've even chosen the disasters for you. And, while scrolling around real-life cities on your Mac is moderately impressive, even then they're US ones, thousands of miles away, so you need feel no guilt if they're consumed by fire. Heathrow Air Disaster might have worked better, or Bournemouth Earthquake Emergency. Or – hey! – The Great Fire of London. In fact, why wait for Maxis to come up with the goods when you could construct them yourself for free?

Like playing with somebody else's Lego creation, *Scenarios Volume 1* seems utterly pointless. I just hope they're not planning to do more of the same.

Jonathan Davies

### SCENARIOS VOL 1

Price: £14.99. Out: Now. *SimCity 2000*: £39.99 extra. Requires: 2.5 Mb of RAM, System 7.0 and later, 256-colour display, and another 1.5 Mb of hard drive space. For more details contact Maxis on 071 490 2333.

#### Graphics

Erm, they're pretty much the same as the ones in *SimCity 2000*.

97%

#### Sound

Again, it's unnervingly similar to *SimCity 2000*'s – still, that's no bad thing.

89%

#### Gameplay

Barely a tenth as much fun as designing your own scenarios..

40%

MACFORMAT RATING

40%



Brandon wakes up after a rather wild party where his parents' house used to be. Maybe he should use the Yellow Pages.

**T**he Legend Of Kyrandia is the latest addition to the genre of graphical adventure games where everything is mouse driven, so there are no commands to type in via the keyboard. This means that it's simple to use and, if you have played a similar game before, you'll be able to jump straight in. The slim manual contains approximately 20% instructions and 80% background story which is then retold in an animated introduction.

The legend tells of a magic gem called the Kyragem, which is exactly the sort of silly name you end up with when you don't bother getting a proper marketing agency to do your research for you. The Order of Royal Mystics have the job of looking after this gem for King William the Generous, who is presumably called King Willy by his friends. As is usual with these plots, both the king and queen have been murdered by a terrible, evil power – in this case called Malcolm the Jester. (You know, it's very difficult to engage in a titanic, tortuous, life and death battle against someone called Malcolm.) Anyway, the chief mystic, Kallak the Palindrome, has been turned to stone by Malc, before he is conveniently discovered by Brandon the Badly Drawn, rightful heir to the throne. After ten minutes of this underwhelming and eminently skipable intro sequence, you reach the game itself.

Click anywhere on the screen and Brandon will walk there – unless you click on an object, that is, in which case Brandon will pick it up, use it or talk to it. Moving the mouse to the edge of the screen causes the pointer to become either a no entry sign or an arrow which indicates Brandon can walk that way to enter another screen. Now begins your quest to find out what you are supposed to be doing – apart from wondering why this game costs so much.

Pick up an object from one screen, walk about until you find somewhere to use it, then see what it does. Solving one puzzle enables you to progress to the next one, and hence see



Brandon is quite happy to break into local houses, with the excuse that he is looking for clues, honest, constable.

# The Legend of Kyrandia

**If it were raining outside and the only thing to do indoors was play this game, you'd get wet.**

more of the island. Not that you'll be particularly anxious to explore such a chunky set of graphics. And while we're on the subject, Brandon himself is very poorly defined. You'd think that the authors would have put a bit more effort into the poor chap, especially considering you spend the whole game looking at him. The backgrounds are equally naff and this makes it difficult to distinguish objects, meaning that you end up walk straight past them. It took me half-an-hour to realise that a brown blob on a table was, in fact, the crucial note I'd been looking for.

Another criticism would have to be that some of the pictures are repeated in several locations. You soon become aware, for instance, that the same cliff-top keeps appearing in different places. I wouldn't mind, but the game doesn't enable you to throw Brandon over the edge. Graphics of this quality would be acceptable in a floppy disk game, but surely the whole point of CD is to enable the programmers to use masses of high-definition images, as seen in recent games like *Myst*.

Background music is supplied, but the best thing about it is the fact that you can turn it off. The digitised speech, by comparison, is much better – as long as you don't mind the American accent.

The problem with these games in general, and with this game in particular, is that you



On-screen messages give you terrific help such as telling you that there is a large statue somewhere. Oh yes, so there is.



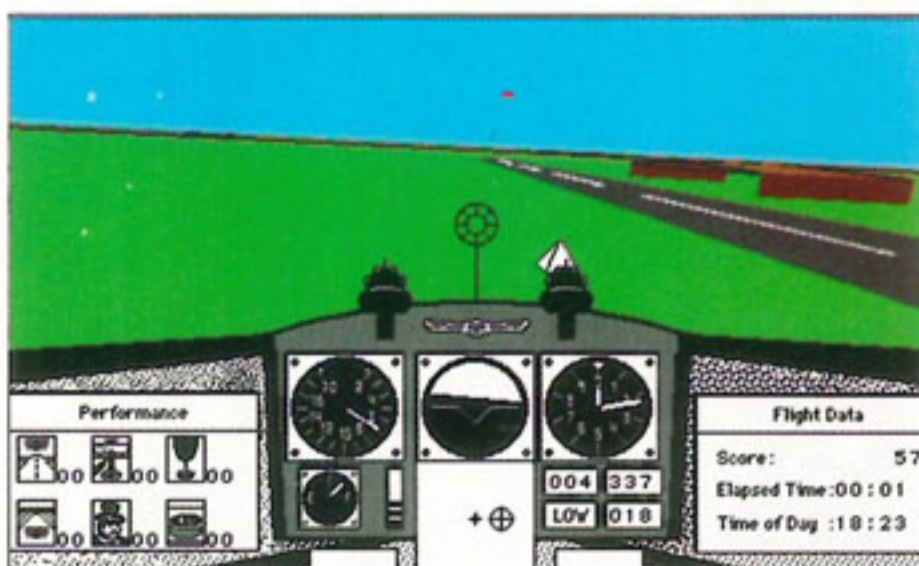
This old man sleeps with his pet dragon, which might begin to explain why the two of them act so strangely.

end up clicking everywhere on the screen for fear of missing a secret button or hidden item. Clicking on one clump of flowers enabled me to pick one, so I clicked on every bush I came across just to see if something might happen – which only lead to a lot of abused flora.

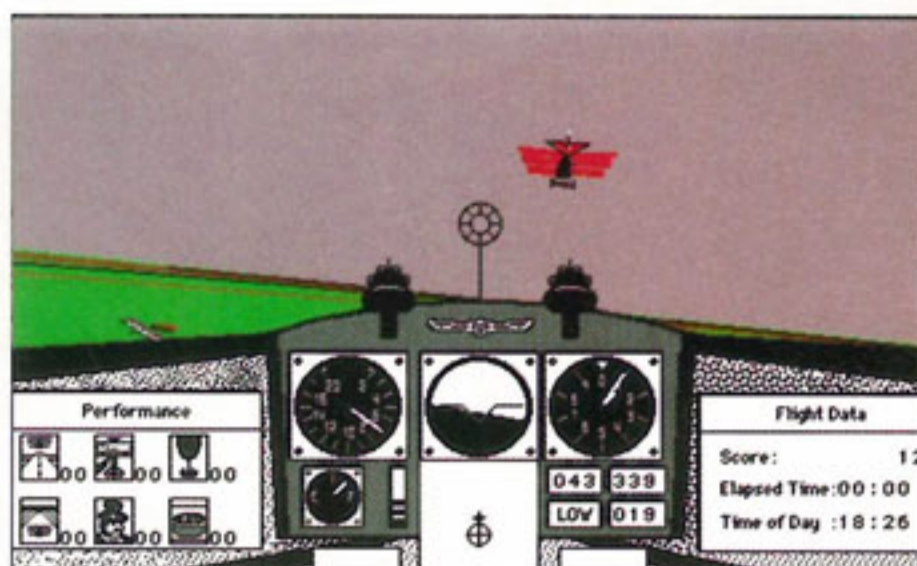
Dedicated adventure fans may enjoy *Legend Of Kyrandia*, but if you're planning to get into the genre for the first time, then try *The Secret of Monkey Island* or *Myst* instead. *Derek Smith*

KYRANDIA	
Price: £50. Requires: System 6.0.7 or later, 12-inch colour monitor with 256 colours, CD-ROM drive, hard disk with 4Mb of space, and 2Mb of RAM. For more details contact Softline on 081 401 1234.	
<b>Graphics</b> Poor, especially by CD standards.	<b>60%</b>
<b>Sound</b> Decent speech, shame about the music.	<b>70%</b>
<b>Gameplay</b> Tedious, with a lack of atmosphere.	<b>65%</b>
<b>Value for money</b> You can't even reformat the disc!	<b>60%</b>
<b>MACFORMAT RATING</b>	<b>65%</b>

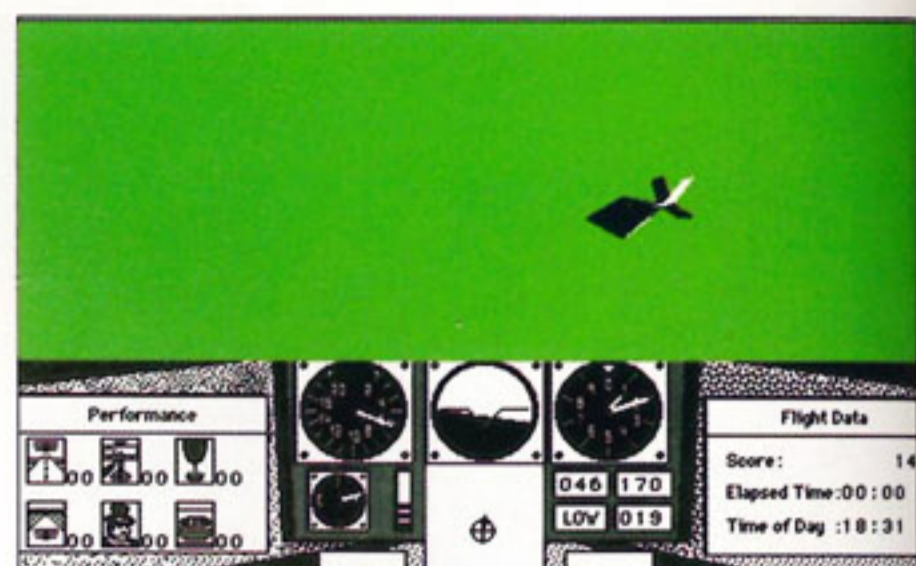
## GAMES



There, see, the ground isn't all green. There's a long grey runway in the middle and everything. Not that it matters where you land your plane anyway...



Ah, the splendour of soaring through cloudy skies on the tail of a large red blobby insect-type-thing with bits that stick out. It fair takes your breath away.



This, believe it or not, is a bomb which you've just dropped, sending it hurtling towards Earth. Well, sort of spasmodically descending towards Earth, as it happens.

# Flight Simulators:

## Fokker Triplane & P51 Mustang

**Ed Ricketts puts the Fokkers through their paces, but will they really take-off with flight sim fans?**

No matter how terrible some games are, you can forgive all their faults, because they are fun in their own sad little way. Some flight simulators are like that. But then there are some games which can claim no defence of any kind, games which are so unutterably unforgivable that Mother Teresa would be inclined to shut them in a dark cupboard until they crumbled to dust. *Fokker Triplane Flight Simulator* and *P51 Mustang Flight Simulator* are two such games.

*Fokker* is intended to be fun rather than over-complicated, so that with the minimum of effort you can be airborne and popping away at other Fokkers. In practice, however, it's slightly more complicated than that. When you're taxiing along the runway it's a real challenge just to see if you're moving, and if you're off the ground. In fact, there doesn't seem to be any ground – just a big sheet of green with a tiny runway on it.

Once you're in the air and you're used to the controls – give it seven hours or so, thanks to the lacklustre response – you can settle down to the task of finding something to shoot. This might take another day (if you're lucky). Once you've spotted the other plane, fire off a few



Yes! The Eiffel Tower! And look, over on the left – the Arc de Triomphe! Or is it a nasty stain on the monitor?

dots – er, shots – and then sob as the enemy plummets to the big sheet of green. The really adventurous can attempt to fly under a bridge – yes, under a bridge! (At least we think it's a bridge. It could be a power cable strung between two poles.) And then turn around and fly back again! And then, um, do it again! Oh, the endless pleasure.

The whole program has a home-grown feel to it, from the utilitarian wording on the packaging to the hand-drawn graphics. Copyrighted in 1985, *Fokker* is deeply shoddy and, frankly, I find it insulting to be offered this ancient tat in an age of PowerMacs and games such as *Flying Nightmares*.

*P-51 Mustang Flight Simulator* is little better, and it's really just a re-hash of *Fokker* with a couple of graphic improvements and a few more missions thrown in. (This one's dated at 1988, so obviously it's the bleeding edge of technology in Bullseye Software terms.)

The packaging of *P51* proudly boasts: 'If you get shot up you'll watch the ground rise leisurely to meet you.' Not exactly. In reality, you'll see a large green rectangle criss-crossed with a couple of lines jerking its way in your general direction, at which point your Mac



At least you get to look at the plane from the outside in *P51 Mustang*. Hmm, perhaps 'plane' is the wrong word.

generally crashes for real. However, this sad state of affairs doesn't compare to the post-nuclear wasteland which purports to be Paris, with its matchstick Eiffel Tower perched in the middle of nowhere.

It's not as if *P51* manages to be ultra-realistic or technically involving for those who like their sims hard-boiled. It's more complicated than *Fokker's* point-and-shoot philosophy, but it offers nothing to keep you up at night.

It's much the same deal as with *Fokker*: nothing to see and not much to do. There are extra options for viewing the plane from the outside, two pixels of more detail, a replay option and differing mission types, but the same dismal engine sound, the same restricted gameplay and the same paucity of excitement. Yes, you can play it on your battered old Classic without worrying if you have 4Mb of RAM free. But then you can also play 'changing the time zone in the Map Control Panel' on the same set-up. We know which option we're going for.

Ed Ricketts

### FLIGHT SIMS

- *Fokker Triplane Flight Simulator* Price: £19.99
- *P51 Mustang Flight Simulator* Price: £19.99
- Compilation disk containing *Fokker Triplane Flight Simulator*, *P51 Mustang Flight Simulator*, *Splat'ers* and *Ferrari Driving Simulator* Price: £39.99.

Out: now. Requires: any Mac with a mouse or joystick. For more details contact GameTek on 0753 553445.

<b>Graphics (Fokker)</b> Yes, there were some.	<b>39%</b>
<b>Graphics (P51 Mustang)</b> Just look at that texture mapping!	<b>47%</b>
<b>Sound</b> Sewing machines at dawn...	<b>48%</b>
<b>Gameplay</b> There is some if you look hard enough.	<b>50%</b>
<b>MACFORMAT RATING</b>	<b>45%</b>

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Astronomy, literature and travel are just some of the subjects that come to life in this month's issue of *CD-ROM Today* – the UK's best-selling multimedia magazine for PC and Mac.

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- LC11 4/40, boxed as new, light home use only. 12" colour monitor with anti glare screen, System 7 and HyperCard, £550. Tel: 0332 769775.
- Mac Classic II 4/40, System 7, keyboard, mouse, manuals, covers plus Stylewriter, £700. Tel: Richard on 0202 535232.
- Mac Classic 2/40, superb condition, boxed with manuals, running System 7.1. Light home use only. £325 ono. Tel: Jeremy Ford on 0272 741462.
- IISI 5/80 FPU co-processor, 14" hi-res colour System 7.1, 3Mb system software, microphone, Stylewriter and printer, £1070. Tel: 0524 65201 ext 3551/3558. e-mail psb003@lancs.occ.uk.
- Mac 2FX 20/160 System 7.1, extended keyboard, mouse, 14-in colour monitor, £1800. LC2 8/40 System 7.1, keyboard, mouse, 14" colour monitor, £700. Tel: Ben on 0383 418548.
- Quadra 610 8/230 CPU, 4 months old, still 12 months warranty, £1,050. Audiomediall Digidesign Nubus, £850. Cubase audio, £600. Clearmountain drum CD, £40. Tel: Ian on 0532 500751.
- Newton 110, unwanted gift, cost £550, will accept £320. Tel: David on 0555 751707.
- LCII 4/160, 14" colour monitor, Stylewriter 2, all with manuals and cables. One year old, excellent condition, £800 ono. Tel: Mandy South on 0494 775213.
- Mac IISI 5/80 CPU Plus System 7 and mouse, boxed with manuals, excellent condition. Home use only, £600 ono. Tel: Mark on 071 607 2009, evenings.
- Centris 650 4/80, £1000. Apple CD 300, £100. 14" black and white monitor, £100.

- Painter, £175. Kai's Power Tools v1.0, £70. Tel: 071 706 1114.
- IISI 5/80 Nubus FPU, 14" colour monitor, System 7.1, extended keyboard and mouse, boxed with manuals, £1,400. Tel: Phil on 0252 844807, Hants.
- Performa 400, complete with 14" monitor, keyboard, mouse, Stylewriter printer and including Clarisworks, manuals and education pack. Bought new September 1993, £750. Tel: 0422 883827.
- Classic II 6/40, less than a year old, excellent condition with RAM doubler, Word 5, Excel and After Dark etc, £600. Tel: Daniel on 081 960 0831.
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- Mac SE, 4MB RAM, 20Mb HD, keyboard, mouse, leads plus accelerator card, System 6.07, £450. Tel: Lewis on 0564 775314, home or at work on 021 603 1001 (8.30am-5.30pm).
- IIfx 8/80, new 14" Mac colour display, 8.24 video card, ethernet fitted, extended keyboard, mouse, £2,000. Tel: Phil on 0252 844807, Hants.
- Performa 450 4/120, System, 7.1, 6 months old. 14" Sony Trinitron monitor, excellent condition. All boxed with manuals including Clarisworks, £950 ono. Tel: Kev on 0787 312250.
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- Colour Classic 8/80 FPU System 7.1, manuals, system software, disks, keyboard, mouse, light home use only, many extras, £700. Phone 0592 630661

## Software

- System 7 software personal upgrade kit new and unopened, £20. Tel: Colin on 0502 584159.
- Word 6.1 update pack, £75. Quicken 3.0, £45, both sealed and unregistered. Tel: 0202 780034.
- Meridan Ada Environment for the Mac, complete package, boxed, £180 ono. Tel: Peter on 0234 325456.
- Symantec C++ compiler and development environment. Also included Think C 6.0 latest version, half price, £140. Tel: John on 0784 454753.
- Microsoft Works 3.0 brand new, unopened, £55 including postage. Tel: Ross on 071 935 1336.
- Powerprint 3.0, Write Now 4.0. Books with disks: Cool Mac Games Plus (2 disks), Cool Mac QuickTime (disk including Quicktime extension, Popcorn), all half price ono. Tel: 0482 448775.
- F/A-18 Hornet v1.01 disks and manuals, Fly Kuwait, £30 ono. Tel: Clive on 0225 862506.
- Journeyman Project CD-ROM game, £17. Times Two, double hard disk memory, £25. Tel: 0533 702675.
- In Control 2.0 new, still sealed with manual, £35. Tel: 0895 634816.
- PageMaker 5.0, boxed and unregistered

- with manual, £350 ono. Also Write Now 3.0, best offer. Tel: 081 998 8332.
- Games: Sim City 2000, £25. SQIV, £15. A-Train, £15. Monkey Island, £20. Another World, £15. All boxed and as new. Tel: Max on 081 994 7051.
- Excel 4.0, new, unopened, will sell for £90 ono. Or will swap for FoxPro 2.5 or 4D First. May consider latest Stacker. Tel: 0778 347404.
- KidPix, £20. Mavis Beacon Typing, £15. Math Blaster Mystery, £15. World Atlas, £15. All unused. Tel: Paul on 0493 748603.
- Safe and Sound disk repair and data recovery software, unused, still in cellophane wrapping, £10. Tel: 0708 486870.
- Indiana Jones and the Lost City of Atlantis/Another World, £20 for both. Tel: 0274 753271 or 0274 677757, 8.30pm onwards.
- CAT 111, £75. High level contact software, all manuals and disks. Tel: 081 940 7572.
- Microsoft Word 5.1, boxed with original disks and manuals, £150. Claris FileMaker Pro 2.0 v4, original disks and manuals, £120. Tel: 0222 450 042.

## Miscellaneous

- Macademy Video training tapes, Quark 3.1 and Photoshop, £40. At Ease software and manual, £12. Tel: 0533 702675.
- Syquest disks 20 x 44Mb, good condition, light use, £25 each or £400 for all 20. Tel: Andy on 021 711 4878, daytime or evenings on 021 711 1428.
- Persona Laserwriter LL5 printer, in excellent condition with books. Home use only, £375. Tel: Chris on 081 747 3762.
- The System 7 book by Craig Danuloff, £14 including postage and postage. Apple 11INTX manual wanted with disks - Swap

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■ Stylewriter II print cable and software manual, colour printer forces sale, £160. Tel: 0670 354292.

■ Sharp JX300 colour scanner including colour interface card, £650 ono. Tel: 0322 448655.

■ 2 x 2Mb SIMMS for Performa 400 (80ns) for a very cheap price. Write to Mr D Mak, 30c District Road, Wembley, Middlesex, HA0 2LB.

■ Wacom Digitiser tablet 12" x 12", cordless pen, software and manuals, used twice, boxed. Cost £750 wanted £350 ono. Tel: Paul on 071 267 9014, after 6pm.

■ Mac IICI 8/240 with Toshiba CD-ROM, fax modem, cache card, microphone etc. Offers to James on 0932 352388, Surrey.

■ RAM Doubler complete with box and manual, £40. Tel: Karl on 071 284 0278.

■ PowerPrint 2.0, enables connection from Mac to over 1000 printers. Serial/parallel smart cable plus 18 printer drivers. Mint condition, registration transferable, £80 ono. Tel: 0604 765912.

■ PowerBook 170 8/80 fax modem 14.4 Radius Powerview, keyboard, spare battery and 2 chargers, £1400 ono. Tel: 071 627 5892.

■ Laser writer NT, only 5,000 prints, new Apple cart installed plus one spare, all manuals, cables (Localtalk) etc, £600. Tel: Richard on 081 654 7772, daytime.

■ Radius colour pivot/Lc, landscape or portrait switchable monitor with ergo shield and LC 8-bit card, home use only, £500. Tel: 081 560 8082.

## WANTED

■ Any/all of the 'Ultima' series of fantasy RPG's by 'Origin' or previous publisher, for the Mac. Please phone Colin 0234 823873

■ New Mac owner requires help to expand software collection. All info to: Kris, 18 Browns Hill, Cromer, Norfolk NR27 0QA. All letters answered

■ Student desperately needs either AutoCad or MiniCad and manuals. Cash ready, can collect. Phone Alex 0203 687473 (evenings)

■ Urgently wanted Fun School 4 for 5 to 7 year olds. Any offers? Phone 0732 851477

■ Have you upgraded your LC? You have, great, I would like to buy the two 1Mb SIMMS you removed. Phone Carl 0268 556894 between 4 - 6pm

■ Music software (Cubase Notator) and graphics software wanted Phone 061 4431462

■ Sad, mad, lonely Mac addict wants The Macintosh Bible first edition. Phone Paul 0785 816922 Staffs (day)

■ I need a program for 'U' Value and Interstitial Condensation calcs - anyone help? Phone George 031 653 2875

■ 72pin 16Mb or possible 8Mb SIMMS wanted. Tel: 081 692 8129.

■ 10Mb upgrade for my LC. I have a sad weak Mac in need of power, and a small budget. Please help. Tel: Andrew on 0204 694824, evenings.

■ Mac Quadra System unit for home use. Don't need screen, keyboard or drives. Will collect and pay cash. Tel: 0752 812948.

■ Painter by Letraset with manuals, £100 waiting. Tel: 061 865 8530.

■ PowerBook wanted. Anything considered. Second hand only. Leave message on 061 980 3600.

■ Mac Quadra 950 with 24-bit VID 60,

keyboard and mouse, 21" monitor. Let's talk about memory! Private, dealer or ex-rental, Tel: Richard on 071 488 4884 or 0850 334124.

■ PowerBook wanted in exchange for 4 month old LCIII CPU, boxed, under guarantee, some software included. Tel: Larry on 0732 852034.

■ Mac LC or greater 8/80, 14" colour monitor, keyboard and mouse wanted. Tel: 0737 356751, evenings.

■ Urgently needed Mac carrying bag for Classic. Also cheap PIM - Quickdex etc. Tel: Dave 0603 745512, evenings.

■ Sytlewriter or other inexpensive printer for Mac IISI wanted. Tel: 0900 828625, anytime. Any and all help welcomed.

■ MACFORMAT March 1993, May 1993, August 1993, December 1993 and cover disks 'if possible', will pay £5 per copy and refund postage. Tel: 041 772 8175.

■ Catch Word Pro OCR for Logitech Scanman. Also Apple CD 300 including Kodak Photo CD Access. Buy or swap with great software. Tel: Anna on 071 229 7633.

■ Mac Classic with HD and keyboard wanted System 7.1. Tel: 0747 822113.

■ Printer driver for Epson FX. Tel: 0422 249764.

■ Stylewriter II or equivalent printer for LC475. Also wanted kids software (educational) for an eight year old. Tel: Gary on 031 557 4570.

■ Wanted, free or very cheap Mac SE/30 main board (working). Any other free Mac stuff gratefully accepted. Tel: Daniel on 0392 438148, Exeter.

■ IICI or similar, pref 8 meg RAM, any condition considered. Will consider fault if not too serious. Tel: 0533 881168, after 6.00pm.

## SWAPS

■ I would like to swap shareware and PD by post. Write to: Raul Reinoso Ortiz, C/Cataluna No 13, 10c 33208 Gijon, (Asturias) Spain (Tel: 98-5161612)

■ Boxed, guaranteed, 5 months old 14" VGA monitor for preferably boxed 12" monitor. Phone 0203 421034

■ A-Train plus A-Train construction set colour/B&W swap for SimCity 2000 and Lemmings (optional) Phone Lawrence 071 729 0776

■ Civilization or Lost Treasures of Infocom to be exchanged for FA Premier Manager game. Must support colour for Performa 400. Phone Manchester 061 620 9789 (after 4pm only)

■ Indiana Jones/Atlantis, boxed with manuals to swap for Kidpix, Prince of Persia, Monkey Island or similar. Tel: Joe on 081 202 3321.

■ Yet another Mac user who wishes to swap shareware, freeware etc, interested? Please reply to Jo Hetland, Brondgade 4, Roskilde, Denmark 4000.

■ Iron Helix to swap for Journeyman Project or Myst Swap FA18-Hornet or Sim City 2000 for Carriers at War or Pathways into Darkness. Tel: 0865 726727.

■ Indiana Jones Atlantis game, originals with manual to swap with Dark Seed, Leisure Suit Larry 5 or 6, Monkey Island 2. Tel: Andrew on 0204 694824, after 6pm.

■ Radius Pivot 14" Greyscale monitor with Nubus card of mine for colour monitor of yours? Also Fractal generating software sought. Tel: 0268 558284.

■ Low mileage, home used, PC compatible laser printer, Panasonic KX-P4420, prints 300dpi at 8ppm, in exchange for Mac compatible Postscript Laser printer in good condition only. Tel: Lance on 0582 461581.

■ Swap Sim Earth for Railroad Tycoon, original. Tel: Ian Stewart 010 41 1730 3577, daytime, Switzerland.

## FANZINES

■ Issue 3 of Hyperlunacy, the HyperCard fanzine out now. Covers HyperCard, the Mac and more. Send £2 (in coins) to Steven Checkley, 4 Charlecot Road, Droitwich, Worcester WR9 7RP.

## USER GROUPS

**Need hands-on help with a Mac problem? Want to swap shareware or freeware, or just meet other Mac enthusiasts? Try a user group near you...**

■ Aston Univ mac UG, Birmingham. Tel: Ray Tier on 021 359 3611.

■ Berkshire Mac User Group meets monthly (on the second Friday of every month) in the Reading/Newbury/Basingstoke area. Bias towards design/DTP and general interest in solving Mac problems. Ring: 0734 813669. (MF 16)

■ Blackburn Mac UG. Tel: Roger Moreton on 0254 670043.

■ Bournemouth Mac UG. Tel: Barry Cheesman on 0202 715859.

■ Bristol (BAUD). Tel: Malcolm Ingsley on 0454 616846.

■ Cambridge Apple UG. Tel: Ian Archibald on 0223 311157.

■ Cancer Research/RMH UG, Cancer Society/RMH. Tel: Raymond Henry on 081 643 8901 (Bulletin Board x 4636).

■ Edinburgh Apple UG. Tel: John Beatie on 031 554 5096.

■ Gateway UG, Norfolk. Tel: Verne Anderson on 0638 513000.

■ Glasgow Mac UG. Tel: Stephen Broadfoot on 041 339 6646.

■ Hampton Court (Riverside) UG has a new phone number: 081 224 1187.

Small, newish group welcomes new enthusiastic members. (MF 16)

■ Highland Mac UG (HIMUG), Scottish Highlands. Tel: Bob Warner 0463 715322.

■ Liverpool Apple UG. Bulletin Board: 051 949 0307.

■ London Macintosh User Group. Facilities include: telephone support for full members, shareware at reduced prices, monthly mag, monthly meetings in London presented by leading hardware and software manufacturers. Full details: 43 Villiers St, London WC2N 6NE. Tel: 071 930 3757. (MF 16)

■ Group of users with a regular newsletter via ICR computing service. Workshops for training, software and hardware support in a PC-dominated environment. Contact Raymond Henry, Hadow Labs, ICR, Sutton SM2 5NG. (MF 16)

■ MacAssist, Cardiff and district. Tel: Nigel Arrighi on 0222 224682.

■ Mac user group. Send large SAE for free newsletter. All levels. Non commercial. Ref MF, 9 Burrill Drive, Wiggington, York YO3 3ST. (MF 16)

■ Macintosh Association of Users in EEC, 4 Chiou, Athens, 15231, Greece. Tel: 6725485. Meetings Wednesdays 8-10pm, Saturdays and Sundays 12-2pm. We are a non-profit organisation. Please help us by donating books (misprinted, used; by surface mail), disks, programs, CD-ROMs etc for our library and program for the handicapped. (MF 16)

■ Mactivity International - the biggest user group in Europe. We have divisions in Scandinavia, Estonia, Germany, and the Benelux countries. The only number we have at the moment is: Belgium Tel. 32 80 64 77 13. (MF 16)

■ Midapple, West Midlands. Tel: William Watson on 0384 277921.

■ Midland Mag UG, Worcestershire. Tel: Ivan Knezovich on 0299 402631.

■ National postal user group. Monthly newsletter on disk. Includes competitions, special offers, reviews, cover disk, etc. Send a self addressed envelope for info to: Mac Shareware User Group (MSUG), 21 Milldown Avenue, Goring-on-Thames, Reading RG8 0AS. (MF 16)

■ North West Apple C.C - Cheshire area, North. Telephone: Mr George Evans on 0270 583714.

■ Nottingham Mac UG. Tel: David Nicholson-Cole on 0602 455077.

■ Poole Mag User Group. Tel: Bob Lister on 0202 684441.

■ SE Essex Mac User Group. Tel: Michael Foy on 0702 468062.

■ Southampton Mac UG. Tel: Geoff Parsons on 0703 2244957.

■ Southern Mac UG, Salisbury and district. Tel: Roger Ford on 0722 780102.

■ Southwest Mac User Group, Bristol. Tel: John Elver on 0272 693119.

■ Staffs Poly Mac UG, Staffordshire. Tel: Mark Stiles on 0785 52331.

■ Stavanger Macintosh User Group was established in 1986 and has over 50 members. It normally has eight meetings a year on various topics. Contact Jan Frick, Chairman, Rogaland University Centre, PO Box 2557, Vllandhaug, N-4004 Stavanger, Norway. (MF 16)

■ Sussex User Group, Hastings, East Sussex. Tel: Garry Nevin on 0424 714110.

■ The Computer Textile Design Group. We are trying to build up a panel of advisors who can help inexperienced computer users with their problems. For

more info contact Maggie Dunn, Wynnstay Cottage, Lamin Gap Lane, The Fosse, Cotgrave, Notts NG12 3HG, enclosing an self-addressed envelope for a membership form. (MF 16)

■ The Southwest Macintosh Users Association. Membership of the group is £17 per annum, but the first 100 applications will be given founder member status. If interested contact the Club Secretary, SMUA, Firs, Rackstile, Wadeford, Chard, Somerset TA20 3AP. (MF 16)

■ The United Shareware User Group meet Portuguese Mac users and our Shareware - Pra. Ferreira de Castro 1-3 Dto, Coruaxide 2795, Portugal (MF 19)

■ West Midlands User Group. Tel: Danny Torbica on 0902 336172.

■ Yorks and Humberside Mac UG. Tel: Derek House on 0423 358853.

**Your user group will be listed here free of charge for six issues, then deleted in order to help weed out defunct groups. The number at the end of each entry is the last issue in which that entry will be included. If you want your group's entry renewed (or corrected), just send in the coupon on page 106 a couple of issues in advance. If you run a group which is not listed here, then send us your details!**

**Please note: this list is provided as a free service for amateur, non-profit-making Mac user groups. MACFORMAT does not endorse or recommend any particular group and cannot be held responsible for any losses or problems you might suffer as a result of contacting User Groups advertised here.**

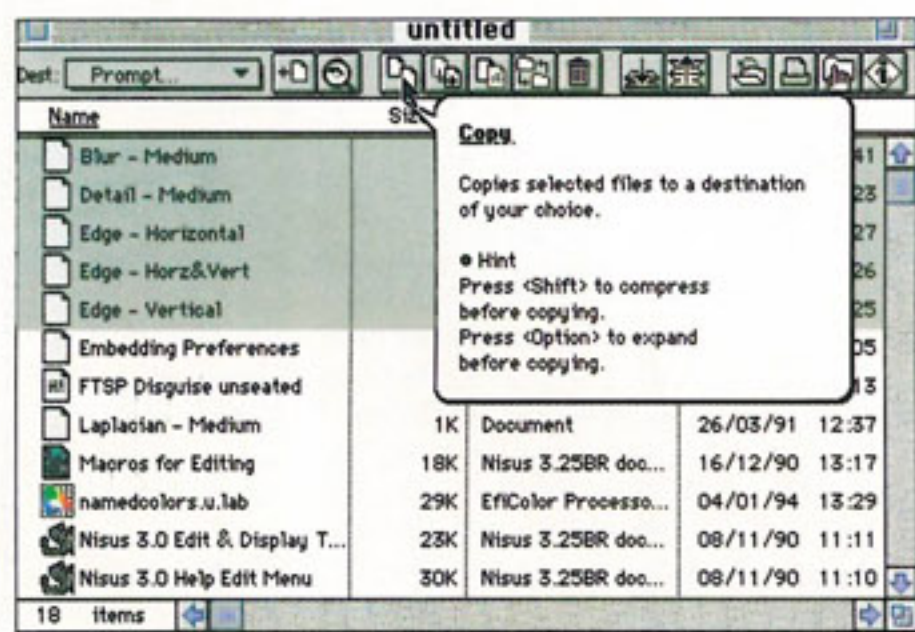
# Finders Keepers

The trouble with the Finder is that it's not very good at finding things. Enter ProFiles and PopupFolder, two utilities which make it easy.

There are two types of Mac users: the kind who structure their desktops into organisational works of art, and the kind who will happily leave everything in one huge folder and spend a lifetime staring at the Find function's dialogue box. ProFiles is clearly an attempt to help out the latter by providing them with a useful new tool.

ProFiles starts by replacing your usual Find dialogue box with a slightly more advanced system, enabling you to use more than one search criterion; you can, for instance, look for all the documents over 200K which were created after a given date. The improved dialogue also enables you to search the contents of files, so you can look for documents which contain a particular piece of information, for example.

When you've finished sorting out your search criteria, you're not taken through the files one by one. Instead, every item which the search has found is displayed in a window with an icon bar at the top. You can then select and act upon the items in various ways - mostly this involves moving, copying, trashing, summoning info windows and opening files - but there are a few handy extras which make ProFiles more desirable than an easily-obtainable postcardware utility like FindStuff, which was on MACFORMAT 11's cover disk. ProFiles is more



Though fairly complex, ProFiles doesn't really need a manual, as balloon help is supported every step of the way.

than just an advanced Find function, it's a file management utility as well.

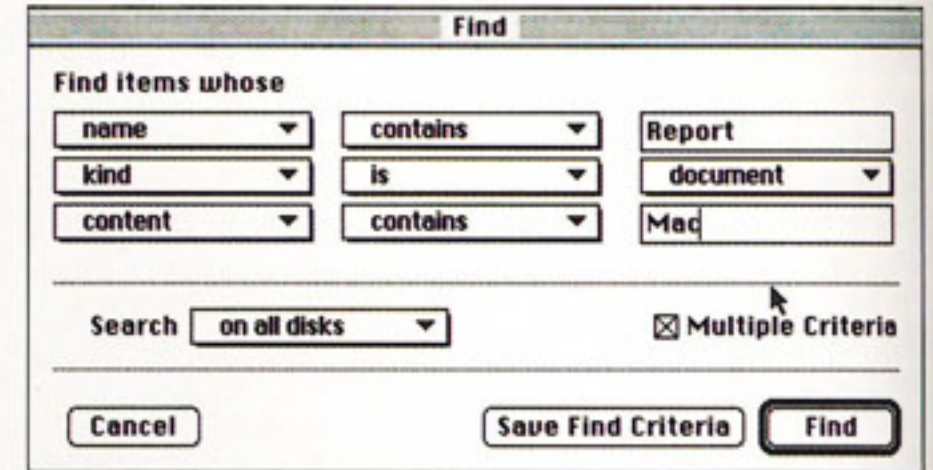
This all begins with a feature enabling you to save both the search criteria and the final list for later use. Saving search criteria enables you to work over a period of time with a constantly updating list, so you can send a guaranteed up-to-date set of files over a network, for example. The list function has the advantage of recording the details of files that may change over a period of time (such as a software library or font archive), and the fact that these lists can be printed makes ProFiles a must for anyone who passionately loathes the Finder's Print Directory function.

However, this would be a disappointing commercial package if its capabilities stopped there. Thankfully, ProFiles has an additional feature which makes it a far more attractive proposition. You see, it's not only capable of finding files - it can compress them too.

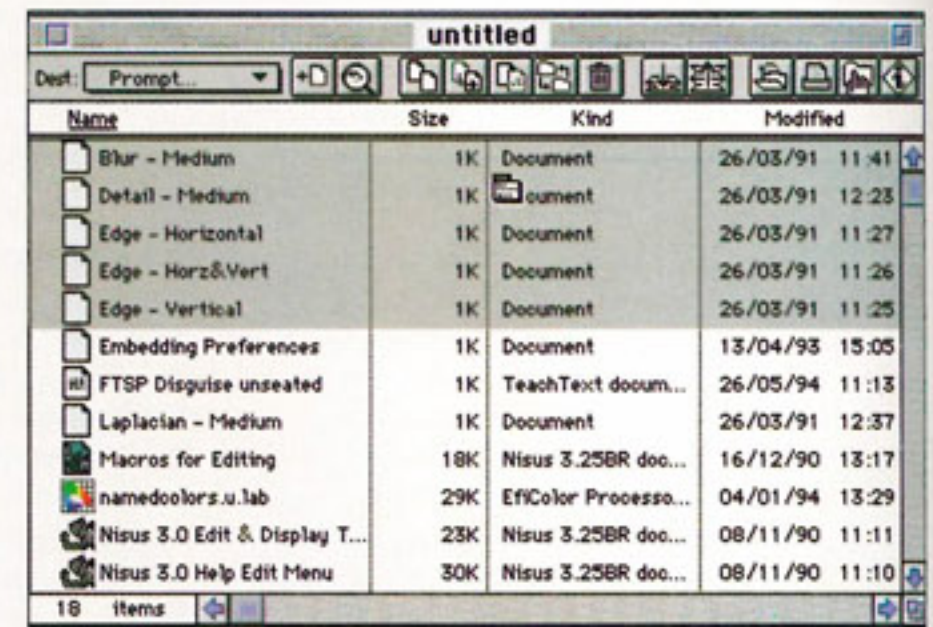
The package includes the StuffIt compression system, and it's not just an added extra but an integrated function. Compression packages are all very advanced these days, but ProFiles combines StuffIt with its own extensive file management and search routines. You can, for example, archive every spreadsheet file with a certain name prefix by saving a document creator and name search, which you can then run once a month, clicking the compression icon to update your archive.

The manual for the package reads like a US textbook; it's full of case examples along the lines of 'Bob wants to synchronize his folders' and 'Carol wants to transport files.' These help beginners to understand the utility by working through the functions and dialogues with them. The manual is well written, although it would have been better if it had been laid out in an easier-to-follow fashion.

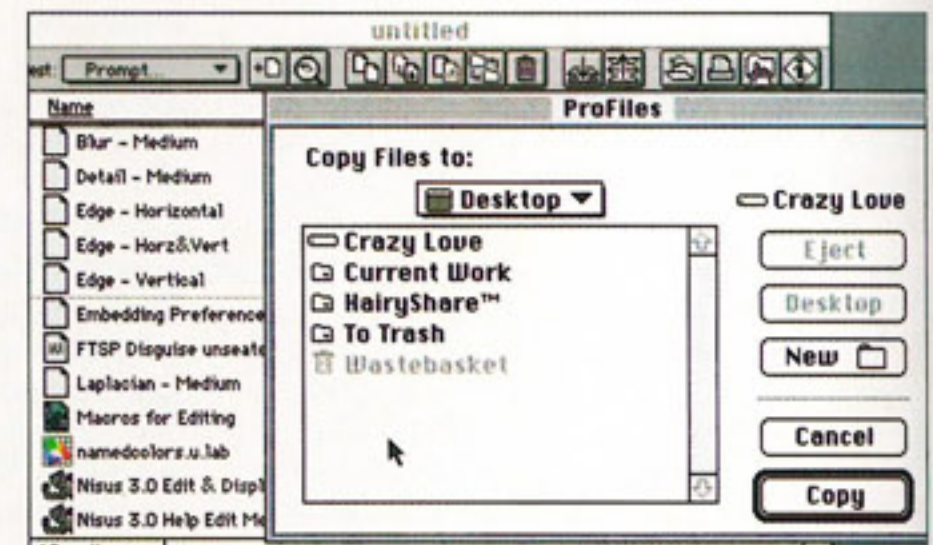
Whatever you want ProFiles to do, it does with the minimum of effort. Though the whole thing can seem a little intimidating at first, un-



The option to replace the Finder's normal Find... dialogue box allows you to search even the contents of files.



All files that meet the search criteria appear in lists, and can even be compressed in batches with the greatest of ease.



The batch handling facility even enables you to copy or move files easily from several different locations at once.

derstanding and using the many useful functions this package contains will become second nature after a while.

Simon Forrester

## Keeping your folders and files in sync

ProFiles can perform another useful task - folder synchronisation. This enables you to have a folder on one Mac which is automatically updated when a new file appears in a folder on a different disk or network. The function will also keep track of which version is the most recent, and update older files with the latest version. This could prove invaluable for PowerBook users who want to work with up-to-date documents

from a desktop Mac, without the hassle of continual file copying.

The synchronisation feature also comes into good effect in a large office environment, where different people all require various documents. ProFiles can efficiently keep an entire network of people up-to-date, forming a rudimentary AppleShare mailing system which is a lot less hassle than electronic mail.

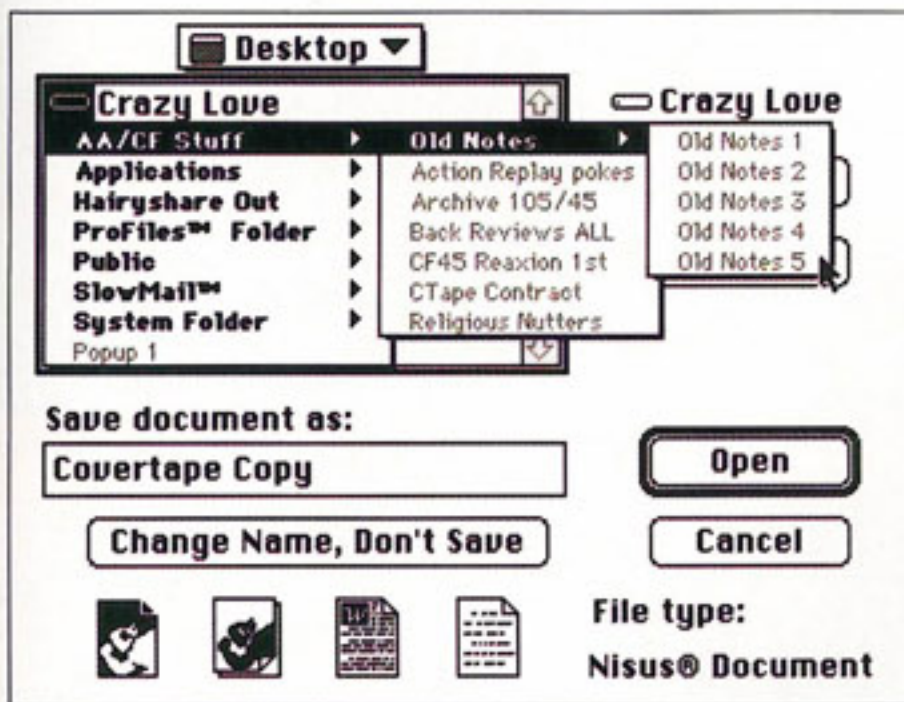
### PROFILES

Price: £99.95.  
Requires: any Mac running System 7 or later.  
For more details contact Computers Unlimited on 081 200 8282.

<b>Ease of use</b> Daunting at first, but ultimately friendly.	<b>75%</b>
<b>Documentation</b> Extensive, if a little patronising at times.	<b>80%</b>
<b>Features</b> A very flexible combination of features.	<b>90%</b>
<b>Value for money</b> At £99.95, ProFiles is slightly over-priced, but it's useful nevertheless.	<b>70%</b>

**MACFORMAT RATING** **85%**

# PopupFolder



PopupFolder – those Open/Save dialogue boxes just got a whole lot easier to use from any application.

The Finder may be a great way of storing information, but trying to find a buried file always means a desktop piled high with folders. The alternative is *BeHierarchic* and an enormous **Apple** menu structure, with the shareware Control Panel adding sub-menus to the **Apple** menu. But a different method is available with *PopupFolder*.

With *PopupFolder* installed, the **Apple** menu, the dialogue boxes under your applications' **File** menu, and folder icons behave more usefully. Everything functions normally until you select a folder. Then if you click and hold the mouse button on a folder's icon, a menu of the folder's items appears. Different items are displayed in various styles which are defined via

the Control Panel; hence files, aliases and folders can appear in italics, bold, outline, underline or a combination of styles, sizes or fonts.

Next to each folder listed, there's an arrow to activate a sub-menu of the items in that second folder. So, instead of double-clicking your way through all the folders to find the file you want, you can access every file on any drive via a simple menu. This feature extends throughout your Mac's system, as well: **Open**, **Save** and the other filing dialogue boxes carry the feature in both their file lists and nesting menus, making all your applications far quicker to use.

*PopupFolder* has one other excellent advantage: drag and drop. When you want to place a file into a nested folder, you normally have to look through folders, expose files on the desktop and resize windows. Now you can simply drag the file (or folder) through *PopupFolder*'s menus to drop it into the destination folder.

*PopupFolder* also enables you to view the desktop using small icons. Unfortunately, this creates a status bar which manages to clash horribly with any desktop pattern.

Perhaps the only problem with *PopupFolder* is

that it tends to jump in with a sub-menu when all you wanted to do was drag a folder – but overall it's a useful addition to your Finder, if a little limited for the price. *Simon Forrester*

## POPUPFOLDER

Price: £45.83.

Requires: any Mac running System 7 or later.

For more details contact Softline on 081 401 1234.

<b>Ease of use</b> Just a simple Control Panel to deal with.	<b>85%</b>
<b>Documentation</b> Simple and brief, like the program.	<b>90%</b>
<b>Features</b> Apart from having small icons on your desktop, not many.	<b>65%</b>
<b>Value for money</b> It's all a little too simple, isn't it?	<b>60%</b>
<b>MACFORMAT RATING</b>	<b>75%</b>

## Buying advice

Whether you're buying by mail or in person, here are some sensible precautions to bear in mind. Note that everything here applies to buying from a business; most of it does *not* apply to buying from a private seller in MACFORMAT's reader ads pages.

Always be absolutely clear about what is included in the price – postage and packing? Any necessary cables etc? VAT? (By law, an advert must say *explicitly* if VAT is not included; if it doesn't, VAT is included. But this could be in the small print – so read it all!) If you're buying in person, check that everything is there and it all works properly before you leave the shop. If you're buying by mail, ring the supplier first to confirm the price and availability, and ask what your options will be if there should be any problem. Find out when you can realistically expect delivery. Always keep all receipts and make records of all correspondence, whether it's by mail or by phone.

### How to protect yourself

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well as the seller, even if the seller has gone bust. You may also get extra insurance – check with your credit card company.

If you're not paying by credit card, pay by cheque. Never send cash through the mail – it is impossible to trace if it gets lost, you can't stop payment if you need to, and even if you have proof of posting you can't prove how much you sent.

Keep records. If you are paying by credit card keep a note of the exact time of the order and ask for an order number. If you are paying by cheque make sure you fill in the details of date, amount and payee's exact name in the stub – and keep it!

### When a mail order arrives

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### If there's a problem

Whether you bought it by mail or in a shop, the law says a product must be:

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speaking, it must work),  
2. 'as described' (in the advert or in person – and this one criterion also applies when you're buying from a private seller, not a business), and  
3. fit for the purpose for which it was sold or for the purpose you specified when you ordered it.

If it fails to meet any or all of these criteria, then you are entitled to return the goods for a refund, receive compensation for all or part of the value, or get a replacement or free repair, depending on the seriousness of the defect. These are the 'statutory rights' that adverts always say are 'not affected' by any extra guarantees. The supplier cannot change or deny these rights.

If you're not happy about something, always contact the supplier first and politely explain your problem. Most problems are sorted out at this stage with no fuss. If not, put your complaint in writing and send it to the manager or owner – ask for the correct name and job title. Give the supplier a reasonable time to reply – say ten days or so.

If the problem is still not resolved, you may need to take some sort of legal action to enforce your rights. This need not cost you a lot. Seek advice from a solicitor (ask about the free advice scheme) or from one of the following (check in your local phone book):

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- Trading Standards Office (listed under your local council),
- Office of Fair Trading, or
- County Court (ask about the 'small claims procedure').

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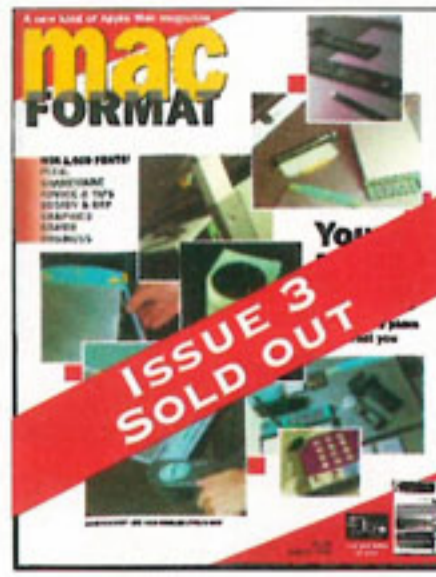
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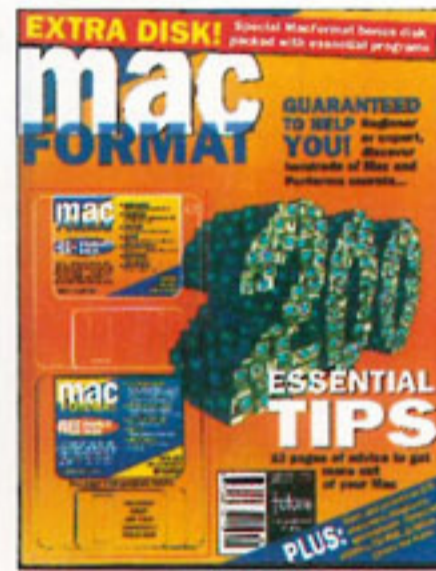
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### Rapidly shrinking: the Tiny Zone!

Help! The Tiny Zone is shrinking to a shadow of its former self! It's being squeezed by all those executive types being listed in what we call the 'flannel panel' above. It's not as if any of them has the remotest thing to do with producing the mag, of course. (And it's not as if any of them is likely to read this either, which is why Tiny Zone is sticking its neck out like this. Not that you could tell, with a neck this size...) No, in fact this august journal (or do we mean the August issue of this journal?) was produced by a modest team of six and a half poor souls, with the help of some Macs and some software. (The 'half' you're wondering about is Yolanda, who works two weeks each month on MACFORMAT and two weeks on our sister magazine CD-ROM Today.) Oh, you might have been forgiven for thinking it was even less than that, after reading in last month's Tiny Zone that Mark was off sick and Alex was away on paternity leave, and yet there was the magazine on the stands as per usual. But no, six and a half it is, locked in an office with a PowerMac 7100, a Quadra 700, a lisi, a lici, another lisi, an LCI and an LC475 and told not to come out until we've finished an issue... So here's this month's Tiny Zone competition: can you match the six and a half editorial and art staff with the right Macs? Who uses which machine? There's a copy of the fun customising program Underware for the first correct entry! Executive types need not enter...

# Next month

**S**o you think all this astrology business is nonsense, and you can't think of anything more bizarre than a fractal landscape designing program. Well, we can. And next month we'll prove it, with a look at the wild and the wonderful of Macintosh programs - the bizarre, the barmy and the brilliant. How about a program that takes any 3D model created with any common Computer Aided Design (CAD) package and 'unfolds' it into a nice flat two dimensions? Or another that helps you get whatever you're designing ergonomically correct by putting 'over 200 body dimensions' at your fingertips, with illustrations and even 'automatic adjustments for clothing and sitting slump'?

These are just two of the brilliant programs you'll discover next month - the ones that make you think, 'How ever did they think of that?' Then there's the other kind - the ones that make you wonder what on earth they could've been thinking of. It's all here in MACFORMAT next month!

But we're not neglecting the more conventional kinds of software either. Next issue we're

reviewing the new version of *MacWrite Pro*, and *Home Publisher* from Iona Software, the easy-to-use entry-level DTP package created by the people who invented DTP and gave the world *PageMaker*. We're also testing *Multimedia Workshop*, the new package from Ablac that enables you to create multimedia for under £70. We continue our series on creating natural media effects using standard Mac paint programs, with a guide to pastel, chalk and charcoal effects. Plus we take a look at desktop music systems which enable you to make your Mac the centre of a complete music set-up.

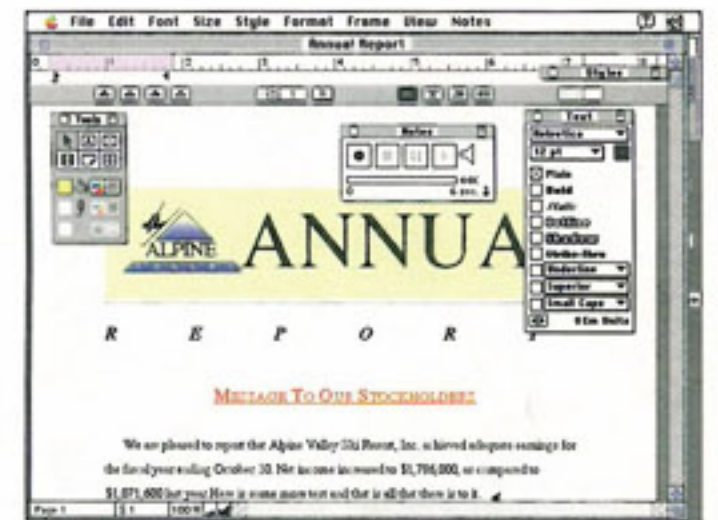
■ PLUS The latest news from around the world; the hottest Mac games, including the spectacular *Labyrinth of Time*; your Mac problems solved in Mac Answers; how to achieve a sepia-toned effect with graphics (sorry it got squeezed out this time round - next month for sure); reviews of some books that will help you customise your Mac and give you an inside look at the origin and evolution of your favourite computer; all the latest shareware (which we're now bringing you on



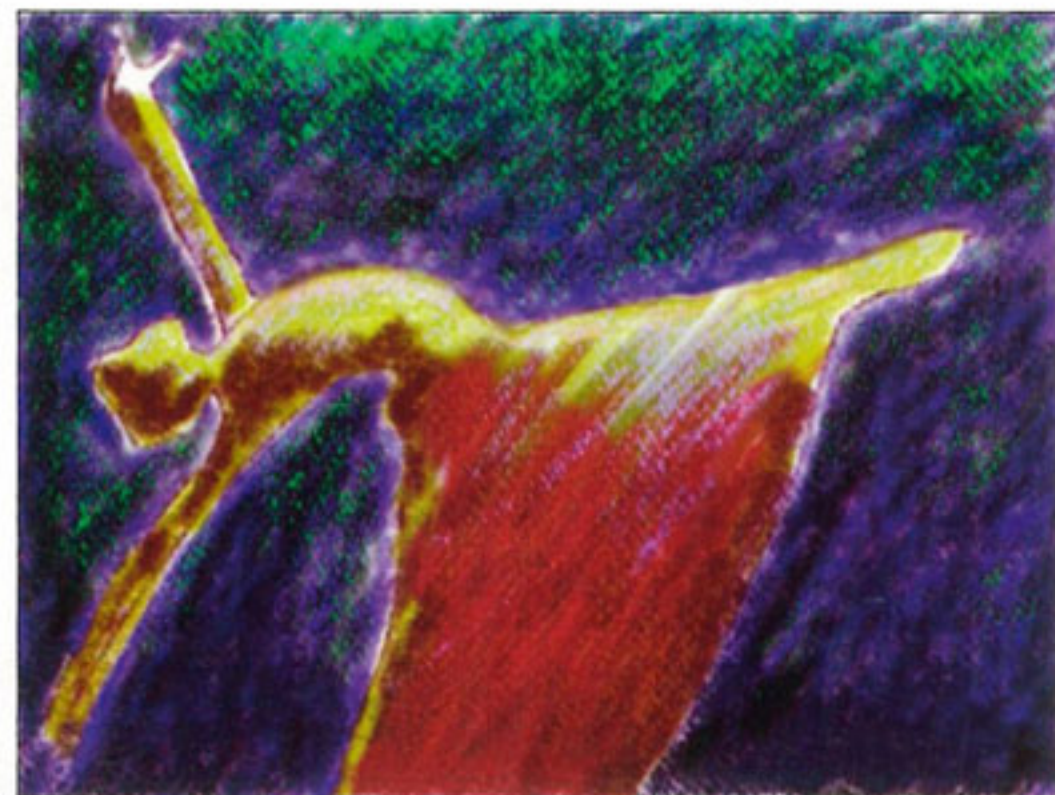
Has this issue stimulated your artistic urges? Well, you can learn how to do this next issue!

the cover mounted CD-ROM as well!), plus MACFORMAT's regular comprehensive coverage of just about everything you can do with a Mac!

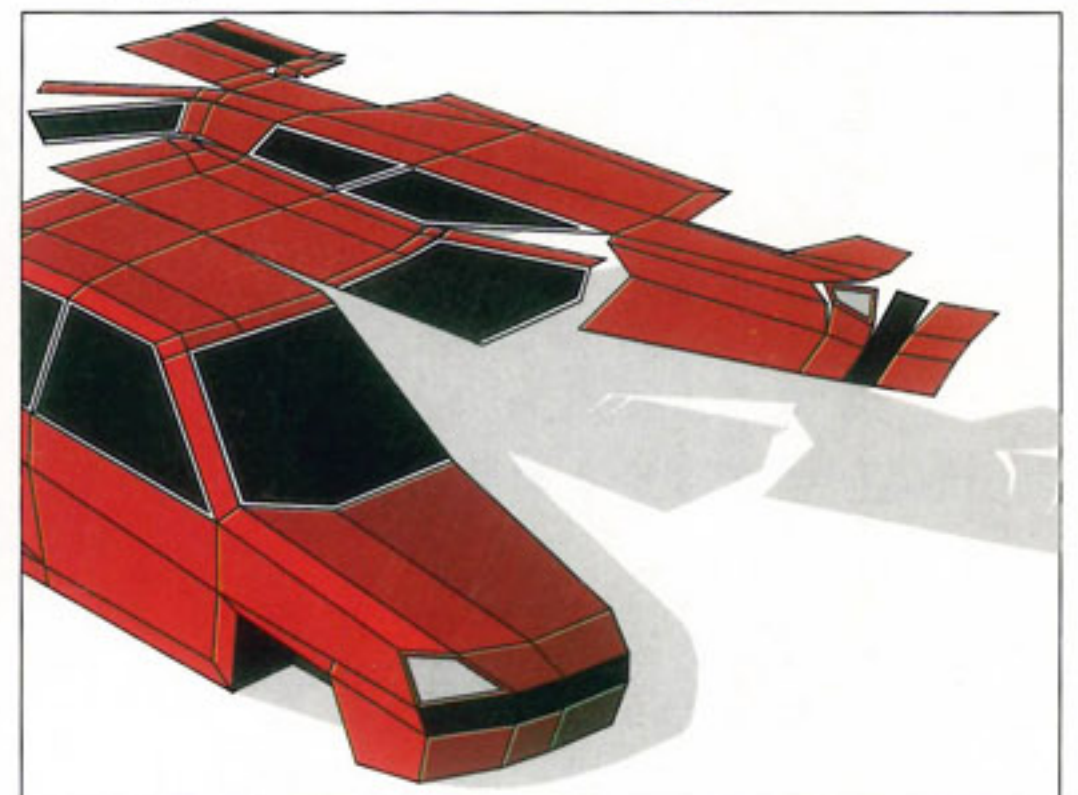
And, of course, there's a cover disk or CD-ROM packed with the very latest and best Mac programs and demos. Miss it and you'll be miserable for a month (probably)!



MacWrite Pro - for a long time, it was overshadowed by the big names. Has the new v1.5 narrowed the gap? Find out next month!



You've seen what the professionals can do with state-of-the-art paint programs. Next month, we show you how to do this with yours.



Touch 3D takes any solid 3D model from your CAD package and... well, unfolds it into a 2D model. It's the sort of brilliant program that makes you go, 'Whaa-?' And it's quite possibly the least bizarre program we'll be looking at next issue. Don't miss it!

## ARE YOU A WINNER?

Back in MACFORMAT issue 10, we gave you the chance to win an autographed copy of Peter Gabriel's new *Xplora 1* CD-ROM, courtesy of Softline. (And yes, that does mean autographed by Peter Gabriel, not by the Editor.) The lucky winner was P Henderson of Redhill in Surrey. The nine runners-up who won *Xplora 1*

without autographs were: D Mallon of Reading, Barry Fowler or Bath, Martin Wagner of London SW2, Roy Graham of Bromley in Kent, Michael Meadows of Claughton in the Wirral, Sean Coughlan of Cork, Brian Eyles of Daventry, Northants., Peter Williams of Birmingham, and Win Tadd of Cardiff. Congratulations to all!

**MACFORMAT 16 goes on sale on Thursday 4 August**

Reserve your copy with your newsagent now, or turn to page 94 for our special subscription offer! Move fast, and you might just be able to get hold of the limited CD-ROM edition!

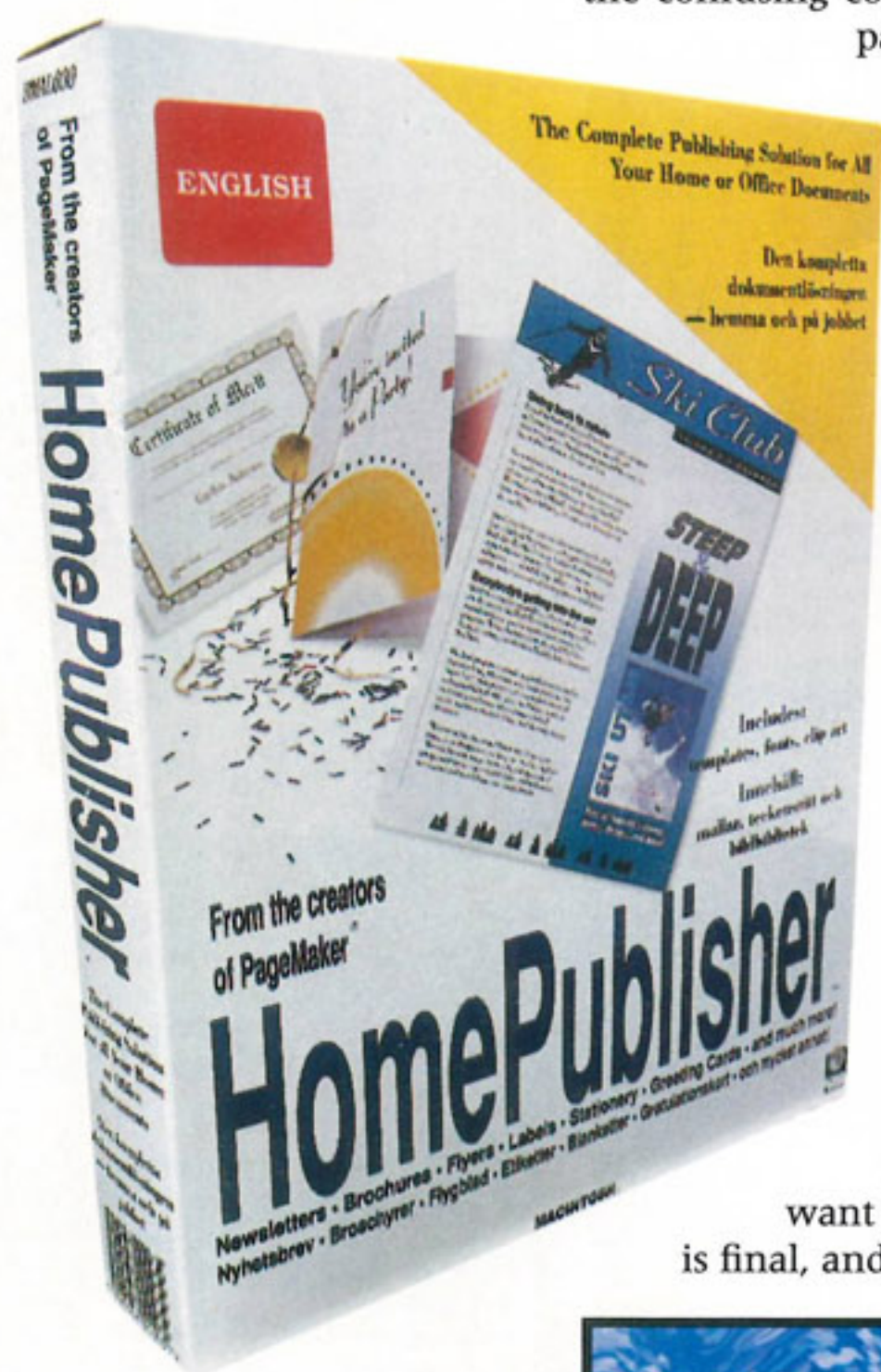
# Win the *easy-to use* home DTP package

From the company that invented Desktop Publishing and created *PageMaker* comes a straightforward, easy-to-use DTP package, *Home Publisher*. We have ten copies to be won, courtesy of Iona Software.

The Macintosh is synonymous with Desktop Publishing, but if you're producing flyers, newsletters, brochures and so on, you don't want to wrestle with all those complicated graphic manipulation options in the top-end DTP programs, you don't need all the confusing colour handling features, and you certainly don't want to pay the earth for power you're never going to need. If you're looking for a simple-to-use DTP package which still has all you need to produce excellent results, then *Home Publisher* is for you.

Created by the makers of *PageMaker* and published by Iona Software, *Home Publisher* makes DTP simple with its AutoCreate Templates. It offers over 50 templates in eight categories – brochures, business ID, calendars, certificates, labels, flyers, greetings cards and newsletters. Simply choose a category, then work through the options to define exactly what you want – you can create a complete newsletter, in black and white or spot colour, in a matter of minutes! The *Home Publisher* package includes a 100,000-word UK spelling-checker and a 60,000-word thesaurus, plus 100 clip art images and 12 TrueType fonts. It's everything you need to start publishing in your home, office or classroom, and we have ten copies to be won, each worth £69.95, courtesy of Iona Software.

To win one, just answer the simple questions below. Send us your answers on a postcard or the back of a stuck-down envelope (nothing inside). Employees of Future Publishing, Iona Software and associated companies, and their families, are not eligible to enter. No multiple entries are allowed. Please state if you don't want your name added to a mailing list. The editor's decision is final, and the closing date is Friday 12 August.



## THE QUESTIONS

1. *Home Publisher* aims to make Desktop Publishing easy with its AutoCreate templates. How many categories of template does it offer?

- (a) More than 50
- (b) Eight
- (c) 12

2. *Home Publisher* features 12 fonts of which type?

- (a) TrueType
- (b) PostScript Type 1
- (c) Bitmapped

3. Which of the following is *not* included in the *Home Publisher* package?

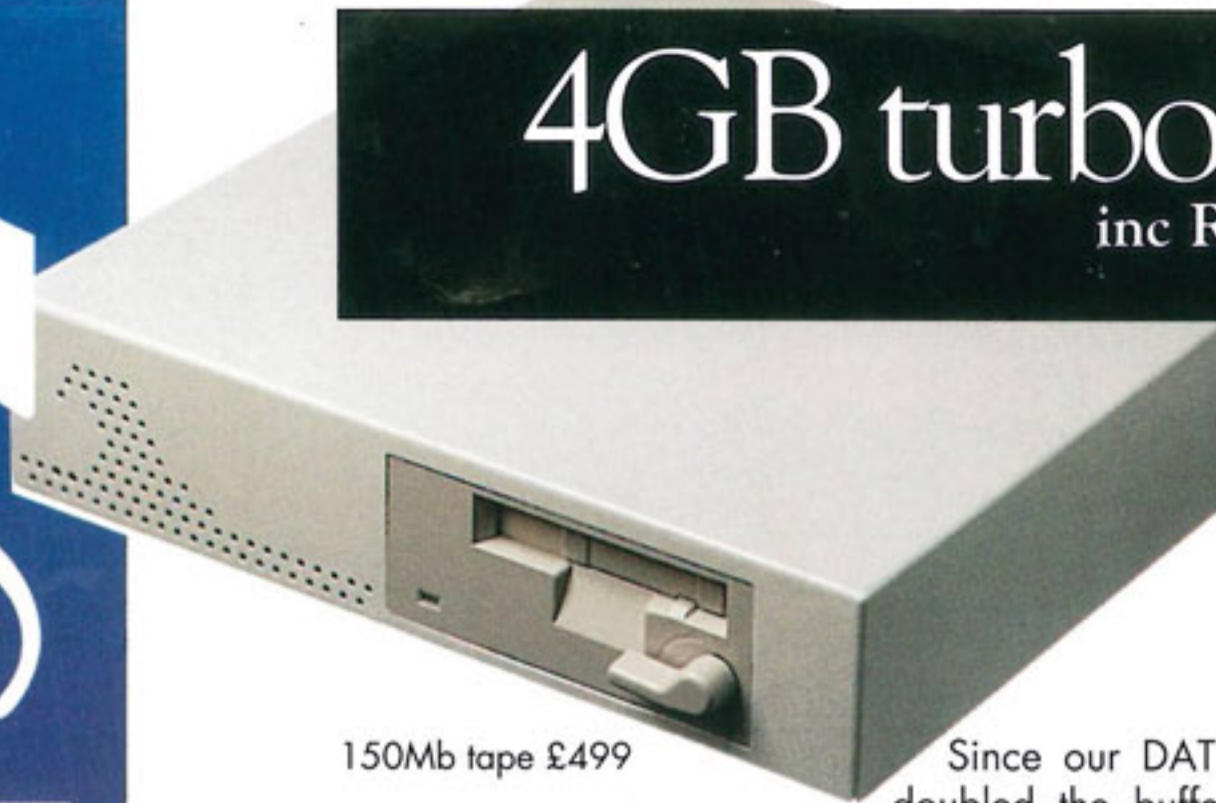
- (a) A 100,000 word UK spelling-checker
- (b) 100 clip art images
- (c) A portable laser printer

Simple, eh? (But watch that first question – it's a trick one!) Just send your entry to: 'Take a Publisher Home Today', MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

0800 765432

# 4GB turboDAT £999

inc Retrospect 2.1, installation kit



150Mb tape £499

tape	int/ext	media
150MB	/£499	£16
2G DAT	£829/899	£10
2-8G DAT	£889/949	£10
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Since our DAT was a 5-mouser best buy, we've doubled the buffer size for even smoother backup, doubled the speed and doubled the capacity! No wonder it won the best peripheral category of the MacUser awards! Full compatibility with DDS1 standard drives (2GB and 2-8GB). Power Macintosh compatible.



# 1GB disk £569

UK installation kit £18

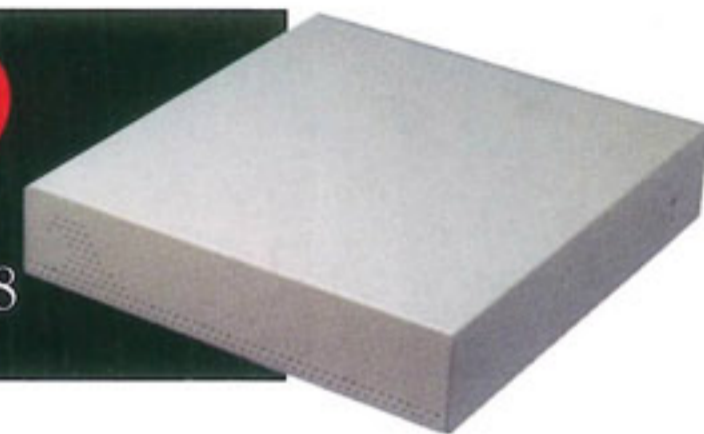


hard disks	seek	int/ext
260	12	£199/269
330	12	£219/289
500	9.5	£339/419
1000	8.5	£509/569
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2000	9	889/919
4000	9	1798/1898

seek times are average, "effective" seek times are all faster.

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88/44Mb Syq	£289	£69
200MB Syquest	£429	£94
105Mb Syquest	£289	£40
270MB Syquest	£360	£74
128Mb Optical	£549	£24
230MB Optical	£689	£40
1.2/1.3GB MO	1599	£78

98% of orders shipped from stock. All external drives (except 105/270 Syquest) have 90-270V power, twin 50 way SCSI, pushbutton ID switch, platinum grey "zero footprint" aluminium housing. Installation kit comprises UK mains cable, SCSI system cable, terminator.

**Warranty:** 1, 2 or 3 years. **Delivery:** £8 next day. **Prices exclude VAT.**

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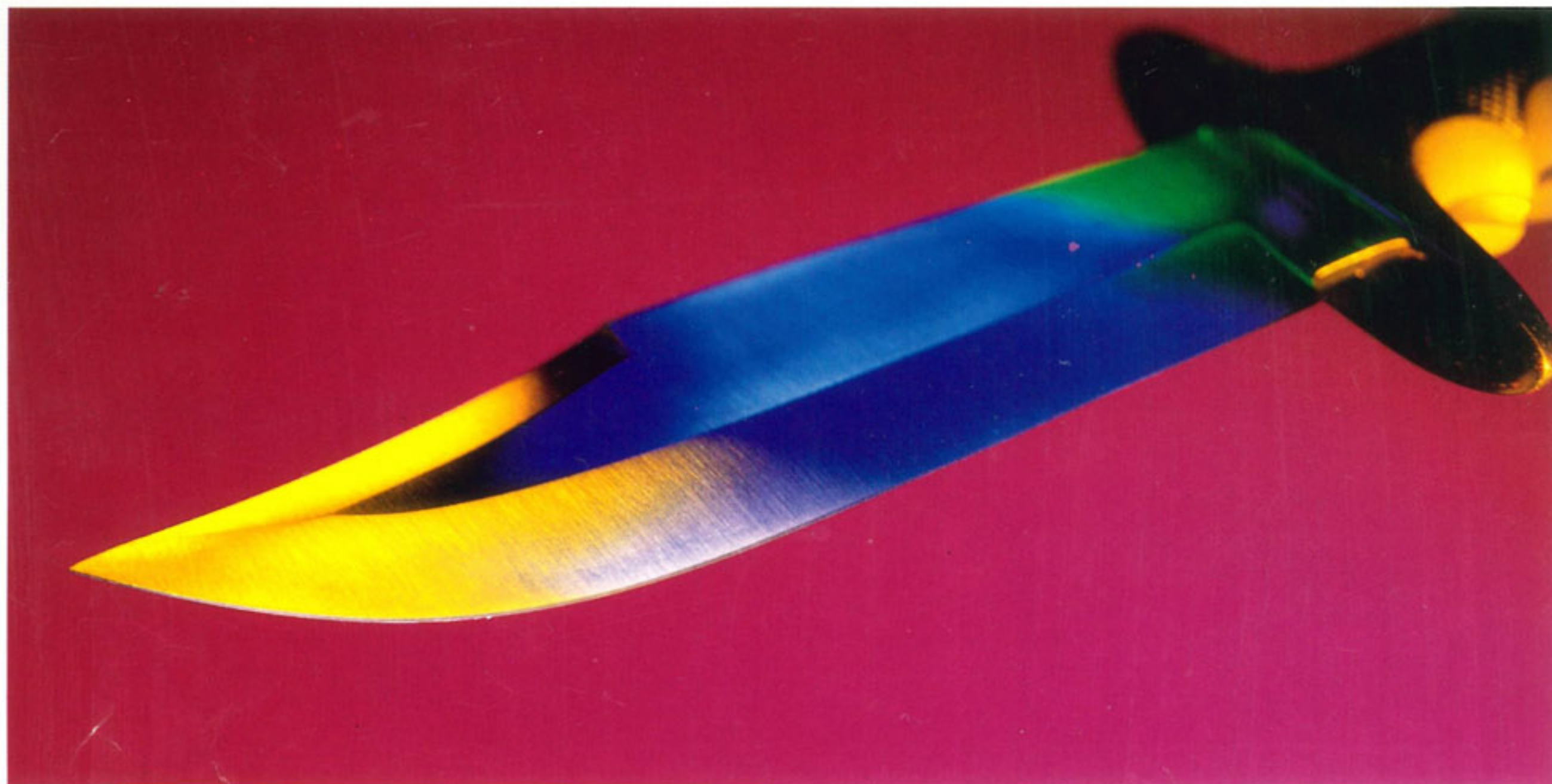
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