Stealth Mac

Running Virtual PC is only one step toward crafting a Stealth Mac that can slip undetected into any Windows stronghold without arousing the suspicions of Apple-hating MIS goons. Here are a few more tips to help your Mac survive in a Wintel world:

Lab Mice That Apple keyboard and friendly one-button mouse are dead giveaways. Beef up your disguise with the $125 MacAdapt, from Usar Systems. This little box lets you connect PS/2 keyboards and mice—especially ones that say Microsoft on them—as well as control panels, bar code readers, etc., to your ADB port. It even has an on/off switch, which PS/2 keyboards don't. Check it out at http://www.usar.com/prodnser/protin/macf.htm.

Switch Printer Printing from Virtual PC to any Mac-compatible printer is no sweat—if your Mac is already connected to it. Suppose you need to print to an ancient Epson 9-pin with nothing but a RS-232 parallel port. Most cable suppliers offer a Mac-to-PC printer cable, which is all you need when running Virtual PC. But you might want to print when you're stealthily running the Mac OS, too. Look into PowerPrint ($149 SRP) from InfoWave (formerly GDT). PowerPrint (and its more expensive sibling PowerPrint Pro) enable Macs to use over 1,000 PC-compatible printers just like a Mac printer. Included are all the necessary printer drivers as well as a serial-to-parallel "smart" cable. The Pro version enables Macs to share a PC-compatible printer over a LocalTalk or Novell NetWare network. Get more info at http://www.gdt.com.

It's Your Pad, Man Ditch that free Apple mousepad for a Microsoft mousepad. Any PC store will be glad to sell you one. If you score one of the ultrarare "Bob" pads, consider yourself BBB (Blessed by Bill).

Stick It Microsoft, unlike Apple, does not distribute free logo stickers. But if you've got access to a label printer, you can easily make your own by grabbing the Microsoft logo off the Web or scanning it from the Microsoft Office box. Slap MS tags on everything that might otherwise arouse suspicion. At least stick a Dilbert cartoon over the PowerPC logo on the front bezel.

RUN THE FAST-PACED DUKE and most other games in DOS for best fighting performance.

time to lift his freeze gun. However, the action picked up significantly when I dropped the colors down to 256, and even better when I installed DN3D on a 200 MHz 604e with 512K L2 cache, internal AV drive, and an 8X CD-ROM. The game was very playable, though not comparable to what you'd experience on the latest 266 MHz Pentium II machines. One reason: Virtual PC doesn't support 3D acceleration.

Windows NT 4.0 support means you can tag along where the high-end Wintel world is headed without having to give up your Mac. But emulation performance becomes even more of an issue here, because NT apps are generally designed for high-performance
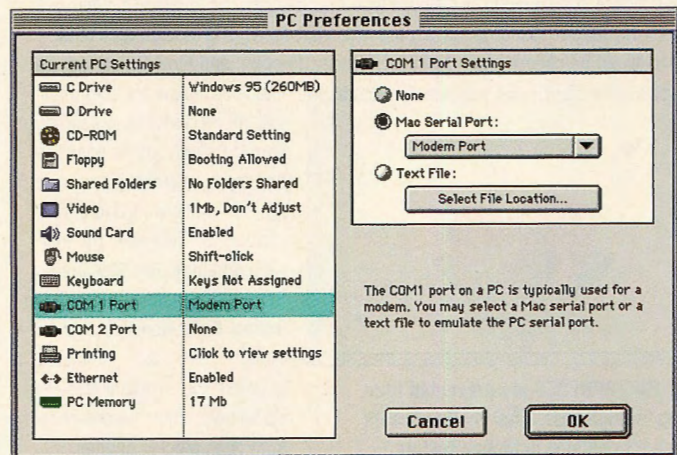
SET COM PORT and other Win-type details in Virtual PC's Preferences window. You won't be able to configure Internet Explorer until you activate COM1.

Windows drivers. Hardware compatibility is determined by what the Mac can support. One essential feature is not implemented: You can't cut and paste from the PC to the Mac, but you can go the other way.

The Win95 apps performed as expected, but if you depend on older mission-critical apps, you may have compatibility problems. Virtual PC keeled over right after I installed the wonky DOS DBMS shell I use every day. Restarting forced Windows into safe mode and brought on a string of illegal operation errors. In the end I had to reinstall Virtual PC and start over.

Possibly more problematic is Virtual PC's performance, or lack of it. Running Win95 under Virtual PC on my daily machine, a dowdy Power Mac 7200 120 with no cache card, brought to mind the word "glacial." At least Connectix is up front about the fact that you really need a fast 603e or 604e for bearable responsiveness. (See "Revving Virtual PC" for ways to improve Virtual PC performance.)

Of course, performance also depends on software. You had better have a fast Mac to run PC "twitch" games. On the 7200, I checked out Duke Nukem 3D for the PC. It installed effortlessly into DOS, but the frame rate, even at the standard low resolution of 320 x 240, was maybe two per second. Demons were ripping into Duke before he had

Pentium Pro or Alpha processors. Forget running cool graphics software such as Kinetix's 3D Studio or Microsoft's Softimage (sorry, Raf!). Even a fast 604e doesn't have the muscle. But future ultrafast PPC processors may make NT-level graphics a reality on a Virtual PC-equipped Mac [Ed Note: on an early Arthur-based Mac, Virtual PC ran Windows95 at almost PC-normal speed.]. And now you can run any NT app that isn't graphics based.

All told, Virtual PC is the easiest, most cost-effective way to run Windows on a Mac. But it's not the solution to everything, so I'm not selling my Pentium just yet. —*Steven Anzovin*

GOOD NEWS: Easy installation. Good Wintel compatibility. Excellent value.

BAD NEWS: Requires a fast Mac and lots of RAM for responsive performance. May choke on older DOS programs. Networking incompatibilities. Cut-and-paste from PC to Mac needs work.

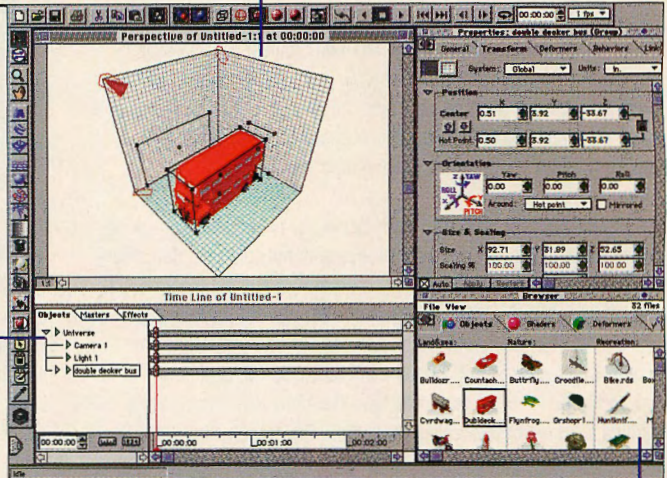# Ray Dream Studio 5.0

UNLIKE MOST 3D modeling programs, Ray Dream Studio uses only cameras to view your scene, projecting it onto a 3D grid.

COMPANY: MetaCreations

CONTACT: 800-297-COOL, http://www.metacreations.com

PRICE: $499 (SRP)

REQUIREMENTS: Power Mac, System 7.0 or later, 24MB of RAM, CD-ROM drive, 24-bit display (recommended: 604e, 64MB of RAM or more, QuickDraw 3D accelerator)

Ray Dream has thrown everything but the kitchen sink into the latest version of its flagship 3D animation program, Ray Dream Studio 5.0. With features such as physics simulation, inverse kinematics, and 3D painting, Ray Dream Studio 5.0 rivals most high-end 3D programs in number and diversity of features. But Ray Dream Studio is not a high-end program. It lacks the speed and the level of control necessary for true high-quality production.

**THE TIMELINE window shows keyframes and the hierarchy of animations.**

Let's Get Physical

Dynamics comes to the Mac with Ray Dream Studio 5.0's physics simulation. The collision detection feature alone is worth all the hype that MetaCreations can lavish on it. When two objects touch, collision detection actually prevents them from going through each other.

Specialized behaviors (such as Initial Velocity, Friction, and Flow Force) can be used to simulate complex phys-ical effects. Vases automatically can fall down stairs, marbles can roll by themselves down a funnel—motions that are very difficult to animate by key-framing alone. But Ray Dream Studio's physics engine is limited. For instance, a domino effect can't be simulated because the program doesn't accurately pass momentum from one object to another.
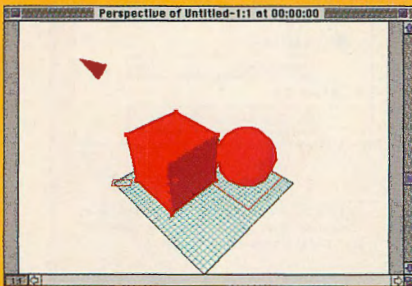
THESE TWO SPHERES are prevented from passing through each other by Ray Dream Studio 5.0's collision detection feature.
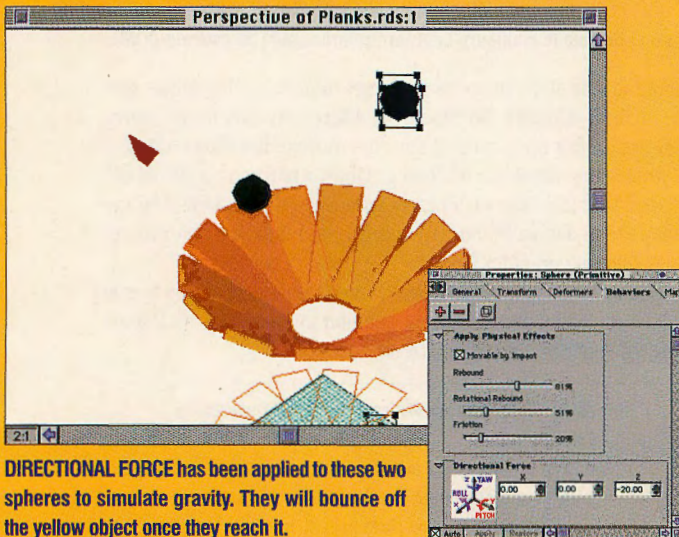
DIRECTIONAL FORCE has been applied to these two spheres to simulate gravity. They will bounce off the yellow object once they reach it.

Ray Dream Studio 5.0's most important new feature is physics simulation, the ability to make a 3D object interact with its environment in a physically realistic way. This takes two forms: general collision detection for use in the 3D workspace; and specialized physical behaviors, such as elasticity and rebound, that can be applied individually to an object. With physics simulation, you can animate motions that would be nearly impossible to create with keyframe animation. Ray Dream Studio 5.0 is the only full-featured animation program for the Mac with this capability.

HERE ARE RAY DREAM STUDIO'S present elements. Save your own in this window.

If you've used other 3D programs, you may be disoriented at first by Ray Dream Studio's unusual workspace. Instead of giving you the standard front/right/top/perspective view, it displays a three-way grid with bounding-box projections of objects in the scene. Although this is not an inherently inferior way of showing object placement, it does have its drawbacks. For one, if you wish to see your scene from any of the standard views, you'll have to put a camera there yourself.

In addition to Ray Dream Studio's free-form modeler, which creates spline objects by extruding cross sections along a path, there's a new mesh-form modeler that lets you edit polygons and vertices individually or as a group. Deformers offer deformation effects without opening the modeler. In Ray Dream Studio 4, deformers could be manipulated only with numeric sliders. Now, they all can be manipulated directly within the workspace.

Ray Dream Studio also supplies one of the most important features to character animators: inverse kinematics (IK). Ray Dream Studio's IK is quite good, automatically setting keyframes for the intermediate objects in an IK chain. Although it was slow at times (even on a 200MHz system), it was easier to set up than many other IK systems. Ray Dream Studio's direct-manipulation tools allow you to adjust joint constraints without the usual trial and error.

Animation is controlled through the Total Control Timeline, and yes, it does give you just about total control, because almost all attributes have their own timeline. But the Tweeners, which control the motion transition between keyframes, don't give you the same fine control as velocity graphs or function curves in other 3D programs.
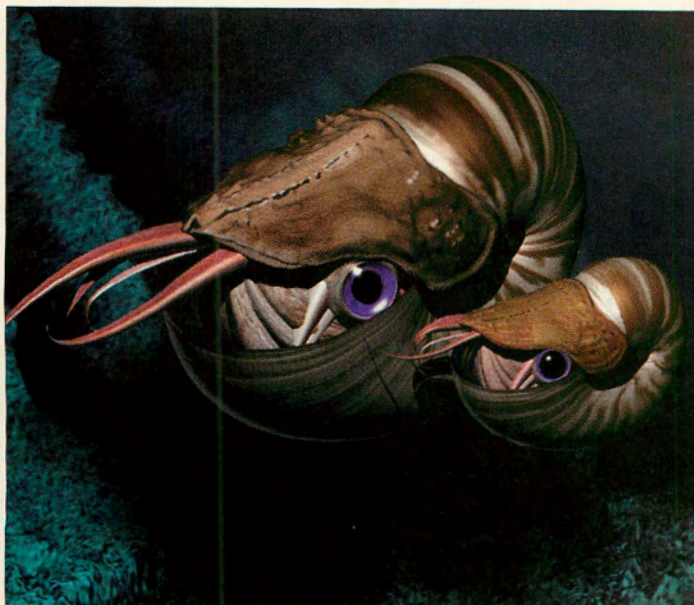
RAY DREAM STUDIO 5.0'S 3D PAINTING and vertex-level editing yield very naturalistic images. Here's a good example of texture mapping.

Ray Dream Studio 5.0's texturing abilities are strong. Both procedural surfaces and image mapping are supported and can be combined into Shaders, with a different image or procedure possible for each channel (bumps, specularity, color). Multiple textures can be mixed, with another texture used to dictate the blend between them, then applied as *paint objects* to object surfaces in a variety of shapes. You also can draw directly on an object with a variety of brushes, but in practice, Ray Dream Studio 5.0's 3D painting was incredibly slow. Alpha channel support in image maps is still sorely needed for pro-level work.

Rendering in Ray Dream Studio is reasonably fast, and the quality is good if somewhat plastic-looking. In addition, the new natural-media effects impart a hand-drawn look to renderings. Redraw speed in the workspace is another story. Ray Dream Studio 5.0's own real-time rendering engine gives good interactivity with simpler objects but bogs down with more complex objects. Ray Dream Studio 5.0 feels very sluggish when working with large scenes, even on a 200MHz 604e.

All in all, Ray Dream Studio 5.0 provides a lot of 3D for a low price. The program's sluggishness has to be addressed, and a few very important features are still missing (velocity graphing and alpha channel masking for surfaces). But it's a good choice for 3D artists who can't afford ElectricImage Animation System or NewTek's LightWave 3D, or for an animator who wants to play in a physical world. —*Raf Anzovin*

GOOD NEWS: Physics simulation. Collision detection. Inverse kinematics. Vertex-level editing. 3D painting.
BAD NEWS: Sluggish redraw. No velocity graphing. Interface is sometimes disorienting.

ReBirth

COMPANY: Steinberg/Propellerhead Software
CONTACT: 818-993-4161, http://www.steinberg.net
PRICE: $199 (SRP)
REQUIREMENTS: Power Mac, 66MHz or faster, 16MB of RAM, System 7.5.3 or later, CD-ROM drive

Now you can turn your Mac into a suite of vintage synthesizers: a drum machine, a distortion device, a mixer, and a sequencer. Without any expensive MIDI gear, interfaces, or software, you can design your own techno, industrial, or acid core masterpieces. You don't even need to know how to write music.

Now there's ReBirth RB-338 Techno Micro Composer, which is a computer version of two Roland 303 analog synthesizers and the classic TR-808 drum machine. The interface is exactly like the original hardware versions, except the computer performs the wave formation.

The drum machine offers 16 analog drum sounds. It's easy to set up a pattern—the 16 switches along the bottom of the interface represent one musical measure. Choose one of the drum sounds, and click the number beats you want to hear. Wild and original rhythms can be created just by selecting patterns that look good visually.

ReBirth's synth modules also use 16th notes. You can combine them in real or step time.

DOWN TO THE WOOD PANELING, ReBirth simulates the best audio hardware of the '70s, all in '90s software. MOOG freaks and techno heads, rejoice.

The really groovy part is that you can manipulate the synths as the song plays. Modulate the cutoff, resonance, and envelope and record your moves. Change the decay, pitch, and accent as though you had four hands. Then mix everything together, add distortion, and tweak the delay parameters. Your music can be saved as a native ReBirth file or as an audio file. —*Judy Munsen*

GOOD NEWS: Easy-to-use analog music system. Will sync to other MIDI hardware and software. Excellent documentation.
BAD NEWS: Won't run without the original CD in the drive.

reviews

GoLive CyberStudio 1.1

GoLive has overhauled its underpowered Web page builder (the lowercase golive), turning it into a "studio" that aims to provide not only pixel-perfect page layout but also Web site management. CyberStudio is packed with powerful features, but its idiosyncratic methods and steep learning curve can be frustrating.

The package's many palettes easily fill even a 19-inch screen. This is a shock, but there's a reason for it. To build a page in CyberStudio, you drag elements from a floating palette (named, simply, Palette) into the Layout tab of the document window. For example, to place an image, you drag an Image tag from the Body section of the Palette onto the Layout

you to color individual cell backgrounds and text, but you must color each cell individually, which can be a pain—literally, given CyberStudio's odd method of selecting colors. First you must check a Color checkbox in the Inspector palette and double-click the color swatch there, which opens the Color Picker. There, you must select a color (look hard for the 216-color Web-safe palette—it's tiny), which then you must grab from the Color Picker and drag to a little box on the Inspector palette. You must repeat this process for every cell. Page background color selection requires the same process.

If you feel tables are passé, turn to CyberStudio's Layout Grid. Dragging this element onto the Layout window gives you a resizable grid with snap-to options. Onto this grid you can lay out images, text, whatever, with a precision unavailable in tables. Our layouts reproduced well in both Netscape Navigator and Microsoft Internet Explorer. This precise layout came at the cost of easily readable HTML, though the code still wasn't as bloated as that produced by NetObjects Fusion 2.0. And how could I tell? Because CyberStudio allows you to view and edit HTML code within the application. Just tab the document window to Source, and there it is, with color-coded tags. Missing only are a spell checker and soft wrap (long lines require a lot of scrolling).

Perhaps what distinguishes CyberStudio most is its site management capability. Once you have all the elements of your site set up (e.g., graphics in proper format, all files in a final file structure), just drag the index file into the Project window, and CyberStudio imports the entire site. Then it builds a full site view, complete with all links. In the manner of Adobe SiteMill, it also checks for broken links (internal only) and, in some cases,

THE DOCUMENT WINDOW tabs between Layout, Preview, and other modes.

THE SITE VIEW shows what's connected to what—and how.

THE COLOR PICKER contains lots of tiny color palettes.

THE PALETTE CONTAINS all the elements you'll want to drop onto your page.

THE INSPECTOR CHANGES according to the element selected.

THE PROJECT PALETTE is where you keep track of all your site's files.

MOVE IT ON OVER: You'll be practicing screen real estate management in order to use all of CyberStudio's features to their fullest.

section of the document window. Then you click the Browse button in the Image Inspector (a floating palette, similar to the Inspector palette in Adobe's PageMill). Also you can drag and drop the image file from the Finder or use CyberStudio's "Point and Shoot" method to link to a placeholder in the Project window. Flexible, yes, but a bit exhausting.

Adding to the screen-side complexity is the fact that CyberStudio's Frames window shows you the structure but not contents of frames, and the Preview window doesn't preview a framed page. It runs Java applets and any plug-in that a browser will support (though Shockwave causes rare conflicts) but, strangely, not animated GIFs. You still need to check your work in a real browser.

The way CyberStudio handles tables is more of a problem than in many WYSIWYG editors. To make a table, you drag and drop a Table tag from the Palette (unfortunately, there's no button or keyboard shortcut). To resize rows or cells, you need to Option-click on only the right side of the row or cell, then drag. CyberStudio does allow
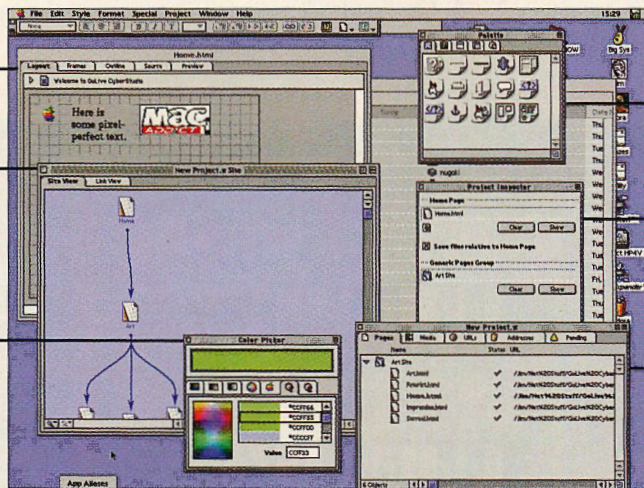
can repair them. Also, if you make any changes within the site—renaming a page or altering a much-used graphic—CyberStudio propagates the change sitewide, saving you buckets of time.

All in all, CyberStudio has much to offer. Sometimes it offers too much, resulting in a steep learning curve and some annoying quirks. And for all its features, it still doesn't free you from endless browser checks. Still, in a young field of Web site tools (Microsoft FrontPage and NetObjects Fusion among them), CyberStudio is easily my tool of choice. —*D. D. Turner*

GOOD NEWS: Powerful Web site management tools. Automatically checks links and warns of breaks. Pixel-precise layout generates clean HTML. Can edit HTML within application.
BAD NEWS: Steep learning curve. Often works in ways contrary to common sense. Hefty system requirements. Still must preview in browser. Screen hog.

reviews

Coda

The word *ballyhooed* doesn't even begin to cover the PR buzz around the Java programming language. Platform independent. Portable. So, cries the real-world user, what do I get out of it? Just some little Web page animations?

RandomNoise made a leap of faith when it created Coda, the first general-use application written entirely in Java. You can run Coda if you have a Java Virtual Machine installed on your Mac (we ran Coda with no problems under Macintosh Runtime for Java (MRJ) version 1.0.2 and with speedier but less solid performance under MRJ 1.5b1). Coda does its best to masquerade as a normal application, all the way to giving you a splash screen upon launch. Once up and running (and in about the time it takes to launch Microsoft Word 6), Coda presents a face that will warm the hearts of page layout pros. There's a page (with a user-definable default height and width in pixels), floating palettes, and a floating toolbar. It even can show rulers and snap-to (or not) grids and guides.

Making a page is fairly easy. RandomNoise did an excellent job in creating a user interface that will be familiar to most graphics application users, and the overall learning curve is gentle. Click a tool in the toolbar-like Controls Panel (so-called because, in technical terms, every element on a page, whether an image or scrolling text, is a Java control or *object*), then click and drag on the page to make a bounding box for this object. In a nice interface touch, holding down Shift while dragging constrains the box to a square. You can move, resize, align, even layer objects exactly as you would graphics in a page layout program. There's a healthy variety of tools, but if you find you miss, say, an arrow tool, no problem. Because Coda is written in Java, the application is modular by nature. That means anyone with a basic (well, maybe more than basic) grasp of Java can create a tool, and integrating it into Coda is as easy as installing a plug-in.

The other advantage of Coda's Java nature (aside from the wealth of caffeine-related puns available) is that anything you build can be dynamic. In other words, nothing has to just sit there. A button can move, change appearance when the mouse rolls over or clicks it, and even send messages to any other element. The last is the most powerful benefit of creating a Web page in Java: Pages not only can be flashy but also can have added functionality. For instance, you can place a small "window" icon on your Web page that will pop up into a full window (into which you can enter text) upon either Mouse Enter or Mouse Down. A user could type in comments, which could be sent via a simple HTML Post command. This feature saves space and load times, and it's pretty cool, to boot.

Still, all is not sweetness and light in Codaland. Although its Java nature endows Coda with all these capabilities (Don't like Coda's Windows-like appearance? Replace all the appropriate Java class files and graphics, and it's got a new look!), that same nature makes
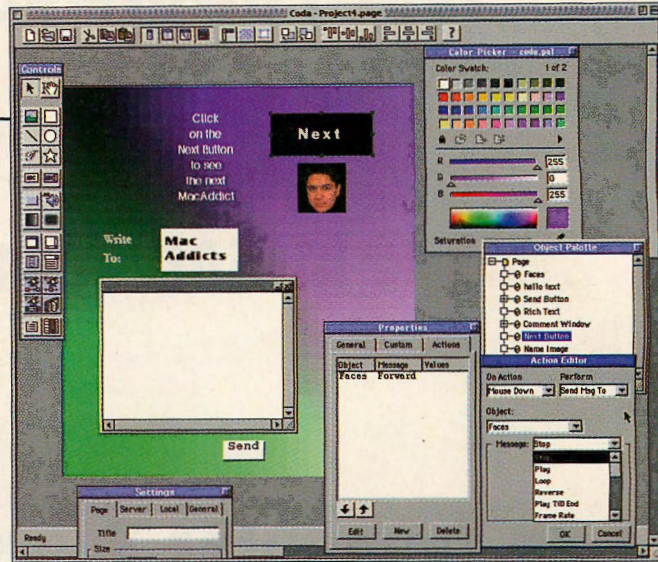
THE NEXT BUTTON, when clicked on, sends a message to the Flipbook object, which then displays the next *MacAddict* staffer's face.

regular and thorough use of Coda problematic. First, Java is far from a mature technology—not only is it shaky in heavy-use conditions (making it unsuitable for use in nuclear power plants, for example), but widespread acceptance is far on the horizon. RandomNoise implicitly acknowledged that limitation, positioning Coda as a Web page builder when it conceivably could work as almost any type of application, such as a replacement for Microsoft PowerPoint, on a Java-savvy system.

Second, even for Web use, Java is not a stand-alone solution. Although Coda can send its runtime files (the Java files needed to run the applets that comprise a page) to the user's browser in compressed, uncompressed, or CAB (for Microsoft Internet Explorer only) format, Web pages created by Coda are quite large—easily hundreds of kilobytes for a snazzy page. You can create small Java applets within Coda for inclusion within a plain HTML page—just build a "page" of small dimensions, and cut and paste the HTML tags Coda generates—but other, cheaper applications do a decent job of this, albeit lacking Coda's power. Also, many people browse the Web with Java turned off. Even though it's a simple matter for an astute Webmaster to write a Javascript that redirects such users to a non-Java page (and RandomNoise makes such a script available), this still means Webmasters must make multiple versions of a site.

Finally, there's Java's just plain weirdness—on rare occasions parts of applets won't work, or Coda itself will redraw a screen in a strange way. Being on the bleeding edge means sometimes you get a bit bloody.

Despite the its shortcomings, working with Coda is a joy, when not wrangling with Java issues. It's a good example of good design and offers a lot in an easy-to-use package. If this is the future, we could do a lot worse. —*D. D. Turner*

GOOD NEWS: Easy-to-use interface makes it a breeze to create pages. Adds unique features to a Web page. Easily extensible.
BAD NEWS: Java still isn't a mature technology. Most Web surfers won't access Java-only sites, so you must make non-Java versions of Coda sites also.
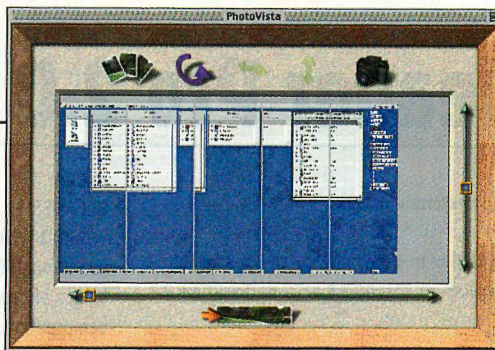
reviews

PhotoVista

COMPANY: Live Picture
CONTACT: 800-724-7900, http://www.livepicture.com
PRICE: $79 (street)
REQUIREMENTS: Power Macintosh, System 7.5 or later, 16MB of RAM (32MB recommended), 8MB of hard disk space


PHOTOVISTA'S MAIN INTERFACE needs only five buttons to handle most of the program's functions.

The idea of stitching together lots of photos for a QuickTime VR panorama never had much appeal. Live Picture's PhotoVista fills the gap between the creative impulse and the ability to carry it out by making it easy to create panoramas.

PhotoVista aligns a series of images or photos to form one continuous panorama (see below). Beats taping together a bunch of Polaroids. Just import the image files into PhotoVista, choose a lens (this controls the amount of image warping), and push the Stitch button. You'll soon have a panorama that you can save as a QuickTime VR panorama or in one of several other formats (including JPEG or BMP). Although the interface is simple, there are a couple of gotchas: Be sure to import your images in the order in which they should be stitched together (add them one at a time or name them sequentially), and give PhotoVista plenty of RAM, especially for a large panorama. Read the manual for lots of valuable tidbits.

PhotoVista also lets you alter your panoramas, mapping them to cubes or spheres (instead of the traditional cylinder). A panorama also can be saved as a screen saver, and if you have an Internet connection, a built-in FTP client lets you publish your panoramas in Live Picture's Panorama Gallery. Also, your panoramas can contain embedded VRML files, and the resulting image displays as it downloads—no more waiting for a huge file to come across the Net.
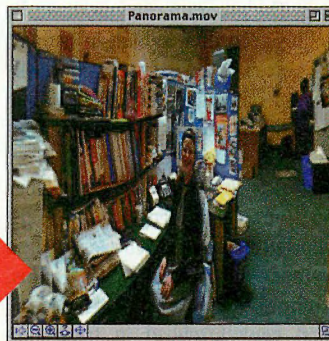
If you own a digital camera (or a scanner), you'll love PhotoVista. In fact, you'll probably be driving everyone around you nuts with pleas to look at yet another panorama of your bathroom. Nothing else does the same job as easily, or as cheaply.

—*David Reynolds*

FIND A DEMO of PhotoVista and a few sample panoramas on The Disc.

GOOD NEWS: Takes the work out of making QuickTime VR panoramas. Handles lots of image types. Simple interface.
BAD NEWS: Must put images in order manually. Requires lots of memory for larger panoramas.

Media Cleaner Pro 2.0

COMPANY: Terran Interactive
CONTACT: 800-577-3443, http://www.terran-int.com
PRICE: $359 (SRP)
REQUIREMENTS: 16MB of RAM; 2MB of free hard disk space (for minimal installation), 140MB (for full installation); MacOS 7.5 or later; QuickTime 2.1

FIND THE SIMPLETEXT movie *Max Rates the World* and a demo of Media Cleaner Pro 2.0 on The Disc.

In its previous incarnation (as Movie Cleaner Pro), Media Cleaner Pro was the tool of choice for cleaning and compressing QuickTime movies for presentation, CD-ROM, and the Web. The new Media Cleaner is a decided improvement, with invaluable features that allow you to process a wider range of media more easily than before.

The big deal in version 2.0, and the one feature that movie makers need most, is batch processing. The program can automatically clean and compress up to 2,000 files according to built-in settings, or to settings you tailor yourself. You can save compression tasks for the end of the day and process overnight. All that's missing is a timing function that will automatically start batch processing at a set time.

Actually, you can do that timing trick, and automate any number of other tasks, with AppleScript, now that Media Cleaner Pro supports it. Check out the scripts posted at Terran's Web site. The best one is one that has Media Cleaner monitor a folder for new clips, compress them, and move the compressed files to a "Done" folder.

How often have you slapped your forehead in frustration because you wanted to work on something, but your Mac was tied up compressing a movie? Media Cleaner Pro 2.0 now has the ability to suspend and resume compression without introducing glitches into your media. Try that in Adobe Premiere!

Speaking of Premiere: The included export module plug-in for Premiere lets you compile Premiere projects directly into Media Cleaner. That avoids the time- and space-wasting step of separately compiling an uncompressed movie in Premiere and then importing it into Media Cleaner.
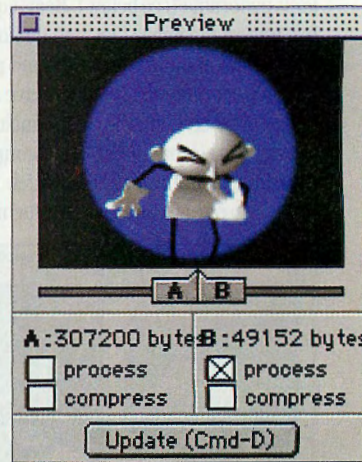
More media clips are in use on the Web than ever before, and Media Cleaner supports more Web formats too, including audio formats. You can generate RealAudio and RealVideo, AIFFs, ClearVideo, and VDOLive, as well as the usual QuickTime choices. The new 8-bit palette generator will speed movie playback with minimal

MEDIA CLEANER'S WIZARD WHISKS you through the basics of media compression.

loss of picture quality. Want to compress your movie's soundtrack without recompressing the whole movie? Media Cleaner Pro does that, too. Plus, you can tag your movie with HTML for showing the QuickTime slider, playing the movie on completion of download, and other Web options.

The Settings window is where most experienced media makers will spend their time. It beats the standard QuickTime compression dialog by adapting settings to the capabilities of each format. Overall, Media Cleaner Pro's twiddle factor should be high enough for the most obsessive tweaker—for example, check out the new gamma, brightness, contrast,

THE SMALL PREVIEW WINDOW makes it a bit hard to see the before and after effect of settings changes.

and saturation controls in the Dynamic Preview, which shows a split-screen, before-and-after view of your movie. Movie Cleaner incorporated this feature, but it works more smoothly now and gives you more information. The Adaptive Noise Reduction feature doesn't do much more than the similar tools in Movie Cleaner, but the earlier version's blurring and stray-pixel elimination were already top-rate.

My one gripe with this program is the wizard. Not that it's a bad wizard, as wizards go—you can pick up more practical compression lore from the wizard screens than can be found in any book—but I for one would be just as happy to bypass all the polite question-and-answer stuff for the Settings window's seductive panoply of adaptive sliders. (Avoid the Wizard by dragging movies into the Media Cleaner icon—you'll open directly to Settings.)

If media is your metier, you need this tool. The $129 upgrade is a no-brainer; the $359 full price is a tad high, but struggle with Premiere's limited compression abilities for a while and you'll pay the money gladly. —*Steven Anzovin*

Batch Processing

QuickTime tedium, begone! If you're tired of compressing large numbers of movies one by one, Media Cleaner Pro can do them all for you automatically. And Terran Interactive has created one of the easiest batch processing routines I've seen. Here's how to whip up a big batch of movies:

STEP 1: In the Finder, Shift-select the files you want to batch process— movies or audio files— then drag them onto the Media Cleaner icon. Media Cleaner will launch and open a new batch file.
STEP 2: If all your media will be compressed the same way, select all the movies (Command-A) and click the Default button to choose a default compression from the Movie Settings box. Shift-select movies and double-click to apply settings to groups of movies.
STEP 3: Need a custom compression setting? Open the Settings window (choose Settings from the Windows menu) and twiddle away. Then save as a new Settings file.
STEP 4: Hit the Start button and away you go.

GOOD NEWS: Batch processing and AppleScript control. Wide support for Web and Wintel media formats. Plug-in for direct export from Adobe Premiere. More control over compression parameters.
BAD NEWS: Pricey if you're not upgrading.

Astra 1200S

COMPANY: UMAX Computer
CONTACT: 510-651-4000, http://www.umax.com
PRICE: $449 with Adobe PhotoDeluxe, $625 with Adobe Photoshop (street)
REQUIREMENTS: 68030 or faster, System 7 or later, 8MB of RAM for PhotoDeluxe, 16MB of RAM for Photoshop, CD-ROM drive

THE ASTRA 1200S produces excellent scans at a good price and has a hip aqua-tinted hinge.

UMAX bills the Astra 1200S as "the mainstream business scanner," and to us, that implies several things. The machine should be easy to set up and to use and should generate reasonable output quickly with default settings. Why? Because average businesspeople don't find tweaking a scanner for hours on end to be fun (Mac addicts don't either). For them, it's a waste of time. So how does the Astra 1200S stack up? Very well indeed, especially because the box includes a long, Mac-to-Mac, 25-pin SCSI cable and a terminator. A cable may not sound like much, but if you've ever had to make a return trip to the local computer store to pick one up, you'll appreciate it. And for small businesses, which may not buy SCSI devices often (or have an IS person around to remind the buyer to pick up a cable), including a SCSI cable can be the difference between a satisfying experience and—gasp—trying to get after-purchase customer service from a computer superstore.

The scanner was simple to set up and get started, although my box was missing the quick set-up guide (more on that below). The scanner is available in two versions, one with Adobe PhotoDeluxe and one with Adobe Photoshop 4.0. Both versions also come with NewSoft's Presto! PageManager, an optical character recognition (OCR) and document management package. Billed as a "scanning operating system," it automates OCR functions and allows you to store scans for later use, such as dropping scans into business fax software or email packages. Kind of a handy idea, but few people

do enough scanning to really see this package increase their productivity. The cool (and more useful) utility is "copy," which scans and then prints whatever is on the bed.

The scanner has an optical resolution of 600 x 1,200 pixels, captures 30 bits per pixel (more than enough quality for most applications—it's better than the resolution of the scanners used at some full-color national magazines), and has a legal-size scanning area. A cold-cathode lamp ensures that as the scanner "warms up" during heavy scanning sessions, colors won't wash out or become distorted. Like all UMAX scanners, the Astra 1200S features Bit Enhancement Technology (BET), a proprietary UMAX hardware technology that supposedly enables UMAX scanners to capture more colors and tones and to provide smoother histograms of color when scanning. You can't turn BET off, so it's tough to tell what the technology actually does, but the color and scan quality of the Astra 1200S is excellent. The scanner reproduced our colors well and preserved even small details. We did a lot of scanning in the default modes (as we suspect many business users do), and we were more than satisfied with the results. The Astra 1200S also is reasonably fast, taking about 75 seconds to scan an 8½-x-11-inch sheet in color mode at 300 dpi. Grayscale scanning (done at 10 bits) also was quick (15 seconds for the same sheet) and of high quality. The TWAIN acquisition software isn't the best we've seen (Epson still holds the high ground), but for the average, default-using user, UMAX's software works problem free.

The scanning software comes on CD-ROM, as does the manual. A respectable savings of paper—and cost—for UMAX, but manuals on disc are always a hassle, no matter how well they're done (and this one is done pretty well, with easy-to-follow directions throughout). The downside is, if the quick-start manual is missing from your box, as it was from ours, you need to install the CD to get the customer service number—which could be a problem if you need customer service because something is wrong with the CD. Still, our call to customer service asking how to set up the scanner was answered quickly and handled professionally, and if we really were the small real-estate shop we said we were, we would have had no complaints.

Without an option for a transparency adapter or a sheet feeder, this machine probably doesn't fall into the hard-core professional scanner category. But for Web use, SOHO (small offices/home offices), or lower-intensity graphics users, this scanner performs well at a reasonable cost. The lack of a paper manual for scanning software is a disappointment, but if the trade-off is the included SCSI cable, we can live without it. —*Chris Charla*

NO, THAT ISN'T A REAL RACE CAR on the page, but the Astra 1200 almost makes it look like one.

GOOD NEWS: Excellent scan quality and color. Easy to set up and use. Good technical support. Comes with SCSI cable.
BAD NEWS: Lack of printed manual. Light software package. No options for transparency scanning or sheet feeder.

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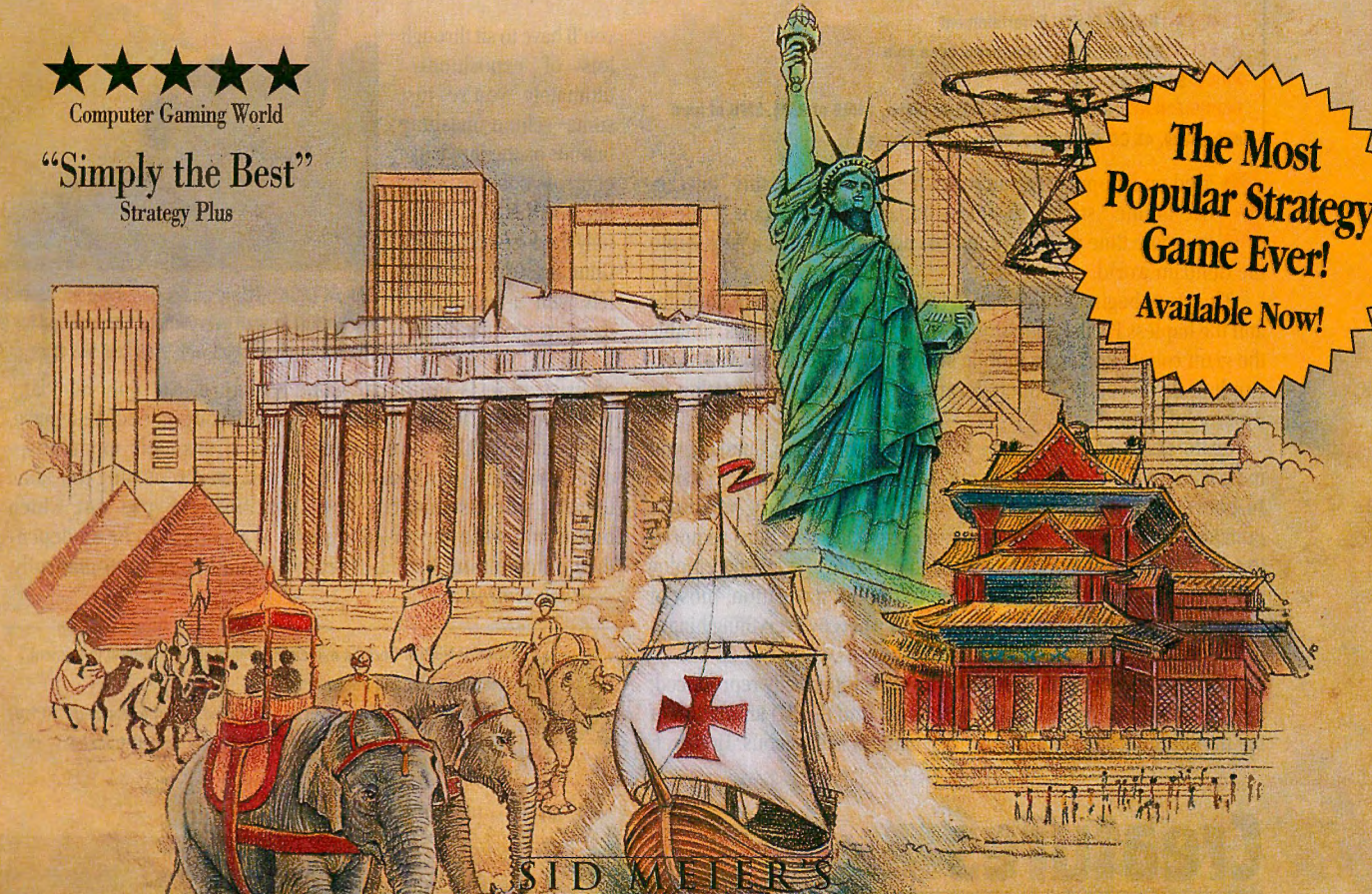
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reviews

Gundam 0079: The War for Earth

COMPANY: Bandai Digital Entertainment
CONTACT: 888-992-9000; http://www.bdec.com
PRICE: $29.95 (street)
REQUIREMENTS: 80MHz PowerPC 601 or faster, 16MB of RAM, 5MB of hard disk space, 4X CD-ROM drive, thousands of colors

Based on a popular Japanese sci-fi cartoon series, this "interactive anime" strives to please Japan's diehard fans while at the same time provide American newcomers with a entree into the Gundam world.

The story begins with a war between rebellious space colonies and the hapless Earth Federation. With its futuristic weapons, notably the giant robots known as mobile suits, the Duchy of Zeon has overrun half the earth; now the federation's last hope is to develop its own mobile suits.

As the accidental pilot of the federation mobile suit Gundam, you must fend off the enemy and shepherd this prototype safely to Earth. In between animated segments, you battle by juggling weapons, punching buttons, and figuring out the sequence of actions required to save you and the federation. Although a couple of segments employ a shooting gallery-type view or QuickTime VR navigation, most of the gameplay proceeds in a linear fashion whereby everything hinges on hitting the right button.

The original series' cast and plot are nearly perfectly reproduced, the disc includes lots of background info, and the 3D animation of the mobile suits and other outlandish gadgets is gorgeous. However,

you'll have to sit through lots of exposition—ultimately, you're just some schmo mashing buttons on the Gundam's control console. And because this disc covers only the first third of the Gundam story, you'll be left with a handful of dangling plot threads.

An additional source

ZAK ATTACK!: These pesky one-eyed miscreants are lurking in wait everywhere, just waiting for a chance to whack you with their red-hot axes.

of frustration is the linear game structure. Not only does any deviation from the One True Path result in your immediate demise, but you must also save compulsively at dramatic moments—or else retrace your footsteps over and over, repeating the same lengthy video sequences until you finally figure out which button you were supposed to push. If a game is to be so dependent on continual saving, it really should happen automatically. —*Mark Simmons*

GOOD NEWS: Serious eye candy. Painstakingly faithful to original. Heaps of plot and background.
BAD NEWS: Brief story can be completed in just a few hours. Strictly linear gameplay. Constant saving is an annoying distraction.

Creatures

COMPANY: Mindscape
CONTACT: 415-897-9900; http://www.creatures.mindscape.com
PRICE: $35.95 (street)
REQUIREMENTS: Any Power Mac, System 7.5 or later, 35MB of free hard disk space, CD-ROM drive

Creatures is an attempt at making artificial life fun. You get to play god to a race of adorable creatures called the Norn. You have to teach them language, show them where to eat, and keep them away from the evil Grendel monsters. Eventually, they'll mate and have Norn babies. You can breed them and trade your Norn with other people over the Internet.

Or you *could* if the developers hadn't used the Microsoft Foundation Classes (MFC) to create the Macintosh version. MFC is a framework that's part of Microsoft's Visual C++ environment. For Windows, MFC creates good programs. For the Mac, though, performance is dog slow, even on a Power Mac 8600/200. MFC essentially translates Windows calls into native Macintosh code, turning the Mac into a virtual Windows machine, but with none of the optimization you'd expect from an emulator.

To put it mildly, this MFC conversion sucks. Installation is a nightmare, with 101 items plopped into a folder, including 16 applications (for instance, there's a little Norn-eye's-view window

that is its own application). Some of these don't even have proper Mac menus, and the multiplicity of separate programs slows the game's performance even further.

Just getting through the program was a

THE NASTY GRENDELS spank your Norns, and try to teach them incorrect words.

chore. The cursor lagged way behind movement. Scrolling was abysmal. The game was not at all responsive (though on a Pentium 100, Creatures was playable). There's no excuse for this.

We have other complaints about gameplay, but these are way overshadowed by our gripes about performance. If I were a Windows developer, and saw how badly a program created with the Microsoft framework performed, I might think that the Mac were slow or something (call me paranoid). Those big huge Norn eyes can't out-cute a dog of a game. —*Kathy Tafel*

GOOD NEWS: Nice box. Cute art.
BAD NEWS: Game ported using Microsoft Foundation Classes. Slow. Unresponsive. Breaks Mac OS interface guidelines.

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color monitor and CD-ROM drive. Also accelerated for Power Macintosh.

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reviews

Heroes of Might and Magic II

COMPANY: Studio 3DO
CONTACT: 800-336-3506; http://www.3do.com
PRICE: $38.95 (street)
REQUIREMENTS: 68040 or faster, System 7.5.3 or later, 50MB of hard drive space, 8MB of free RAM (we recommend 10), CD-ROM drive

In our March '97 issue (p79), we warned you against Heroes of Might and Magic, not because of the game, but because of the port quality. With the sequel, Heroes of Might and Magic II: The Prince of Loyalty, we can skip right to gameplay, because there's nothing wrong with this version technically.

The game mechanics haven't changed much from the original: You still control castles and heroes, and your goal is to take over the other castles and defeat all other heroes on the gameboard. There are six different types of heroes and castles—barbarian, sorceress, wizard, warlock, necromancer, and knight—which control different species of fantastic creatures—goblins, druids, golems, rocs, mummies, and calvary, to name just a few. Castles provide troops and the funding needed to hire them. To improve both troops and income, a hero needs to claim control of a variety of building materials scattered throughout the countryside. Improving the fortifications requires wood and stone and leads to better defense, whereas mercury, gold, and sulfur allow you to upgrade the mage tower which gives a hero more spells to cast. Opposing heroes vie for control of these resources.

The sequel adds more hero types (necromancer, wizard) and their associated monsters (vampires, halflings). There are more buildings on the playing field, and you can climb a tower to get a glimpse of the surrounding countryside, even of places you can't physically reach yet. The castles

TURN ON THE GRID to see where your creatures can move. Dead warriors slump to the ground and remain on the battlefield.
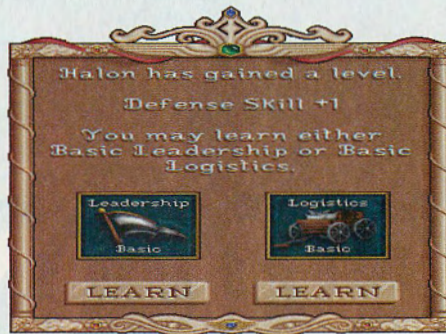
WHEN A HERO GAINS an experience level, he or she can learn a "skill."

have been upgraded, with more options: You can build a captain's quarters, turrets and a moat for defense. If a hero isn't in the castle when it's attacked, the captain leads the defense. You can also upgrade the creature habitats: cavalry become champions, giants become titans, and liches become power liches.

Battle mechanics are slightly different from the original. Your hero gets a number of spell points, and once he or she runs out, no more spells may be cast. There are also some new battle spells: the "death ripple" is amusing to watch as it ripples along th screen, wounding all living creatures in its path. The death ripple can be countered with a "holy word" spell, which clouds the video and wounds undead creatures, such as vampires and liches. If your hero runs out of points, you can take him or her to a castle to recharge (but not during battle).

Completely new in the sequel are campaign intros which introduce the opposing forces. You can choose to play the good (outcast and honorable) or evil (in power but oppressive) side. We found the campaign scenarios difficult after the first few levels. If you get stuck, play a standard game, and work up to beating the expert levels at the highest difficulty rating, and then go back to the campaigns.

The game is zippy on a standard Power Mac. However, if you're running on a 68040, turn off ambient animations and computer opponent animation. Our only nit to pick with Heroes II is that we wish that ports would use the standard file dialog for saving and opening games, and that the light source for shadows was in the Mac-standard upper left corner. Still, if you're a role-playing or strategy fan, you'll have tons of fun with Heroes of Might and Magic II. —*Kathy Tafel*

WANDER AROUND GATHERING resources, but don't wait too long to attack the other heroes.

GOOD NEWS: Completely upgraded. Runs well on '040s. Better port than original. Fun for weeks, not hours.
BAD NEWS: Nonstandard saving mechanism. RAM-hungry.

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MATT GROENING

cd-roms

Each month five CD-ROM titles are reviewed by three Mac addicts who hold vastly different opinions on just about everything. This month was no exception. Mark loved a product that Judy kind of liked that Joe hated. Then, Judy went nuts over a title that both Mark and Joe loathed. End result: mediocre ratings for several discs that at least one person thought was freakin' awesome. Although this may sound unfair, we've found that it's the best route to the fairest review overall. After all, the real stars truly shine, and everyone can agree on that. —*Nikki Echler*

Wines of the World (Gold Edition)

COMPANY: Multicom
CONTACT: 800-850-7272,
http://www.multicom.com
PRICE: $19.95 (street)
REQUIREMENTS: 2X CD-ROM,
System 7.1 or later, 68040 or faster, 8MB of RAM

Perhaps a nice Merlot with your Big Mac? Or would a light Chardonnay taste better with the fries? The only thing more nerve-racking than picking the perfect wine for the perfect meal is using this disc to do it.

From reading just the box, this disc sounds rich: more than 40,000 wine reviews; expert insights into wine making and appreciation; maps, photos, and videos describing vintages, varietals, and wine regions; and buying tips. Your sophisticated hopes, however, are quickly dashed with the first taste of the search engine. It's nearly useless at searching anything—including good, cheap wines.

You do get some pretty pictures and paragraph-long explanations on wine making, highlighted with video insights from wine authority Ronn Wiegand. But the editors apparently spent too much time in the tasting room, as evidenced by oft-repeated sentences and punctuation errors.

For $10 more, you can buy the disc bundled with a decent book on wines. Or, better yet, you could buy a couple of bottles of vino and do your own research.

EVEN OPTIMISTS WILL AGREE that this wine glass is more than half empty.

The Last Words:

Mark: Wine makes me sleepy, and so does this disc. If you're a globe-hopping wine connoisseur looking for a database of new vintages to sample, by all means help yourself, but I'll pass on this round.

Judy: The opportunity to create something tasty got completely crushed. Really. This disc turns multimedia grapes sour.

Joe: A terrible search engine, bad editing, and grainy QuickTime videos. Even worse, of the 40,000 reviews, I couldn't find any mention of the Boone's Farm. Hmmm.

Human Vision

COMPANY: Interactive Eye
CONTACT: 207-725-3516,
http://www.iknow.net
PRICE: $75 (SRP)
REQUIREMENTS: 2X CD-ROM,
System 7.1 or later, PowerPC only, 12MB of RAM

BRILLIANT USE OF MULTIMEDIA lets you see what's really going on behind those eyes.

As inventive as it is interactive, this small-time science title reveals the inner workings of the eye through an effective 3D blend of video science.

An awesome QuickTime sweep through the eyeball's innards takes you past such sights as your rods, cones, and cornea. Once inside, you can dawdle over the details via dozens of video graphics, or you can get a 3D glimpse at how all the parts work together. A few hands-on sections also let you test your vision and experience optical illusions, while the hard-core scientific principles surrounding the development of the eye, the properties of light, and proper eye care are explained in down-to-earth terms. It's simple, straightforward, and, of course, eye-catching.

The content appears to be 20/20, but the navigation has room to improve. For example, you can move in only one direction in 3D mode, which turns one of the disc's best features tedious. Loading time can also take one too many blinks of even an uncritical eye.

The Last Words:

Mark: As promised, you'll find just about all there is to know about vision on this disc, from the physics of sight to the care and feeding of your eyeballs.

Judy: Glory be, I can see! The disc suffers some at the hands of the navigation developers, but the content folks came through with their end of the deal. What a tour!

Joe: You just have to love a disc that doesn't require hard-disk installation and has so many good videos. I just wish other CD makers could see the light. (Pun absolutely intended.)

Gary Bernstein's Secrets of Professional Photography

COMPANY: Diamar
CONTACT: 800-234-2627,
http://www.diamar.com
PRICE: $30 (street)
REQUIREMENTS: 2X CD-ROM,
System 7.1 or later, 68030 or faster, 8MB of RAM

A celebrity photographer invites you over to his place to teach you the tricks of his trade. The catch? You have to sit through a slide show of 400 of his photos. And you can't touch any of his gear. You just listen to him talk. And talk. And talk.

Sure, host Gary Bernstein knows his business. He easily briefs you on basics of adjusting film or shutter speed and playing with light to produce better-than-Polaroid photos. He also hands out plenty of advice on how to stage pics for guys, gals, and groups.

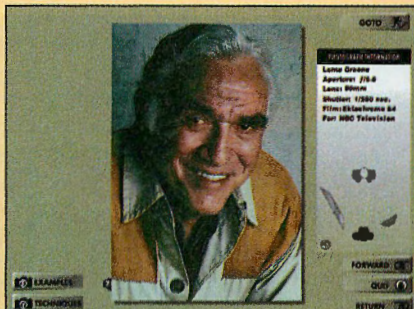While that might seem picture perfect to Nikon neophytes who don't know an F-stop from a stop sign, others may want to see the bigger picture—something Bernstein doesn't deliver. For example, it would be great if the disc included a multimedia workshop, where virtual photogs could play with a cyber-camera to see what kind of picture would be created using a small aperture with a fast shutter speed. In only a few instances do you actually get to see the photographic effects of all that camera-control fiddling.

BERNSTEIN'S SECRETS sound better when they're left untold. Everyone say, "cheese."

The Last Words:

Mark: Lots of diagrams of how shots are set up, lots of comparisons of the same scene with different options, and no shortage of useful advice.

Judy: Given that basic photography books can be a total bore, this disc has its merits—primarily, a Photography 101 short-course—but beyond the basic introduction, I'd "shutter" it in the basement.

Joe: I spent a few hours paging through the disc and learned little more than the importance of removing the lens cap.

Deepak Chopra: The Wisdom Within

COMPANY: RandomSoft/Crown
CONTACT: 800-788-8815,
http://www.randomhouse.com
PRICE: $39.95 (street)
REQUIREMENTS: 2X CD-ROM,
System 7.0 or later, 50MHz 68030 or faster, 8MB of RAM

Positive energy has little trouble flowing through much of this visually rich New Age workshop hosted by author Deepak Chopra. Turn that frown upside down with a stroll through the Field of Infinite Possibilities for total mind well-being. Or nurture your physical side with a trip through the Sacred Space, which comes complete with tips on embracing Mother Earth's natural energy.

And yet, despite all of the feel-good philosophy that will keep self-help folks in meetings with their inner selves for weeks, scrolling through the endless text boxes of the Living in Balance section would make even Gandhi violent. With no hyper-linked glossary, the big words spread evil t h o u g h t s through your psyche, until you've fallen off this wagon of enlightenment.

NEW-AGE NOVELTY needs a little more self-help to enlighten us.

The Last Words:

Mark: I wouldn't rank this as "Spiffy" per se, but suspending my natural cynicism, I found it a serviceable intro to the Chopra ethos.

Judy: If you're skeptical, critical, or simply not a believer in anything Eastern, you'll have a hard time with this disc. But if you're curious, wondering, and want a multimedia workbook to manage your life for life, it's worth the investment.

Joe: Sometimes it made perfect sense. Other times it left me scratching my head. And I'm just talking about the setup, not the message.
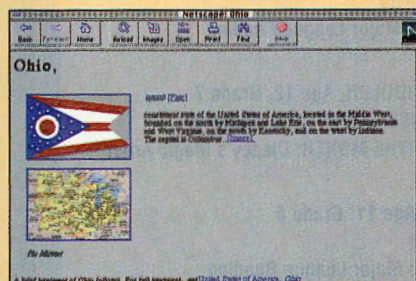
Britannica CD 97

COMPANY: Encyclopædia Britannica
CONTACT: 800-747-8503,
http://www.eb.com
PRICE: $150 (SRP)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, IIci or faster, 8MB of RAM

Encyclopædia Britannica, the first friend of many a young researcher, has crammed several lifetimes of learning into its latest offering. For a whopping $150, you get 44 million words with 400,000 hyperlinks to 65,000 subjects, plus the standard Web link. The one-disc info dump comes with an easy-to-use Netscape Navigator interface that lets you search by typing in standard questions instead of just "Find this and that but not that." Nice.

However, the ultimate question goes unanswered: Why so few sounds, graphics, and movies? Look up the Beatles, and you'll get a page of text but no pictures of John. Search on cats to find dozens of articles but no cute kittens with their paws draped over a laundry basket.

Which leaves us with a question you *can't* type into the CD's search engine: Is any disc that lacks significant m u l t i m e d i a worth over a hundred bucks? We doubt it.

WEIGHTED DOWN WITH WORDS but meager with movies. And pictures. And sounds. And fans.

The Last Words:

Mark: Not a stellar product. It must have seemed like a good idea to use a Web browser as a browsing interface—it does have familiar navigation controls—but jeez, people, your HTML is so 1995.

Judy: Spend time with the manual, modify your searches, and learn all sorts of random stuff!

Joe: OK, Britannica folks, bonus question: What year is it? If you answered 1997, then you should know that you're way behind the multimedia curve for a CD encyclopedia.

Kidz Stuff

Local Mac addicts from the Brisbane schools size up kids' software to see what fits.

Math for the Real World

COMPANY: Davidson and Associates
CONTACT: 800-545-7677, http://www.education.com
PRICE: $30 (street)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 68040 or faster, 12MB of RAM

A s a rising rock star in the real world of math, you and your band need to struggle through a 10-city tour, earning enough money along the way to produce a killer music video that will send your song soaring up the charts. How do you raise the cash? Do the math, yourself. Use fractions to keep your drummer from skipping out on his dinner bill, budget money for new equipment, and learn all about time zones to reach your next gig on time. Cash bonuses are awarded for correct answers, and glory awaits you in the recording studio.

GOOD FOR GRADES: 5 to 8

LIKES: "You need to use your brain and need to know your math. The game has great sound and good color. It gets going right away. You also have something to work for (a music video)." ▪Benjamin

"There was good music and fun, short games." ▪Devin

"I liked that you can make a music video with explosions. I liked the easy math problems." ▪Brian

"I like how you get to drive in a car. I like how you have to get gas and eat." ▪Justin
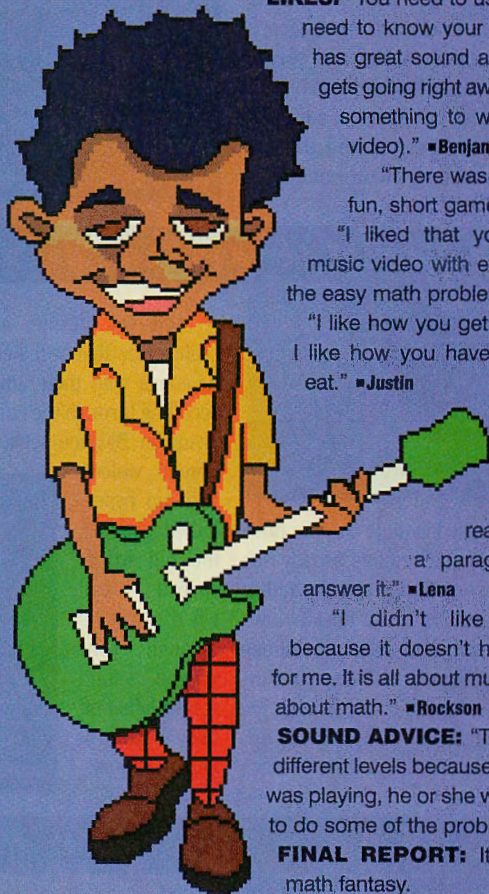
DISLIKES: "It's kind of boring unless you really like to read a paragraph and then answer it." ▪Lena

"I didn't like this program because it doesn't have enough info for me. It is all about music, it's not really about math." ▪Rockson

SOUND ADVICE: "They should have different levels because if a smaller child was playing, he or she would not be able to do some of the problems." ▪Amanda

FINAL REPORT: It's a rock 'n' roll math fantasy.

Meet the players...

AMANDA OLSEN, Age 10, Grade 5
EXPERTISE: Arm wrestling
PICK OF THE MONTH: Math for the Real World

DEVIN NIXON, Age 10, Grade 5
EXPERTISE: Mountain climbing
PICK OF THE MONTH: Major League Reading

JUSTIN PEREZ, Age 10, Grade 5
EXPERTISE: Baseball
PICK OF THE MONTH: Major League Reading

ROCKSON YAN, Age 12, Grade 7
EXPERTISE: Computers
PICK OF THE MONTH: Major League Reading

DANIEL LAM, Age 11, Grade 6
EXPERTISE: Shakespearean soliloquies
PICK OF THE MONTH: Math for the Real World

BENJAMIN WILSON, Age 11, Grade 6
EXPERTISE: Piano tuning
PICK OF THE MONTH: Major League Reading

LENA RUDOLPH, Age 12, Grade 7
EXPERTISE: World-class modeling
PICK OF THE MONTH: Disney's Magic Artist

BRIAN SCHROEDER, Age 11, Grade 6
EXPERTISE: Whistling
PICK OF THE MONTH: Major League Reading

YOU'LL WANT TO ROCK 'N' ROLL all night and do math every day.

Page 78 of 116

Major League Reading

COMPANY: Sanctuary Woods Multimedia
CONTACT: 800-943-3664, http://www.ah-hah.com
PRICE: $29.99 (SRP)
REQUIREMENTS: 2X CD-ROM, System 7.0 or later, 68030 or faster, 5MB of RAM

What's more intimidating than a Randy Johnson fastball? How about having to answer reading problems in order to score the game-winning hit? If you want your favorite team to win the World Series, get ready to sharpen your spelling skills and brush up on your vocabulary words. On defense, select from one of five pitches, and then correctly answer a word teaser to ring up a strikeout. At bat, fill in the blanks of a word problem to smash home a run.

GOOD FOR GRADES: 3 to 6

LIKES: "The power-ups are fun. You're supposed to catch a base-ball, but you could catch a bird, or a dog could bite you." ∎**Daniel**

"I like the way that it is like a real game and you do the same things like pitch, bat, and other things." ∎**Amanda**

"It has great graphics, and it is easy to play if you know how to read and spell." ∎**Benjamin**

DISLIKES: "You have to know a lot about many different baseball teams, and I don't." ∎**Lena**

SOUND ADVICE: "I would improve this program by having infinity power-ups." ∎**Brian**

FINAL REPORT: Reading for sport strikes a chord with major league fans.

DIVE INTO A STORY and slide safely into a home-run hit.

Dragon in a Wagon

COMPANY: Diamar Interactive
CONTACT: 800-234-2627, http://www.diamar.com
PRICE: $29.95 (street)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 25MHz 68030 or faster, 8MB of RAM

Preschoolers itching for their own set of wheels can rely on the wagon dragon to teach them everything there is to know about getting from here to there—be it over the river and through the woods or on a 12-lane superhighway. The dragon and his assistant, Megan, host five different games exploring every angle of the vehicles we use every day. Get Megan to the finish line in the Crossroads Puzzle by matching a vehicle to its terrain, answer quiz show questions on transport trivia to reveal a hidden picture, create your own vehicles in the lab, or take your road warrior to the Art Center for a do-it-yourself custom paint job.

GOOD FOR GRADES: Preschool to K

LIKES: "It was fun to make different vehicles and learn how they work. It also has good sound and lots of things to do." ∎**Benjamin**

"I like the way they gave you different types of games to play. I also like that they gave you choices of what to put in your picture." ∎**Amanda**
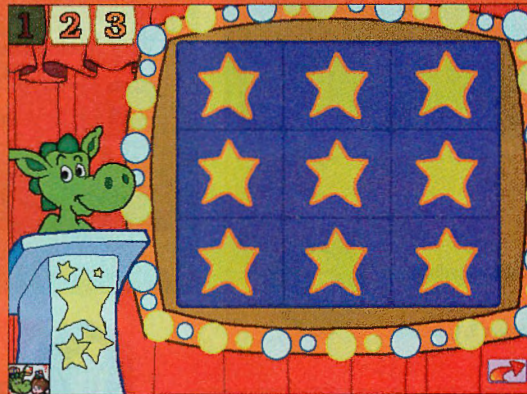
DISLIKES: "It's kind of childish. It takes too long and is too slow." ∎**Lena**

"The dragon isn't realistic and it's too small. Some vehicles don't go as fast. The vehicles look bad." ∎**Daniel**

SOUND ADVICE: "I would have more colors and have the girl do something." ∎**Justin**

FINAL REPORT: The wagon dragon knows all the highway how-to's.

WAGON DRAGON makes for great car talk at parties.

A Color Clown Comes to Town

COMPANY: Diamar Interactive
CONTACT: 800-234-2627, http://www.diamar.com
PRICE: $29.95 (street)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 25MHz 68030 or faster, 8MB of RAM

If your preschooler has yet to learn the difference between red, orange, green, and blue, it might be time to call in the clowns, or at least the Color Clown and his sidekick, Laura. The comic duo teaches kids the properties of color (hues and shades, primary versus secondary) as well as some basic reading skills via an interactive coloring book. (Kids can act as the narrator by recording their voices over the story.) If kids get bored with the book, they can switch to mixing paint for Laura's art projects in the mixing room, or matching everyday objects with their colors in the squirting gallery.

CLEVER CLOWN provides plenty of paint for playing with color.

GOOD FOR GRADES: Preschool to K

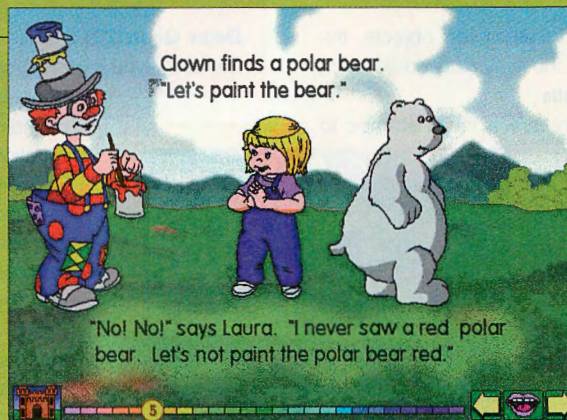**LIKES:** "It's good for preschool kids to learn how to paint. It helps kids learn their colors and easy words." ∎**Rockson**

"It is fun coloring pictures and drawing things. Plus, it is also cool to mix colors to make other colors you want." ∎**Benjamin**

DISLIKES: "The story is bad, the squirting colors place is too easy, and in the mixing color place, you could mix only three colors together." ∎**Daniel**

"It says the same things over and over again, and it needs more sound effects." ∎**Benjamin**

SOUND ADVICE: "I would have more stuff with the clown. I would have more games." ∎**Justin**

FINAL REPORT: Clowning around with colors is perfect for preschoolers.

Let's Pretend Volume 5: The Past Is Our Playground

COMPANY: Ringling Multimedia
CONTACT: 800-762-6443, http://www.mindmagic.com
PRICE: $19.95 (SRP)
REQUIREMENTS: 2X CD-ROM, System 7.0 or later, 68030 or faster, 8MB of RAM

Flash the Firefly wants you to know that your attic is more than just a cleaning project. Click on objects strewn across the room, and Flash whisks you away to such sites as ancient Greece, the Roaring '20s, and the Ice Age. Each destination teaches spelling and vocabulary, and is loaded with hidden pop-up facts about history, science, and just-for-fun trivia.

FLASH FLUTTERS, flickers, and fades into history just by clicking on junk.

GOOD FOR GRADES: 1 to 4
LIKES: "It taught me a lot of things about different times in the past, like in Ancient Greece the first Olympic games were held almost 3,000 years ago." ▪Lena
DISLIKES: "You don't get to answer the questions that they ask you. They say, 'Do you want to go to the past? OK, let's go!' You don't get to decide." ▪Brian
SOUND ADVICE: "Let you answer the questions." ▪Daniel
FINAL REPORT: Historical blast to the past fails to wow us now.

Highlights Hidden Pictures Workshop

COMPANY: Palladium Interactive
CONTACT: 800-910-2696, http://www.palladium.net
PRICE: $29.95 (SRP)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, 68040 or faster, 8MB of RAM

Highlights magazine's ever-popular hide-and-seek picture puzzles advance toward the modern age with this digital workshop full of the perplexing collages. Young players can create colorful pictures by finding hidden objects in scenes ranging from Grandma's kitchen to a dinosaur barbershop. When kids have uncovered all the hidden hot spots, they can click over to the creativity studio to customize storyboards or produce their own artistic brain teasers.

GOOD FOR GRADES: K to 3
LIKES: "I like that when you found all of the objects, the picture would be colored in. I like the way you could paint instead of just finding pictures." ▪Justin
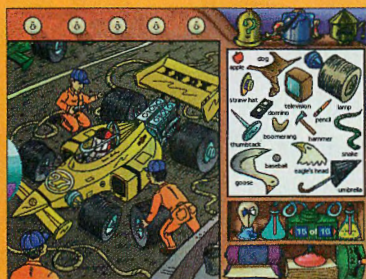"You could mix colors, and there are a lot of stamps to use." ▪Daniel
DISLIKES: "The sound effects are OK, but they're the same each time you click on something." ▪Benjamin
"Finding the pictures is too hard." ▪Devin
SOUND ADVICE: "I would have more instructions. I would have more games to play." ▪Justin
FINAL REPORT: The highlights are hard to find.

HIGHLIGHTS HIDES the pictures and the fun.

Disney's Magic Artist

COMPANY: Disney Interactive
CONTACT: 800-900-9234, http://www.disneyinteractive.com
PRICE: $35 (street)
REQUIREMENTS: 2X CD-ROM, System 7.1 or later, PowerPC only, 16MB of RAM

Just a touch of that ol' Disney magic, a PowerPC, and a ton of RAM, and suddenly, everyone is an artist. Hundreds of stamps, characters, costumes, poses, and backgrounds mean that kids are limited only by their imaginations and not by their drawing skills. Drawing lessons led by Disney animators, however, teach kids how to create their fave Disney characters all on their own. Those with the guts to go freehand can paint with everything from a crayon to a toothbrush to a whipped cream can. Yum.

GOOD FOR GRADES: 2 to 7
LIKES: "It has good pictures and sound, plus you get vivid colors. It makes you feel like you are an artist, and it looks good and makes you feel good when you're done." ▪Benjamin
"Good sound effects. There are a lot of backgrounds. There are a lot of stamps." ▪Daniel
DISLIKES: "It goes too slow and takes too long. It doesn't give enough directions." ▪Lena
"When you press on something, it doesn't tell you what it does. There are some places that you don't even know are there." ▪Daniel
SOUND ADVICE: "Have the game for all computers, not just a Power Mac." ▪Benjamin
FINAL REPORT: Kids without Power Macs will miss out on this magic act.
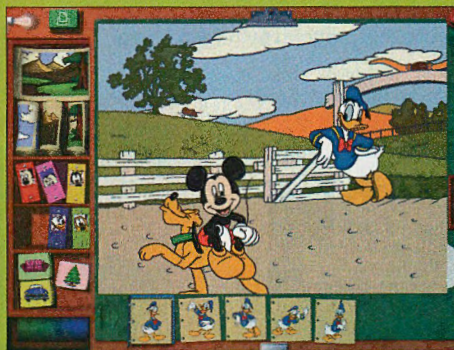
SKETCH MICKEY or create your own goofy drawings.

Ask Nikki

Dear Nikki,

My high school is making everybody take a class called "computer literacy" including ME!!! I have had a computer since I was FOUR!! I have 10 years of experience using computers and they are making me take computer literacy!!! All I'll be doing is learning how to type, but I can do that with my eyes closed. Oh yeah, we learn basic Internet skills, too—I sent you this letter through email, didn't I?!?! I don't need this class, but the worst part is that for half the class we use PCs (ewww gross, huh!) Please help!!! Greg Prevost, Keene, NH

Dear Greg!??!

Perhaps if you impress your computer literacy teacher with your admirable punctuation skills, you'll be quickly yanked from that offending class and placed in a more useful learning situation, such as Grammar 101. If not, try being a good Samaritan by helping the other kids in the class who may not harbor the vast knowledge of computing that you seem so fortunate to possess. And, though it sucks to be chained to a PC for half the class, it provides you with the perfect opportunity to evangelize your classmates. Place a Mac next to a Wintel box, fire up both of them, and the choice is obvious, isn't it?

(Kids, the next time you have a problem, write to Ask Nikki, c/o *MacAddict*, 150 North Hill Drive, Suite 40, Brisbane, CA 94005.) —*Nikki Echler*

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